

Imperial College of Engineering and Research, Wagholi, Pune. (Approved by AICTE, Delhi & Govt. of Maharashtra, affiliated to Savitribai Phule Pune University) Gat.No.720,Pune-Nagar road,Wagholi,Pune,412207

Phone No. 020-67335102 website: www.icoer.in Email- principal.imperial2016@gmail.com



PROF. DR.T.J.SAWANT FOUNDER SECRETARY **DR.R.S. DESHPANDE PRINCIPAL** 

#### **Criterion – II: Teaching Learning & Evaluation**

#### 2.3 Teaching Learning Process:

#### **Participative learning**

Learning	Evidence Documents
Method	
Participative	Flipped Class room
Learning	Project Based learning
	MOOC/ NPTEL Courses
	Newsletter/ Magazine





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Flipped Class room





Fig. Students enjoying innovative teaching



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DR.R.S. DESHPANDE PRINCIPAL

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National Assessment & Accreditation Council



#### JSPM'S Imperial College of Engineering and Research, Wagholi, Pune First Year Engineering Department,



#### **Sub-Project Based Learning 2021-2022**

### **Faculty Allotment List**

Sr.No	Name of Faculty	DIV.	Batch
1	Prof.Kadagaonkar J.s.	Α	A1
	Torridagaorikai J.S.	F	F1
2	Prof. Meshram A.C.	Α	A2, A3
3	Prof. Jadhav M.S.	В	B1, B3
	1 101. 3dd1lav 1v1.3.	Е	E1
4	Prof.Wagh V.Y.	E	E3
5	Prof. Khadake C.N.	В	B2
	Tron Middake C.N.	F	F2
6	Prof. Dandge R.G.	Е	E2
		F	F3

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First Year Engg. Dept. Imperial College of Engineering & Research Wagholi, Pune- 412207.



#### JSPM'S Imperial College of Engineering and Research, Wagholi, Pune First Year Engineering Department,



Sub-Project Based Learning 2021-2022

## **Project List**

Sr.No	DIV.	Batch	No. of studen t in Group	Name of student	Name of PBL project/ Problem	Faculty
1 2 3 4	A	Al	5	AMAN RAJJAK SAYYAD DADHE PRATIK LAHU DARADE SHAHADEV KAKASAHEB BANSODE YASH PRAKASH	A case study on Humanoid Robot	
5 6 7 8	A	Al	3	AHER SHWETA LAXMAN ARYA PRADEEP SHENDE CHAKTE SAMIKSHA NITIN	Creat a quiz game with Python	
9 10 11 12 13	A	A1	5	DHUMAL VAISHNAVI DHONDIRAM  DEOTE TUSHAR JAYANT  BHONDAVE ATHARVA HARISH  BOBADE MANAV DEEPAK  BORDE ADITYA BHAGWAN  BADAVE NARSINH MAHESH	Case study- The fall of Srilankan Economy	Mr. J S Kadagaonkar
14 15 16 17 18	A	A1	5	HARUGADE RUSHIKESH UTTAM GARGOTE ADITYA SARJERAO GIRI HARSHAL MAHENDRA INAMDAR TANBIR MUJID GAJARE BALAJI UTTAM	Case Study- Drawsiness Detection System	
19	A	Al	.1	JADHAV ABHISHEK NARAYAN	Case Study- Solid Waste Management Wireless Power	, 1
20	A	Al	1	BIRAJDAR SHUBHAM UMESH	Transmission through Tesla Coil	
21	A	A1		INGLE TEJAS BALASAHEB	Cancelled	
1 2 3 4	A	A2	4	JAWALE GAURAV AVINASH KULKARNI SAGAR GANESH PATIL ABHIJIT PRABHAKAR KUMBHAR AMIT DATTATRAY	The Study of Microwave Commuinication System	MYS.
1 2 3 4 5	A	A2	5	NALKAR SIDDHANT MACCHINDRA NANDURKAR OM MAHENDRA PATIL JYOTIRADITYA DEEPAKRAO KARAD DHANANJAY ANKUSH KHAN AYUB IMTIYAZ	Case Study Apple Inc. & iPhone's Success	A · C· Meshvar
1 2 3 4 5	A	A2	. 5	JEJURKAR SHRAVANI SANTOSH KASAR ROHAN SUNIL KIRTI KAILAS PAGAR KRISHNAGOUDAR SHRADDHA GURI KSHIRSAGAR SIDDHI BABASAHEB	Water Detector Alarm	

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3	^	\ ^	2	4	N	IISAL TEJAS RAJENDRA		
4		1			N	MOHITE KARAN KHANDU		
1					P	AWAR HARSH PARAMESHWAR	7-1	
2		1	- 1		P		Earthquake Sensing	
3	٨	1 /	12	5	S	SHETTY VISHAL PRAKASH	Alarm System	
4		`			1	WADGAONKAR MANSI RAVINDRA		
5	1				2	ZAMBARE ANJALI UMESH		
1	-	+-			- 6	SANGAR ASHUTOSH SANTOSH	A Case Study on:	
2	۱,		A3	3	1	TAGAD ROHIT SAMPAT	Electric Vehicle	
3	- '	- 1	K3	3		WAGH GANESH RAVINDRA	Bitter	
	-				-	SHAIKH NOORBANO MOHAMMAD K		
1_	-	- 1	1		- 1	SHAIKH NOOKDAHO MESAHEB	A Case Study on:	Mrs.A.C.Meshi
2	4			_	. }	SHINGNE ABHISHEK GOKUL	Internet of Things	am
3	_ A	- 1	A3	5			Internet of Times	
4		- 1				SUNNY KUMAR SURYAWANSHI VIVEK SUDARSHAN		
5						SURYAWANSHI VIVER SODARGITATI		
1						SHERE SAYALI SUKHDEV	Chandelier Using E-	
2	A	.	A3	8	3	TAMBE ADINATH RAJESHWAR	Waste	
3			-			SHINDE ABHIJEET VIJAY		
1						PATIL GAURAV RAJENDRAKUMAR	+	
2			A3		4	SHINDE NIKHIL JARICHANDRA	Flame Detection	
3	7 ′	A 1	AS		4	SURYAWANSHI SOMNATH BALAJI		
4						TALKE YASH BAJARANG		1
1						MOHITE PRANAV MOHAN		
2		.	4.2	1	4	MESHRAM SAMRUDDHI ASHOKKUN	A Gym portal developed by coding	
3	_	Α	A3		4	JADHAV ANANDI PRABHU	developed by coding	
-	_					JADHAV NEHA SUBHASH		
						GAIKWAD SHUBHAM BHARAT		
$\overline{}$	2	,	, =1			GAMBHIRE AVINASH BHIMRAO	Magnetic Door	
$\overline{}$	3	В	В1		5	GAWANDE ANIRUDDHA PRAMOD	Alarm	* 1
-	4					GEDAM PRANAY VINOD	-1.5	
$\vdash$	5					GIRHE DIVYA RAJKUMAR		
	6					GUJAR ADITI MAHESH	*	
-	7					<b>GURUDE SADANAND BALKRUSHN</b>	A Laser Security	
-	8	В	B1		5	INGALE VISHAL SATISH	System	- A
-	9			- 1		ITKALKAR SANIKA SHAILESHRAO		
$\vdash$	10					JAMDADE AVINASH SOPAN		Ms. M. S.
$\vdash$			+-	$\neg$		JANHVI PRASHANT DESHMUKH		Jadhav
-	11					KEDAR CHAITANYA SUBHASH	Student database	
$\vdash$		В	В	1	. 5	KHURANA UMANG MAHESH	management	
$\vdash$	13	_				KUMBHAR ADARSH BASLING		
-	15					LAGAD SAGAR BAPUSAHEB		
-	_			_		LOMATE AKASH ASHOK		
-	16					MOHIT SANJAY WAT	Hotel Mangemen	t
-	17	В	В	1	5		System	
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3	В	1	<b>B2</b>		5	JA	MDADE AVINASH SOPAN	College Campus Renovation	
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5	1					_	ATIL PRANAV RANJEET	2	
1	1			$\neg$		_	AMBHIRE AVINASH BHIMRAO		Mr.C.N.
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<del>2</del> 3	۱ ۲	В	B	2	4	_	UMBHAR ADARSH BASLING	Cable Fault Detector	
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2	4, ,	В	B	32	4	F	CHURANA UMANG MAHESH	Mini Calculator	
3	4			1		- ⊢	MORE ANIKET TANAJI	-	
4	_			-		-	NAVALE VISHAL SAINATH		1
1	_					<b>⊢</b>	INGALE VISHAL SATISH	<b>\</b>	
2	_	В	1	B2	4	- 1	KEDAR CHAITANYA SUBHASH	Virtual Augmented	
3	_			-			LAGAD SAGAR BAPUSAHEB	& Mixed Reality	
4	_						LOMATE AKASH ASHOK	,	
11	$\overline{}$			2			SINGH SATYAM		
12	$\overline{}$						SONMALI ONKAR ANAND		
13	3	В		B3	5	5	SURYAWANSHI ANIKET FULCHAND	Java Programming	
1	_		- 1				SURYAWANSHI SANDHYARANI SHI	<u>rv</u>	
1	5	ri .					TAMBE NIKITA SURYAKANT		Ms. M. S.
	6						TIWARI ANKUSH GANESH	1	Jadhav
1	17						VAYKAR DNYANESHWAR NAVNAT	<u>r</u> H	
_	18	В	•	B3		5	VIBHAVARI CHOURASIA	Smart Water Plating	g
	19				1.		VETHEKAR VITTHAL DNYANDEV		
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3	В		E2	1	5	K	AKADE NIKHIL SHASHIKANT	System	
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6	4	- 1		1		0	AVATE VAISHNAVI SUDHIR	Movies	
7	4 .		E2	1	5	10	HODESWAR TANUSHRI SHRIKANT	Recommendation	
8	4	B	Code	-1	3		ATIL SAKSHI DEEPAK	System Using Python	
9	4	- 1		١		1	AWAR SAKSHI JITENDRA	2000	Ma. R. G.
10				-		1	ADHAV SIDDHESH CHANDRAKANT		Dandage
11		1		١		3/	ADHAV YASH SUDHAKAR		
12				١		1	AISWAR AMAN CHANDRASHEKARA	Line Follower Robot	
13		E	E2	١	6	1	AISWAR ANIAN CHANDANIAY	Line Pollower Roose	
14		1.		- 1		1	KAKDE SAURABH SANJAY KHAN URUJKHAN FEROJKHAN		
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16	,					1	MUTUKUNDU SHREERAM SRINIVAS		
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1:	8		1	١		- 1	KALE ABHIJEET RAJENDRA	Earthquake Detector	
11	9	E	E	2	5	١	LONDHE GAJANAN CHANDRAKANT	1	
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2	1						PACHPUTE ADITYA ASHOKRAO		
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	2						YADAV GANESH DATTATRAY	Magnetic Door Alarm	
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	4		1		١		RAHOD RAMESHWAR GARDAL		]
	5						SANAP SHRINIVAS RAJENDRA		
	6				1		SAWANT AISHWARYA AJAY		
	7						TAMBE SAKSHI RATIKANT POKHARKAR SAHIL SOMNATH	Automatic Watering	
	8	Е		E3	6		PISE AJAY BABURAO	System	
	9	E					PAWAR SAKSHI JITENDRA		Mrs.
	10	1	-		1		ROTHE VAISHNAVI SUDESH		V.Y.WAGH
	11						RODE KAUSHAL KISAN		
	12						WAGADARE PRANAV SANTOSH		
	13	]				_	SHAIKH UZAIR SHAIKH MUMTAZ	Simple Clap Switch	
	14	E		E3	1	5	SAYYED AFWAN RAFIK		
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	17						VIKAS KUMAR	system	
	18	1				5	WAGHMARE KRANTI KALAPPA	documention project	rt e
	19	F	Ξ	E3		5	NAVALE SAKSHI SANJAY	using Python	
	20	4					VISHWAKARMA SOURABH MADAI	٧	
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			Name of the Students	Project Title	Idea Incepti on(5)	Proble m defini ng	al/Dat a Collec	Introdu ction of Project	principl e/hypot	Project	Result with Conclu	Appli cation	nst	Repor t Subm	MARK S OUT
-1	F07545	F190510182	PAWAR SWAPNIL PRABHAKAR		5	5	tion		nesis		sion			ission	
_ 4	FU/562	F190510276	YADAV GANESH DATTATDAY		5	5	5	4	4	5	4	5	4	5	46
4	F07551	F190510196	SABALE SHUBHAM KISAN	Magnetic Door Alarm		5	4	5	4	5	4	5	4	5	46
5 5	F07563	F190510191	RAHOD RAMESHWAR GARDAL	garage 2001 Marin	5	5	4	5	4	4	4	5	5	4	44
6 6	07552	190510203	SANAP SHRINIVAS RAJENDRA	1	4	4	4	5	4	5	4	5	4	5	46
7/5	07557	190510214	SAWANT AISHWARYA AJAY		5	5		4	4	4	4	3	4	3	38
8 F	07547	190510199	ambe Sakshi Ratikant	1 1	4	5	4	5	4	5	4	5	4	5	46
9 F	07546	190510184	OKHARKAR SAHIL SOMNATH	Automatic Watering	4	5	4	5	4	5	4	4	4	4	43
IOF	07544 5	1905100091	ISE AJAY BABURAO	System	4	5	4	5	4	4	4	5	4	5	44
1 FC	7550 F	190510100	AWAR SAKSHI JITENDRA	1	4	5	4	5	4	5	4	5	4	5	45
2 F0	7549 F	190510194 R	OTHE VAISHNAVI SUDESH		4	5	4	5	4	5	4	4	4	4	43
3 F0	7560 F1	90510193 R	ODE KAUSHAL KISAN		4	4		5	4	5	4	4	4	4	43
IFO:	7556 F1	90510268 00	AGADARE PRANAV SANTOSH	-	4	5	4	4	4	4	4	4	4	4	40
F07	7555 F1	90510218 51	HAIKH UZAIR SHAIKH MUMTAZ YYED AFWAN RAFIK	Simple Clap Switch	4	5	4	5	4	4	4	4	4	4	42
F07	553 F19	20510215 57	NAP SUHAS NAVNATH		5	3	4	4	4	4	4	4	4	4	41
F07	558 F10	00510204 34	NAP SUHAS NAVNATH		3	4	4	4	4	4	4	3	5	4	-
F075	559 F10	0510264 Vik	KADE SAMRUDDHI ANIL	TT 4 124	5		3	4	4	3	4	3	3	4	40
F075	561 F10	0510264 VIK	as Kumar	Hotel Management	4	5	4	5	5	4	5	4	4	· ·	35
F075	63 F10	0510270 VVA	GHMARE KRANTI KALAPPA	system	4	3	3	4	3	4	3	4	<u> </u>	5	46
075	64 F100	0510162 NA\	ALE SAKSHI SANJAY	documention project		5	4	5	4	4	4	5	3	4	35
	04/190	10266 VISI	HWAKARMA SOURABH MADA	using Python	5	5	4	5	4	5	4	_	4	5	44
					5	5	4	5	4	5	7	5	4	5	46

HOD
First Year Department
HOD
First Year Enga. Pont.
Imperial College of Engineering a Research
Wagholi, Punc. 412207.

		JSPI	PBL TV	V/PR RING & RESEARCH , WAGHOLI , PUNE			
		COLL	GE CODE: 4051	RING & RESEARCH, WAGHOLI, PUNE			
			FE SEM II	Examinations, May-202	2		
			Batch	2021-22 MAY			
				. 53			
SR.NO.	Roll No.	Exam Seat Number	Name of the Students		Weekly		
			rame of the Students	Title of Project	Document	Report(1	PBL TW (2
1	F07545	F190510182	DAVIAG		ation(12)	3)	1. 52 100 (2
2	F07562	F190510162	PAWAR SWAPNIL PRABHAKAR		12	12	
3	F07551	F190510276	YADAV GANESH DATTATRAY	1	12	12	24
4	F07548	F190510196 F190510191	SABALE SHUBHAM KISAN	Magnetic Door Alarm	10	11	24
5	F07552		RAHOD RAMESHWAR GARDAL	The Book Marin	12		21
6	F07554	F190510203	SANAP SHRINIVAS RAJENDRA	1	7	12	24
7	F07554	F190510214	SAWANT AISHWARYA AJAY		_	10	17
8	F07547	F190510199	Tambe Sakshi Ratikant	1	11	11	22
9		F190510184	POKHARKAR SAHIL SOMNATH		10	9	19
10	F07546	F190510009	PISE AJAY BABURAO	Automatic Watering System	10	10	20
11	F07544	F190510180	PAWAR SAKSHI JITENDRA	1	12	12	24
	F07550	F190510194	ROTHE VAISHNAVI SUDESH	1	10	9	19
12	F07549	F190510193	RODE KAUSHAL KISAN		10	9	19
13	F07560	F190510268	WAGADARE PRANAV SANTOSH	1	10	8	18
14	F07556	F190510218	SHAIKH UZAIR SHAIKH MUMTAZ	Simple Clap Switch	10	10	20
15	F07555	F190510215	SAYYED AFWAN RAFIK	Simple Clap Switch	10	8	18
16	F07553	F190510204	SANAP SUHAS NAVNATH	1	10	8	18
17	F07558	F190510201	TEKADE SAMRUDDHI ANIL		10	5	15
18	F07559	F190510264	Vikas Kumar	1	12	12	24
19	F07561	F190510270	WAGHMARE KRANTI KALAPPA	Hotel Management system	10	8	18
20	F07563	F190510162	NAVALE SAKSHI SANJAY	documention project using Python	10	12	22
21	F07564	F190510266	VISHWAKARMA SOURABH MADAN	i jee asing 1 years	12	12	24
			1 2010 1011 110 107 114		11	12	23

Project Mentor

HOD First Year Department

HOD First Year Engg Dept Imperial College of Engineering & Research Wegholi, Pune-412207.



## Imperial College of Engineering and Research, Wagholi, Punc.



(Approved by AICTE, Delhi & Govt. Of Maharashtra, affiliated to Savitribal Phule Pune University) Gat.No.720, Pune-Nagar Road, Wagholi, Pune, 412207 Phone No. 020-67335102 website: www.jspmicoer.edu.in Email- principal @jspmicoer.edu.in

## Instruction for students and Rubrics for PBL

- 1. Each student has to spend 4hrs/week for PBL, out of this the teaching workload is load of 2Hrs/week/batch needs to be considered for the faculty involved and remaining 2Hrs/week/batch needs to use by student to compile work as per the guideline by faculty.
- 2. Project based learning (PBL) requires continuous mentoring by faculty throughout the semester for successful completion of the tasks selected by the student per batch.
- 3. The batch needs to be divided into sub-groups of 5 to 6 students.
- 4. Assignment / activities / models / projects etc. under project based learning is carried throughout semester and credit for PBL has to be awarded on the basis of internal continuous assessment and evaluation at the end of semester.

## Rubrics for PBL in semester Assessment

Mark distribution for PBL project (50 Marks)

Sr.no	istribution for PBL project (50 Marks)  Name of rubric		Total Mark	
1	Group formation and problem statement finalization		10M	
2	Attendance, Regular reporting, Timely completion and progress	s of	10M	
	project Project Design, implementation and testing		30M	
3	Dosign (Block diagram / circuit diagram, / Algorithm /	10M		
	design calculation / CAD model)  b) Manufacturing (component assembly / writing / code	10M		
	/ circuit boards / simulation )  c) Testing and results	10M	4	
	<ol> <li>Demonstration / presentation5M</li> <li>Report in paper format5M</li> </ol>		4	C. T. A.





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#### **Continuous Assessment Sheet of Project Base Learning (PBL)**

#### FE-2021-22 SEM-II

Division – A / B / E / F

Roll No .: - F07545, 62, 51,48,52 .

Batch -	E3	Project Title :-	Magnet	ic Do	oor f	Harm
Name o	of Group: Group-I	- 1 Te				
Sr. No.	Parameters for Assessments	Week and month	Date	Max, Marks	Marks	Signature
1	Idea Inception – Topic selection	1St April	21/04/22	5	15	levol.
2	Problem defining	2nd April	28/04/22	5	5	Hurgh.
3	Material / Data Collection /	1st may	05 05 22	_ 5	5	lungh,
4	Introduction of Project	2nd may	12/05/22	. 5	4	Tungh,
5	Defining Principle / Hypothesis / law /Formation / Theory used for project / Circuit diagram	3rd may	19/05/22	5	4	Cevogh.
6	Progress of project Design / Modeling / Survey Data Analysis etc	1st June	02/06/22	5	5	Rough.
7	Result with Conclusion	15t June	02/06/22	5	4	aust.
8	Application	2nd June	09106122	5	5	Awagh.
9	Demonstration / Presentation/ User Interface / Usability	2nd June	, , , , , , , , , , , , , , , , , , ,	_	4.	(leargh.
10	Report Submission Compiling with all point with Photo	2nd June	09/08/22	5	5	Aungle
11	Awareness / Considering Environmental, Social, Ethical Safety measurement, Legal Aspects Supporting technology					

Name and Signature of Student

1. Swapnil Pawar (F07545)

2. Ganesh Yadav (F07562)

3. Shubham Sabale (F07551)
4. Aameshwar Rathod (F07548)
5. Shrinivas Sanap (F07552)

Name of Signature of Project Mentor

Malaker

First Year Engg. Dapt. Imperial College of Engineering & Research Wagnell, June-412207,





(Approved by AICTE, Delhi & Govt. Of Maharashtra, affiliated to Savitribal Phule Pune University) Gat.No.720, Pune-Nagar Road, Wagholi, Pune, 412207 Phone No. 020-67335102 website: www.jspmicoer.edu.in Email- principal @jspmicoer.edu.in

## Continuous Assessment Sheet of Project Base Learning (PBL)

#### FE-2021-22 SEM-II

Division - A / B / E / F

Roll No .: - 54,57,47,46,44,50,

Batch -	Group-2' E3	Project Title :-	Automat	ic Wa	yeoir	19 Staten
Name o	f Group: Group - 2	F	or plan	H9.		
Sr. No.	Parameters for Assessments	Week and month	Date	Max, Marks	Marks	Signature
1	Idea Inception – Topic selection	1st April	21/04/22	5	5	acagh.
2	Problem defining	2nd April	28/04/22	5	5	Hoogh
3	Material / Data Collection /	1st may	05/05/22	5	4	Thomas
4	Introduction of Project	2nd may	12/05/22		5	Chosen.
5	Defining Principle / Hypothesis / law /Formation / Theory used for project / Circuit diagram	3rd may	19/05/22	5	4	Norgh,
6	Progress of project Design / Modeling / Survey Data Analysis etc	StJune	02/06/22	5	5	Cough,
7	Result with Conclusion	1StJUne	02/06/22		4	Cerroli.
8	Application	2nd June	09/06/2		5	Twoth.
9	Demonstration / Presentation/ User Interface / Usability	2nd Jone	09/06/2	5	4	Jugh
10	Report Submission Compiling with all point with Photo	2nd June	09/06/2	5	5	Awali
1	Awareness / Considering Environmental, Social, Ethical Safety measurement ,Legal Aspects Supporting technology					

Name and Signature of Student

- 1. Aishwarya Sawant (F07554)
- 2. Sakshi Tambe (F07557)
- 3. Sahil Pokharkar (F07547)
- 4. Ajay Pige (F07546)
- 5. Sakshi Pawar (FOT544)
- 6. Voishnavi Rothe (F07550)

Name of Signature of Project Mentor

Muchehan

First Year Engg. Dept. Imperial College of Engineering & Research Wagholf, Pune- 412207.

#### FE-2021-22 SEM-II

Division - A / B / E / F

Roll No .: - 49, 50, 56, 55, 53.

atch -	F3	Project Title :- 0	Bimple	. cla	UP S	witch
iame of	Brond: CLEOMD-3					
Sr. I	Parameters for Assessments	Week and month	Date	Max, Marks	Marks	Signature
No.	Idea Inception – Topic selection	(1)		5	4	Ough -
1		Dd HPOII	21/04/22		5	Awali
3	Material / Data Collection /	1st may	05/05/22		4	Towns .
4	Introduction of Project	2nd may	12/05/22	-	5	Tough
5	Defining Principle / Hypothesis / law /Formation / Theory used for project / Circuit diagram	38 may	19/05/2	5	4.	Twogh.
6	Progress of project Design / Modeling / Survey Data Analysis etc	istjune	02/06/2	5	4	Nevgh
7	Result with Conclusion	19t June	02/06/2		4	lugh
8	Application	2nd June	09/06/22	5	4	Twool
9	Demonstration / Presentation/ User Interface / Usability	2nd June	09/06/2	5	4	Read
10	Report Submission Compiling with all point with Photo	2 <sup>nd</sup> June	09/06/2	5	4	Noogh
11	Awareness / Considering Environmental, Social, Ethical Safety measurement, Legal Aspects Supporting technology					

Name and Signature of Student

- 1. Kaushal Rode (F07549) 2. Pranar Wagadare (F07560)

- 3. Uzair Shaikh (F07556) 4. Afwan Sayyed (F07555) 5. Suhas Sanap (F07553) 6.

Name of Signature of Project Mentor

Mos. V.Y. Wagh

First Year Engg. Dept. Imperial College of Engineering & Research Wagholi, Pune- 412207.

#### FE-2021-22 SEM-II

Division - A / B / E / F

Roll No .: - 58,59,61,63,64.

	Eg	Project Title :-'	totel M	anage	ement	- gystem
me of	Group: Grows -4	Documa	entatio	n Poo	गुंहल	using Pyt
). P	Parameters for Assessments	Week and month	Date	Max, Marks	Marks	Signature
1 1	Idea Inception – Topic selection	1ST April	21/04/22	5	5	lungh
2	Problem defining	2nd April	28/04/22	5	5	Tweet .
3	Material / Data Collection /	13+may	05 05 22	5	4	Charles.
4	Introduction of Project	2nd may	12/05/22	5	5	Que
5	Defining Principle / Hypothesis / law /Formation / Theory used for project / Circuit diagram	3rd may	19/05/22		5	Numara.
6	Progress of project Design / Modeling / Survey Data Analysis etc	19t June	02/06/22		4	Ausol
7	Result with Conclusion	13t June	02/06/22		5	( levolt
8	Application	2nd Jone	09/06/22		4	House
9	Demonstration / Presentation/ User Interface / Usability	2nd June	09/06/2		4	Two
10	Report Submission Compiling with all point with Photo	2 nd June	09100/5	2 5	5	Juste ,
11	Awareness / Considering Environmental, Social, Ethical Safety measurement ,Legal Aspects Supporting technology					

Name and Signature of Student

1. Tekade Samruddhi (F07558)

- 2. Vikas Kumar (F07559)
- 3. Waghmar Kranti (F07561)
- 4. Marale Sakshi (F07563)
- 5. Vishwakarma Sourabh (Fo7564) Imperial College of Engineering & Research

Name of Signature of Project Mentor

JSPM's IMPERIAL COLLEGE OF ENGINEERING & RESEARCH, WAGHOLI, PUNE

JSPW STWIFERIAL COLLEGE OF EXCHANGE	Exc	aminations, May-2022
COLLEGE CODE: 4051	2	A V -2021

		COL	LEGE CODE : 4051				τ.	Batch-E1				A.Y202	21-22	
		FE- SEM II	Sub- Project Bas	ed Learn	ing	37.4		Definin	Progres	Result			Report	TOTAL
Sr	IROH N	Exam Sea Number	Name of the Students	Idea Inceptio		Materia I/Data Collecti	Introdu ction of	g principl	s of Project	with Conclus	Applica tion	Demonst		MARK S OUT OF 50
No	2	Number		n	defining	on		e/hypot		ion 4	4	4	4	42
$\vdash$	1 F0750	1 F19051010	7 VINOD SUBHASH JOGDAND	4.5	4.5	4.5	4.5	4	4	4	4	4	4	40
-			0 AKASH BABAN DOUND	4	4	4	4	4	4	3.5	3.5	3.5	3.5	38
	3 F0750	3 F19051001	3 ANIKET BALIRAM KOKATE	4	4	4	4	4	4	3.5	4	4	4	42
1	1 F07504	4 F19051011	3 ANUSHKA DINESH KALE	4.5	4.5	4.5	4.5	4	4	4	4	4	4	42
-	F0750	5 F19051003	ARIHANT SHRIRAM BHAMARE	4.5	4.5	4.5	4.5	4	4	4.5	4.5	4	4	44
1	F07506	F19051002	1 AYAGOLE POOJA VISHNU	4.5	4.5	4.5	4.5	4.5	4.5	3.5	3.5	3.5	3.5	38
1	F07507	F190510030	BARDE RUTIK BALIRAM	4	4	4	4	4	4	3.5	3.5	3.5	3.5	36
1	F07508	F190510036	BHANDARE PRITI VIJAY	3.5	3.5	3.5	3.5	4	4	3.5	3.5	3.5	3.5	38
100	F07509	F190510037	BHANSALI SHIVAM MADAN	4	4	4	4	4	4	3.5	3.5	3.5	3.5	38
10	F07510	F190510041	BHONDAVE PRANIL GOPICHAND	4	4	4	4	4	3.5	3.5	3.5	3.5	3.5	36
		F190510221		4	4	3.5	3.5	3.5	3.5	4	4	4	4	40
12	F07512	F190510238	Chaitanya Chandrabhan Solanke	4	4	4	4	4	4	3.5	3.5	3.5	3.5	38
13	F07513	F190510258	Chetan Arjun Udhan	4	4	4	4	4	4	4	4	3.5	3.5	39
		F190510057		4	4	4	4	3.5	3.5	3.5	3.5	3.5	3.5	36
15	F07515	F190510058	DAKHORE HEMANT KAILASH	4	4	3.5	3.5	3.5	4	3.5	3.5	3.5	3.5	38
16 6	07516	F190510066	DHASE TANMAY TUSHAR	4	4	4	4	4	4	4	4	4	4	40
17 5	07517	F190510067	DHIMDHIME ADITYA SATISH	4	4	4	4	4	4	3.5	3.5	3.5	3.5	38
18 5	07518	F190510069	DHULSHETTE SHIVHAR BALAJI	4	4	4	4		4	3.5	3.5	3.5	3.5	38
10 5	07510	F190510257	FADTARE TUSHAR SANJAY	4	4	4	4	4	4	3.5	3.5	3.5	3.5	38
20 5	07520	F190510197	GADADE SAKSHI RAMESH	4	4	4	4	4	4	3.5	3.5	3.5	3.5	39
21 5	07521	F190510073	GADE SUYASH SANJAY	4.5	4.5	4	4	4	4	5.5	0.0	2.0		

Faculty Incharge

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JSPM's IMPERIAL COLLEGE OF ENGINEERING & RESEARCH, WAGHOLI, PUNE Examinations, May-2022 A V -2021-22

	(	COLLEGE CODE: 4051					_					A.Y202	1-22	
	FE- SEM	II Sub- Proj	ect Based	l Learnin	ıg			atch-B3	Progres	Result			Report	TOTAL
	TE OBIN	-		Idea	Proble	Materia I/Data			s of	with	Applica	Demons	Submiss	MARK
0.34	D-U No	Exam Seat Number	PBL PR	Inceptio	m	Collecti	ction of	principl		Conclus	tion	Demons	ion	3001
Sr.No	Roll No.	Liam Scat Names	(50)	n	defining			e/hypot	Design	ion				OF 50 78
			4	4	4.5	4.5	4	4	4	4	4	4	41	
F07243	F190510166	NIMBALKAR ADITYA SUNIL		4.5	4.5	4.5	4	4	4.5	4.5	4.5	4.5	44	83.5
F07244	F190510170	PANDIT AARYAN ARVIND	4.5		4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	46	87
F07245	F190510177	PAWALE HARSHADA SANJAY	5	5		3.5	3.5	3.5	3.5	3.5	3.5	3.5	35	66.5
F07246	F190510179	PAWAR ROHAN ARUN	3.5	3.5	3.5	4.5	4	4	4.5	4.5	4.5	4.5	44	83.5
F07247	F190510181	PAWAR SUNNY TANAJI	4.5	4.5	4.5	4.5	4	4	4.5	4.5	4.5	4.5	44	83.5
F07248	F190510205	SANGA ANKUSH MADHUKAR	4.5	4.5	4.5		3.5	3.5	3.5	3.5	3.5	3.5	35	66.5
F07249	F190510213	Savalajkar Sanika Sanjay	3.5	3.5	3.5	3.5	3.5	4	3.5	3.5	3.5	3.5	38	72
F07250	F190510216	Shaikh Adiba Haroon	4	4	4	4	4	4	4.5	4.5	4.5	4.5	44	83.5
F07251	F190510222	SHEMBADE BALAJI TAYAPPA	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	46	87
F07252	F190510063	SHRUTI BHUJANG DESHPANDE	5	5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	46	87
F07253	F190510212	Singh Satyam	5	5	4.5	4.5	3.5	3.5	3.5	3.5	3.5	3.5	35	66.5
E0725/	F190510242	SONMALI ONKAR ANAND	3.5	3.5	3.5	3.5	3.5	4	4	4	4	4	40	76
E0725	5 E190510246	SISURYAWANSHI ANIKET FULCHAND	4	4	4	3.5	3.5	3.5	3.5	3.5	3.5	3.5	36	68
F07256	5 F19051024	7 SURYAWANSHI SANDHYARANI SHIV	1 4	4	3.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	46	87
F0725	7 F19051025	4 TAMBE NIKITA SURYAKANT	5	5	4.5		4.5	4.5	4.5	4.5	4.5	4.5	46	87
E0725	8 E19051025	6 TIWARI ANKUSH GANESH	5	5	4.5	4.5	4.5	4.5	4	4	4	4	40	76
F0725	9 F19051025	9 VAYKAR DNYANESHWAR NAVNATH	4	4	4	4	4.5	4.5	4.5	4.5	4.5	4.5	46	87
E0726	n F19051026	2 VIBHAVARI CHOURASIA	5	5	4.5	4.5	4.5	4.5	4	4	4	4	40	76
E0726	1 F19051026	1 VETHEKAR VITTHAL DNYANDEV	4	4	4	4	4	4	4	4	4	4	40	76
F0726	2 F19051027	3 WAIKAR ADITYA SACHIN	4	4	4	3.5	3.5	3.5	3.5	3.5	3.5	3.5	36	68
E0726	3 F19051005	0 Yash Dipak Chavan	4	4	3.5	3.5	3.5	4	3.5	3.5	3.5	3.5	38	
E0726	4 E19051016	7 Nirphal Amol	4	4	4	4	4	4	4	4	4	4	40	
E0726	5 F19051005	9 AASTHA RAJU DANDEKAR	4	4	4	4	4				Justehu	1		
10720											Jokehoo			

HoDOD Hirst Year Sage Dept. Laparial Contige of Economicing & Research Wagnoil, Pains 412207.





## Imperial College of Engineering and Research, Wagholi, Pune.

(Approved by AICTE, Delhi & Govt. Of Maharashtra, affiliated to Savitribal Phule Pune University)

Gat.No.720, Pune-Nagar Road, Wagholi, Pune, 412207 Phone No. 020-67335102 website: www.jspmicoer.edu.in Email- principal @jspmicoer.edu.in

Continuous Assessment Sheet of Project Base Learning (PBL)

#### FE-2021-22 SEM-II

Division - A / B / E / F

Roll No .: - 14, 1, 2, 5,7, 15

Batch -	. []	Project Title :-	Python	Proc	1 scm	ning
Name	of Group:		Tick ta	Max,	Marks	Signature
Sr. No.	Parameters for Assessments	Week and month	Date	Marks	IVIAIKS	Jigilutu. c
1	Idea Inception – Topic selection	1st May	20/4/22	5	4.5	A
2	Problem defining	and May	2714122	5	4	8)
3	Material / Data Collection /	2n Mas	04105/22	5	4.5	- W.
4	Introduction of Project	2nd May	1115/22	5	4.5	<i>X</i> \
5	Defining Principle / Hypothesis / law /Formation / Theory used for project / Circuit diagram	2° May	18107/22		4.	A)
6	Progress of project Design / Modeling / Survey Data Analysis	gmay	25/5/22	5	8	R
7	etc Result with Conclusion	1st June	1/6/22	5	4	18
8	Application	1st Twe	-	5	4	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
9	Demonstration / Presentation/ User Interface / Usability	1st Ture		5	4	. 🕅
10	Report Submission Compiling with all point with Photo	2nd June	15/6/2	. 5	3	d
11	Awareness / Considering Environmental, Social, Ethical Safety measurement ,Legal Aspects Supporting technology	2nd Ture	15/622	5	4	A

Name and Signature of Student

1. Ganesh Mule

2. Vined. Jogdand
3. Akesh David

Arihant Bhamase 4. 5.

Hemant Dakhox

Name of Signature of Project Mentor

Madhari Tadhar

Imperial College of Engineering & Research Waghan, Pune- 412207.





(Approved by AICTE, Delhi & Govt. Of Maharashtra, affiliated to Savitribal Phule Pune University) Gat.No.720, Pune-Nagar Road, Wagholi, Pune, 412207

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## Continuous Assessment Sheet of Project Base Learning (PBL)

#### FE-2021-22 SEM-II

Division - A / B / E / F

Roll No .: - 9, 8, 20, 6

Batch -	E	Project Title :-	Studer	y Do	uta b	ase Mage
	of Group:			11	Marks	Signature
Sr. No.	Parameters for Assessments	Week and month	Date	Max, Marks	Marks	
1	Idea Inception – Topic selection	and April	2014/22	5	4	A)
2	Problem defining	5rd April	27/4/22	5	4.5	₩.
3	Material / Data Collection /	may tel	04/05/22		4	<b>A</b>
4	Introduction of Project	end may	11 05 22		4	9/
5	Defining Principle / Hypothesis / law /Formation / Theory used for project / Circuit diagram	and May	18/05/22	5	4	A
6	Progress of project Design / Modeling / Survey Data Analysis	3rd May	er 5 22	5	.4	R
	Result with Conclusion	1st June	1/06/22	5	4	8
7		and Tune	8/06/22	5	4	B
9	Application  Demonstration / Presentation/ User Interface / Usability	2nd Jane		5	4.5	8
10	Report Submission Compiling with all point with Photo	3rd June	5/06	5	4.3	4
11	Awareness / Considering Environmental, Social, Ethical Safety measurement ,Legal	3rd June	196/24	-		
	Aspects Supporting technology					

Name and Signature of Student

1. Shiram Basali

2. Patti Bhandare

3. Sakshi Gadde

Pooja Ayagon

5.

6.

First Year Engg. Dept. Imperial College of Engineering & Research Wagholi, Pune- 412207.

Name of Signature of Project Mentor

Madhari Tadhar of





(Approved by AICTE, Delhi & Govt. Of Maharashtra, affiliated to Savitribal Phule Pune University) Gat.No.720, Pune-Nagar Road, Wagholi, Pune, 412207 Phone No. 020-67335102 website: www.jspmicoer.edu.in Email- principal @jspmicoer.edu.in

Continuous Assessment Sheet of Project Base Learning (PBL)

#### FE-2021-22 SEM-II

Division - A / B / E / F

Roll No.: - 12,18,16, 17,3,2

Batch -	- E1	Project Title :-	3 marr u			
Name Sr.	of Group:  Parameters for Assessments	Week and	Date	Max,	Marks	Signature
No.	Talameters	month		Marks		
1	Idea Inception – Topic selection	1st April	2014/22	5	4.6	
2	Problem defining	2nd April	2014/22	5		
3	Material / Data Collection /	and April	27/4/22	5	4.5	
4	Introduction of Project	ard April	27/4/22	5	4.1	
5	Defining Principle / Hypothesis / law /Formation / Theory used for project / Circuit diagram	1st May	0415/22		4	
6	Progress of project Design / Modeling / Survey Data Analysis	2nd May	111/22	5	4	
	etc	and May	111722	5	4.6	
7	Result with Conclusion	21114	1115/22	5	4.5	
8	Application / Presentation/		18/5/22	5	4.5	
9	Demonstration / Presentation/ User Interface / Usability					-
10	Report Submission Compiling with all point with Photo		25/22	5	4.5	
11	Awareness / Considering Environmental, Social, Ethical Safety measurement ,Legal					
	Aspects Supporting technology					

Name and Signature of Student

- Chaitanya Bolanthe
- Shirhar dhulshette 2.
- Tanmay . dhave
- Adita dhimdhime 4.
- Kokate Anileet 5.
- Suyash bade 6.

Name of Signature of Project Mentor

Imperial College or Lague

Madhavi Jadhon





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hans No. 020 67335102, website: ways ispringer edu in Fmail-principal @isprincoer.edu.in

Phone No. 020-67335102 website: www.jspmicoer.edu.in Email-principal @jspmicoer.edu.in Continuous Assessment Sheet of Project Base Learning (PBL)

## FE-2021-22 SEM-II

ivision - A / B / E / F

Roll No .: - (+1,10,19,13)

atch -	-	E	Project Title:- 🧐	security	abo	Beco	
Vame	of G	Group:			24-11	Marks	Signature
Sr. No.	P	arameters for Assessments	Week and month	Date	Max, Marks	IVIAIRS	
1	+	dea Inception – Topic selection	1st April	2014/22	5	5	900
2	1	Problem defining	2nd April	20/4/22	5	5	500
3		Material / Data Collection /	and April	27/4/22	5	4.5	1
4		Introduction of Project	2nd April	2714/22	5	4.1	8)
5		Defining Principle / Hypothesis / law /Formation / Theory used for project / Circuit diagram	4 Maj	0411/22	5	4.5	8
e	5	Progress of project Design / Modeling / Survey Data Analysis	5th May	1115/02	5	4.5	8
-		etc Result with Conclusion	5th Mox	11/5/22	5	4.0	H
	7	Application	6th May	18 5/22	5	4.5	O)
	9	Demonstration / Presentation/ User Interface / Usability	6th May	25/5/22	5	r	8
0	10	Report Submission Compiling with all point with Photo	7 Hs Ju	E 01/06/22	5	4.0	18
	11	/ Caraidoring	7th Jun	15/6/22	5	4,5	D

Name and Signature of Student

- 1. Shantanu Chafle
- 2. Poaril
- 3. Tushar
- 4. Chaitainya Udhan
- 5.
- 6.

Name of Signature of Project Mentor

Madhavi Jadha

Imperial College of Caginaching & Research





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## Continuous Assessment Sheet of Project Base Learning (PBL)

### FE-2021-22 SEM-II

Division -A/B/E/F

Roll No .: - 2, 8, 10, 19

			Project Title :-	Eastha	lyake	Pe	tector
Batc	h –	B <sub>1</sub>					
Nam	ne of	Group:	Week and	Date	Max,	Marks	Signature
Sr.		Parameters for Assessments	month	Date	Marks		
No.		Idea Inception – Topic selection	1st April	8 4	5	5	$\mathcal{Y}$
1			3rd April	22/4	5	5	<i>δ</i> /\
2	-	Problem defining	3rd April	29/4	5	4.5	<b>₹</b> /
3		Material / Data Collection /	8.4 4611	06/5	5	4.5	Q/
4		Introduction of Project			5		A
5	5	Defining Principle / Hypothesis / law /Formation / Theory used for project / Circuit diagram		ISI C		4.5	01
	6	Progress of project Design / Modeling / Survey Data Analysis		20/5	5	4.5	₩.
		etc		27/5	5	4.5	M
	7	Result with Conclusion	-	a) 6	5	4.5	d1
	8	Application (Bases station)			5	4.5	<i>b</i> ^\
	9	Demonstration / Presentation/ User Interface / Usability		10/6		'	0 1
	10	Report Submission Compiling with all point with Photo	1	17/6	5	4.1	X)
	11	Awareness / Considering Environmental, Social, Ethical Safety measurement ,Legal Aspects Supporting technology		817		4.5	dV.

Name and Signature of Student

- Shantanu Agarkar
- 2. chaitnya Bandal 3. Pushpak Barage
- 5. Tejas bree chaitakur
- Gagan Shubhan

Name of Signature of Project Mentor

Imperial College of Engineering & Research Waghell, Pune-412207

Madhavi





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Continuous Assessment Sheet of Project Base Learning (PBL)

#### FE-2021-22 SEM-II

Division - A / B / E / F

Roll No.: - 11,13,17,18,20

 3atch	1- B1	Project Title :-	Laser	Secu	riH	2 YJTONL
Vamo	e of Group:			1		Cianatura
ir. No.	Parameters for Assessments	Week and month	Date	Max, Marks	Marks	Signature
1	Idea Inception – Topic selection		914	5	4	
2	Problem defining		02/4	5	4	
3	Material / Data Collection /		2914	5	4	
4	Introduction of Project		618	5	4	
5	Defining Principle / Hypothesis / law /Formation / Theory used for project / Circuit diagram		1815	5	4	
6	Progress of project Design / Modeling / Survey Data Analysis		2018	5	4	
7	etc Result with Conclusion		2718	5	3.1	
7			8)6	5	3.6	
8 9	Application  Demonstration / Presentation/ User Interface / Usability		10/6	5	3.0	
LO	Report Submission Compiling with all point with Photo		17/6	5	3,5	
.1	Awareness / Considering Environmental, Social, Ethical Safety measurement, Legal Aspects Supporting technology		97			

me and Signature of Student

Sujit Bhaqat
Harshay Bhor
Pranav Divekar
Sanika Pongar
Priya baikwad

ne of Signature of Project Mentor

Imperial College Engineering & Research



## Imperial College of Engineering and Research, Wagholi, Pune. (Approved by AICTE, Delhi& Govt. of Maharashtra, affiliated to Savitribai Phule Pune University) Gat.No.720, Pune-Nagar Road, Wagholi, Pune, 412207



Ref No. ICOER/FE/2021-22/ER-1/

Date: 22/07/2022

#### **EVENT REPORT**

1 Name of the Event

First Year PBL Exhibition

2 Day & Date of the Event

Monday, 18/07/2022

100

3 Time of the Event

11:00am To 12:30pm

4 Venue of the Event

FE Department, ICOER.

5 Description

(a) Introduction, Theme & Significance:

Project based learning (PBL) requires continuous mentoring by faculty throughout the semester for successful completion of the tasks selected by the students per batch. While assigning the teaching workload a load of 2 Hrs/week/batch needs to be considered for the faculty involved. The Batch needs to be divided into sub-groups of 5 to 6 students. Assignments / activities / models/ projects etc. under project based learning is carried throughout semester and Credit for PBL has to be awarded on the basis of internal continuous assessment and evaluation at the end of semester

#### Theme:



Theme of Exhibition was to undertake a problem which can be theoretical, practical, social, technical, symbolic, cultural and/or scientific and grows out of students' wondering within different disciplines and professional environments. The problem may involve an interdisciplinary approach in both the analysis and solving phases.

#### **Significance**

For better learning experience, along with traditional classroom teaching and laboratory work based learning, project based learning has been introduced with an objective to motivate students to learn by working in group (5 to 6 students per group) courteously to solve a problem. Such practice will also increase their capacity and learning through shared cognition.

#### (b) Conduction, Activity:

#### Conduction:

Induction Activity was smoothly conducted under the guidance of Dr. Kharat A. G., Principal Dr. R. S. Deshpande Sir, F.E. H.O.D. Prof. S. K. Wakchaure Sir, Departmental H.O.D's, PBL Teachers of respective Batches and all first year faculty members.



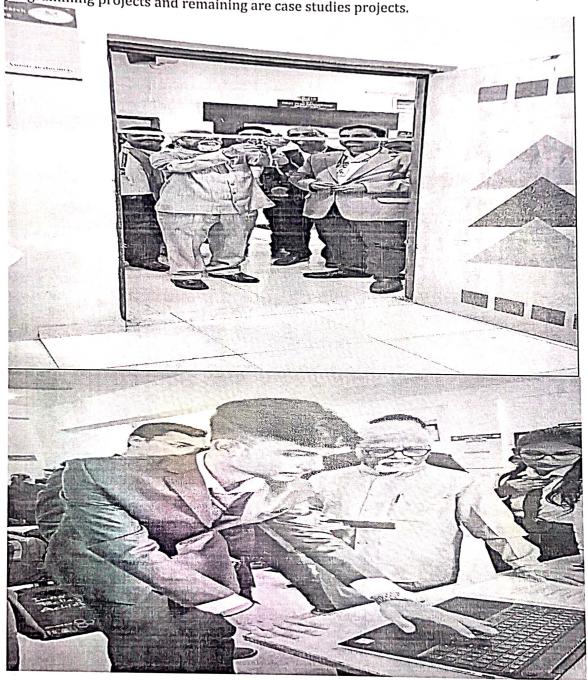
# Imperial College of Engineering and Research, Wagholi, Pune. (Approved by AICTE, Delhi& Govt. of Maharashtra, affiliated to SavitribaiPhule Pune University) Gat No. 720 Pune Marca Bood Wagholi Pune 412207

Gat.No.720,Pune-Nagar Road,Wagholi,Pune,412207



### Activity:

Exhibition held in Basic electrical lab and Physics lab in First Year department. Total 36 students were presented their project and response of student was overwhelming. Out of 36 projects, 21 students made model of project, 10 were computer programming projects and remaining are case studies projects.





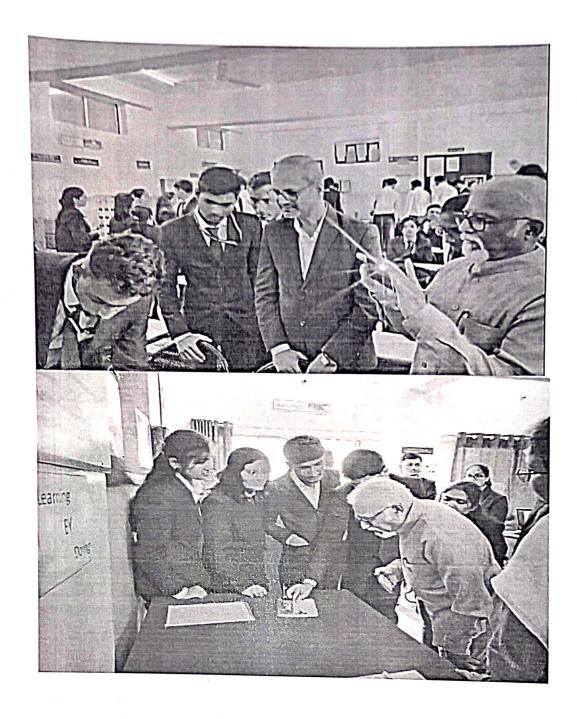






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Event Representative

First Year Engg. Dept.
Imperial Collage of Engineering & Pagaargh
Wagholi, Puge. 117201

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AC V: 2021-22

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Guide	Student Name	Roll No.	Project Title	Idea Inception <sup>1</sup>	Outcome <sup>2</sup>	Document ation <sup>3</sup>	Attend Reviews <sup>4</sup>	Demonstration <sup>5</sup>	Awareness/Consideration of Env./social/ethics etc.	Total
	Ash D			5	25	7.5	5	5 9	2.5	50
	Ashu Bamane Rohit Bankar	SA17		3	22	5	3	3	1	37
	Sayali Bhagat	SA19	Clap Switch	3	20	5	3	3	1	35
	Sayan Bhagat	SA18		3	20	6	3	3	1	36
	Bhushan Awari	SA14		the state of the state of						
	Sahil Arjun Goraksh	SA14 SA11	Smart Dustbin	3	21	6	5	5	2	42
	Adarsh Kumar Singh	SA02	Smart Dustbin	3	19	4	4	4	2	36
	ridersh remai Shigh	3A02		3	23	6	5	5	2	44
	Anjali Sinha	SA09	Intruder Alarm using	4	21	5	5	5		
	Siddhi Adhav	SA05	Ultrasonic sensor	4	21	5	5	5	2 2	42
	GL UN N				Live TWO				2	442
A1	Shaikh Namra	SA01	Distance Indication	3	23	6	5	5	2	44
SD)	Pritha Baggha	SA15	Home Automation	3	18	3	2	2	2	30
	Subodh Bahadure	SA16		3	17	1 2	1 2			
	Amar Aradhya	SA10		2	18	3	3	3	1	29
	Aadesh Shedge	SA04	Traffic Light Simulation		19	1	3	2	1	29
			Traine signe simulation		19	1 1	1	3	1	28
	Ashwini Funde	SA12	Plus Alesso Heles	4	21	6	5	4	2	4
	Akanksha Kadam	SA07	Fire Alarm Using	4	20	6	4	3	2 2	4
	Agarwal Yashika	SA06	Aruino Uno	4	19	6	4	3	2	3
								100		1 3
	Ade Nita	SA03	Temperature Sensor	4	19	6	4	3	2	3
	Aniket Jadhav	SA08	Using LM35	4	18	6	4	3	2	3
1	Atar Tahir	SA13	Using EM33	2	18	3	3	2	1	2

HEAD OF DEPARTMENT

Dept: E&TC

## J8PM'SICOER

AV: 2021-27

Group & Guide		110000000000000000000000000000000000000			Assessment		-			
	Student Name	Roll No.	Project Title	Idea Inception <sup>1</sup>	Outcome <sup>2</sup>	Document ation <sup>3</sup>	Attend Reviews <sup>4</sup>	Demonstration 5	Awareness/Consideration of Env./social/ethics etc.6	Total
	<b>三</b> 医多个自身恐怖。路点是全个孩子是	E Care see		5	25	7.5	5	5	2.5	50
	Basari chavan	SA-29	Ardunia based in 1	4	20	5	4		<b>建维加</b>	Alle
	Onkar Bhosale	SA-21	Ardunio based wireless	4	23	6	4	4	2	39
	Vaishnavi Bhudhwant	SA-26	notice board	4	23	6	4	4	2	43
	Bhute Ayush Sachin	SA22	wireless	5	23	6	4	4	2	43
	Bodul Shruti Rajendra	SA25	wireless power	5	22	5	1	4	2	44
	Chavan Shubham Maharudra	SA30	transmission	5	21	6	- 4	4	2	42
	Harshada Bhapkar	SA20	Automotion of sandari	5	22	6	1	4	2	43
SE A2	Shadab Deshmukh	SA36	Automation of gardening	3	18	3	2	4	2	43
(NSL)	Karuna Biradar	SA24	system	3	19	4	3	2	1	29
()	chande alka	SA-27	Granden die in	3	18	4	3	3	1	33
	Desale Aditi	SA-35	fire sensor circuit using	4	18	3	3	3	2	33
	Daptare Ashutosh	SA-34	bc547 transistor	3	18	2	3	3	2	33
	Tejas Deshmukh	SA37	A	4	20	6	3	3	2	31
10 30	Pratima Bibrale	SA23	Automatic person counter &	4	19	5	4	4	2	40
4.5	Yash Dhane	SA38	light on/off	4	19	5	4	4	1	37
1.4.8	Sanket chor	SA33		3	20	2	3	4	2	38
180	kunal charthad	SA28	noise detection System	3	19	2	3	3	1	32

not done anything in project, did some part in report writing project demo done on Monday 13th June. corrections in project report, will submit on 15th June 2022

25



HEAD OF DEPARTMENT

Dept: E&TC

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AY: 2021-22

	Student Name		S. C. Marker M. A. C.	Carrie on Land to the State of the	1219 X 100 100 100 100 100 100 100 100 100 1	(1971-1971) (3Zent) 5-25(1)	Continuous	Assessment	The state of the s	(marking)
Group & Guide		Roll No.	Project Title	Idea Inception	Outcome <sup>2</sup>	Documentat ion <sup>3</sup>	Attend Reviews <sup>4</sup>	Demonstration <sup>5</sup>	Awareness/Consideratio n of Env./social/ethics etc. <sup>6</sup>	Total
	and the			5	25	7.5	5	5	2.5	50
	Lokesh Girase	SA48	Automated Arduino	4	25	6	4	5	2	46
	Ganesh Donhe	SA39	Based Accident	5	25	6	4	5	2	47
	Gaikwad OM	SA45	Home Automation using	4	22	5	5	5	2	43
	Jade Swami	SA55	Android Application	1	22	5	2	4	1	35
	Jadhav Aditya.B	SA56	7 individ 7 ipplication	1	22	5	2	3	1	34
	Shivam Gawale	SA47	Smart Dustbin Using	4	25	4	4	5	2	44
SE A3	Gitesh Bhangale	SA49	Aurdino	4	25	5	5	5	2	46
(SD)	Kiran Gurale	SA52	71414110	3	25	3	2	3	2	38
	Hajare Poonam	SA53		5	22	5	5	4	2	43
	Gade Pranali	SA43	Fire Detector Alarm	1	18	3	1	1	1	25
	Gadhiya Vaibhavi	SA44		1	18	2	1	2	1	25
	Gogule Vivek Vishnu	SA50	LED Distance Indicator	3	25	4	3	3	2	40
4.11.5	Aditya Jadhav . R	SA57	Using Arduino	3	24	4	3	3	1	38
	Durgesh Thakre	SA40	oomg : nounc	5	24	3	5	5	1	43
	Harshika Deepak	SA 54		2	2:			3	4	3
	Vinay Gulhane	SA 51	Automatic Soil Watering	3	2.		3	3	4	2
- 24	Erande Abhishek	SA 41		4	1		3	3	3	3
	Erande Omkar	SA 42	Mary St.	5	1	5 4	1	3	3	3
	Gaikwad Pratiksha	SA 46	Location and Detection u	2	1	2	2	3	2	3
	Gurale Kiran Balaji	SA 52								



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Dept: E&TC

JSPM'S ICOER

DII. 2021-27

	and the second second second second		Project Based Learn	ing Continuous	Assessmen	t Sheet		7	4. 2021				
Group &	Student Name			Continuous Assessment									
Guide		Roll No.	Project Title	Idea Inception <sup>1</sup>	Outcome <sup>2</sup>	Document ation <sup>3</sup>	Attend Reviews <sup>4</sup>	Demonstration 5	Awareness/Considerati on of Env./social/ethics etc. <sup>6</sup>				
	Khachare leena Rambhau	72		5	25	7.5	5	5	2.5	50			
	Jadhav Akshata	72 58	Bidirectional Visitor	5	23	7	4	4	2	45			
	Kanse yash	71	Counter	4	23	6	4	4	2	43			
	jawalkar tejas	64		4	23	6	5	4	2	44			
	kale Sakshi	67	Waterland	4	23	5	4	4	1.5	41.5			
	kale yogesh	68	Water level Indicator	4	23	5	4	3	1.5	40.5			
	kamble Swapnil	70		4	23	5	4	3	1.5	40.5			
	Jadhav S S		Reduce the intensity of light using Arduino	4	23	5	4	4	2	42			
SE A4		60		3	22	5	3	3	1.5	37.5			
(DAJ)	Jawale OM	63		3	23	4	4	4	2	40			
	jaiswal kartik	62	Automotical	4	23	4	4	4	2	11			
	kale pavan	66	Automatic plant	3	22	4	3	4	2	38			
	kakade Chetana	65	watering System	3	22	4	3	4	2	38			
	Jadhav Chetana	59	Gas Leakage Detector	4	23	4	4	4	2	41			
	kamble Aniket	69	using GSM Module	3	14 The 12 May 1					34.5			
	Jagtap A	61	1000	3	21 18	3	3	3	1.5				
	Karpure K	71	Automatic Light intensit	4	23	3	3	3	1.5	29.5			
	More Lakhan Yuvraj	75		4	25	4	3	4	2	40			
	Khandagale Shivani Popat	73					-						

		Project I	Based Learning Continuous Ass	sessme	nt Shee					
						Co	ntinuous A	ssessment	Awarenes	
oup & uide	Student Name	Roll No.	Project Title	Incep	poutcome	Documen tation <sup>3</sup>	Attend Reviews <sup>4</sup>	Demonstr ation <sup>5</sup>	s/Conside ration of	Total
				5	25	7.5	5	5	2.5	50
	Karale Pratiksha Ajinath	SB01		3	16	3.5	2	3	1.5	29
	Maindad Pratiksha Jivan	SB14	Smart dustbin using Ardino	3	17	5	4	4	2	37
	Mamta Tukaram Khandade	SB16		3	17	5	4	4	2	35
	Khose Sayali Bibhishan	SB05			18	4.5	2	3	1.5	33
	Kokate Suraj Ganeshrao	SB06	Water level Indicator	4	21	5.5	3	4	1.5	39
	Korke Vaidehi Santosh	SB07		3	16	3.5	2	3	1.5	29
	W. D. D. and Canada	SB02		3	18	5.5	1 4	3	1.5	35
	Kardile Prasad Ganesh Kudale Tushar Shankar	SB02 SB09	Smart stick for Blind person	3	17	5.5	4	3	1.5	34
	Lakare Omkar Subhash	SB10		2	15	5.5	2	2	1.5	28
				-						
B1	Lakshmi Nishikant Chaudhari	SB11	Automatic Light intensity	3	15	3.5	2	3	1.5	28
AM)	Maharaj Govind Anandidas	SB13	control	3	15	3.5	2	3	1.5	28
	Mallav Hritik Shantaram	SB15	Light Thermometer using	3	16	3.5	2	3	1.5	29
	Mane Rutwik Rajendra	SB17	buzzar	4	18	4.5	2	3	1.5	33
	Khedkar Vishal Sanjay	SB03	and the state of the state of	1 4	18	4.5	2	3	1.5	33
	Khomane Aditya Sunil	SB04		3	16		2	3	1.5	29
	Kshatriya Akash Yogesh	SB08	Traffic light simulation	3	17		4	3	1.5	3
	11.11.11.11.11.11.11.11.11.11.11.11.11.	DE PRINT	A CHARLES							
	Lalwani Saksham Santoshkuma	SB12		4	18	4.5	2	3	1.5	3
	Mehta Ranjankumar Ruplalpra	SB18		3	16	3.5	2	3	1.5	
	Meshram Simran Nandkishor	SB19	Fire detector Alarm	4	18	4.5	2	3	1	

HEAD OF DEPARTMENT

Dept: EBTC

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Ay. 2021-22

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				Commission of Secretary Street	Allie State Commence		Continuous Asses	sment	ALEXAND ROBERT AND STATE	
Group &   Guide	Student Name	ent Name Roll No.	Project Title	Idea Inception <sup>1</sup>	Outcome <sup>2</sup>	Documentation <sup>3</sup>	Attend Reviews4	Demonstration <sup>5</sup>	Awareness/Consideration of Env./social/ethics etc.	Total
	Patil Ashwini	10年6月11日		5	25	7.5	5	5,	2,5	50
	Nakate Siddhi	B30	Touchless Hand	3	18	5.5	1	MATERIAL STATE OF THE STATE OF		
		B24		3	17	5.5	4	3	1.5	35
	Attar Nilofer	B26	Sanitizer Dispenser	2	15	5.5	2	3	1.5	34
- 1	M				15	3.3		2	1.5	28
	Mhetre Harshal	B21	Smart Switch	3	20	6.5	3			
	aik Sarvesh B23	B23	Automation using	3	17	5.5	2	4	1.5	38
1	Pawar Satyam	B31	Ardunio	3	18	6.5	2	4	1.5	33
-		Broke Broke			10	0.5	3	3	1.5	35
	Prasad Rakeshkumar	B34		3	18	•				Fig. 13
	lakh Kiran	B36	Home Automatrion	3	17	5	4	4	2	36
	alave Nilesh	B27	using Ardunio	3	17		4	4	2	37
,D)			THE RESERVE OF		1/	5	4	4	2	35
Pa	awar Sushant	B32	Smart Stick For Blind	3	23					
Ra	athod Aakash	B38	Person	3	22	6	4	4	2	42
			11 013011	3	22	6	4	4	2	41
M	okashi Ashitosh	B22		4	47					1 11
	rdeshi Tarun	B28	Smart Clap switch light	4	17	5	4	3	2	35
	radar Prathamesh	B35	By using Ardunio	4	18	5	4	3	2	36
DI	adal Fradianiesii	033	By Using Ardunio	4	16	5	4	3	2	34
MI	aske Harshda	B20	-			The state of the			2	34
				3	20	6	4	3	2	-
	gale Nikita	B25	Digital Thermometer	3	19	5	4	3	2	38
Pav	var Vaishnavi	B33	using Buzzer	3	20	5	4	3	2	36
		and the state of t	the second of the second	The State of the Land		THU CLER		3	2	37
	jane Yogesh	B37	Solar Power Converter	3	18	4	2			11/2
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Group & Guide	Student Name	Roll No.	Project Title	lea Inceptio	Outcome <sup>2</sup>	Document ation <sup>3</sup>	Attend Reviews <sup>4</sup>	Demonstration <sup>5</sup>	Awareness/Considerati on of Env./social/ethics etc. <sup>6</sup>	Total
			THE RESERVE ASSESSED.	5	25	7.5	5	5	2.5	50
	Gayatri sawant	SB46	The second secon		29/2/2/2/2020/7					
	Shruti sarda	SB43	LPG gas leakage detection	4	24	6	4		1	4
		and a little deposit of				-			1	
	Siddhesh kumbhar	SB53			1 12					
	Shubham Hajare	SB52	Obstacles avoiding car using aurduino					10 1 10 10	44.44	
	Runit sawant	SB47		3	24	7	3	4	. 2	
	D. Line and a	Tonas								
	Rohit takpire	SB56		5 1 17	1 1 1 1 1 1 1 1					
	Akshay talnikar	SB57	Water level indicator			200				
-	Aishwarya soundatikkar	SB55		3	18	5	3	5	2	
1	Shreya patil	SB51								
D3	Renuka khrade	SB39	Power distribution transformer monitoring	5	25	_				
SB)	Renuka khrade   SB39   5   25   7   3   3									
1	Sakshant nandanwar	SB41								
5	Shreyas saraf	SB42	Motion sensor light system							
Ī	Digamber sarode	SB44		4	22	7	3		2	1
										-
	Chetan sathe	SB45								
F	Rutuja sapate	SB40	Automatic upper dipper light system		3					
S	Savita sonwane	SB54		4	24	5		1	4	2
-	Thomaso abodica	SB48								
	hamrao ghodke	SB48 SB49	Automatic street light	-						
	larshada shevate		Automatic street light							
S	hubham shewale	SB50	( ON Fr	3	17		1	4	5	2

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Dept. of Electronics & Telecommunication
Imperial College of Engineering & Research
Wagholi, Pune - 412 207.

DEPT: 200 ESTC

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A.Y: 2021-22

			Project Based	Learning Continuous Assess	sment Sheet					_
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oup & Gu	ic Student Name	Roll No. Project Title	Project Title	Idea Inception <sup>1</sup>	Outcome <sup>2</sup>	Document ation <sup>3</sup>	Attend Reviews <sup>4</sup>	Demonstr ation <sup>5</sup>	Awareness/Consideratio n of Env./social/ethics etc. <sup>6</sup>	Total
				5	25	7.5	5	5	2.5	50
	Waghmare Vishal Rajkumar	SB 71	Ultrasonic Radar using	5	22	7	- 5	5	2	46
	Yadav Harishkumar Kamalapati	SB 73	Arduino	5	22	7	5	. 5	2	46
							1			
	Vivhal Sanika Sanjog	SB 65	Arduino Based Ultrasonic	5	22	6.5	5	4	1.5	44
	Tarde Sarang Ganesh	SB 59	Sight	5	22	6.5	5	4	1.5	44
	m t skil a d D d'i	SB 60		4	21	5.5	5	1 4	1.5	41
E B4	Tejas Vishwanath Patil	SB 67	Soil Moisture Sensor using	4	21	5.5	4	3	1.5	39
(KD)	Vishal Vittal Saudagar Waghmare Aditya Ramchandra	SB 68	Arduiono	3	20	4.5	4	3	1.5	36
				4	21	1 55	1 2	1 2	1.0	20
	Tilekar Abhijit Santosh	SB 61	Arduino based car parking	4	21	5.5	3	3	1.5	38
	Utkarsh Shivaji Gardare	SB 63	system	4	21	6.5	1	4	1.5	
	Waghmare Amol Gangadhar	SB 70		4	21	0.3	1 4	4	1.5	41
		SB 62	Obstacle Avoidance	4	18	4.5	2	3	1.5	33
J	Tushar Narute Jay Vaidya	SB 64	Robotic Vehicle	4	21	5.5	3	4	1.5	39
	Pratiksha Tambekar	SB 58	Robotic venicle	3	16	3.5	2	3	1.5	29
		00.51	Smart Dustbin using	3	15	3.5	1 2	1 3	1.5	28
	Vedant Prakash Yelpale	SB 74	Arduino	3	15	3.5	2	3	1.5	28
	Vipul Rajesh Wankhede	SB 72	Aidullo	11-30		7.0			1	20

Vishal Vitthalrao Garud Waghmare Amar Kamlesh

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#### JSPM's



# Imperial College of Engineering and Research, Wagholi, Pune. (Approved by AICTE, Accredited by NAAC 'A' Grade, affiliated to SPPU) Department of Computer Engineering



#### PBL groups details

		Class : SE Subje	ect - PBL AY.2	021-22		
Batch	Group no	Group members	Contact no of Team/Group leader	Title	Guide	
		GATHADI TEJAS ANIL (TL)		Movie recommendations		
	1	GARUD SUYASH SANDIP	9325411829 - 788 764 4646	system using machine	Prof S. R.	
		KADAM POONAM UTTAM		learning	Bhandari	
		KALE SHIVANI SANJAY		1001111118		
	2	GAJARE DHANASHRI DNYANESHWAR				
		KHALATE SEJAL SANDEEP		Online Chatting app like	Prof A. P.	
		KOPARKAR GARGI BHAGWAN (TL)		WhatsApp	Gaigol	
		GAIKWAD SEJAL SHANTARAM				
		KARANDIKAR ADITYA VINAYAK (TL)	7219236226		Da V C Wadaa	
		KAMBLE JYOTIRAM AMBADAS		Nickes telving annlication		
	3	DHOKALE NISHANT MUKUND		Notes taking application	Dr. V. S. Wadne	
		GAIKWAD HARSHAL VIJAY				
		JALKOTE SHANTANU SHAILESH (TL)				
A1	1 , 1	JADHAV ATHARVA SAMBHAJI	9422829067	0 15 '	Prof V. U.	
	4	GUNWANT MAROTRAO BANAIT		Search Engine	Rathod	
		BHOSALE SAKSHI SANJAY	1			
		DEOKAR RAHUL PRAKASH (TL)				
	[	GUPTA SHIVAM RAKESH	97675972/19		Prof M.	
	5 L			Contact hook	Į.	

	<i>J</i>	BONDE ANUJ MACHHINDRANATH	71013714 <del>1</del> 7	COMIACI DOOK	Kulkarni	
		BHAYGUDE VAISHNAV BABASAHEB				
	6	BHANNARIA MANAS MANISH			Prof S. R. Bhandari	
		DESHMUKH GAURAV DIPAKRAO	9657198507	Restaurant Website		
		KALEKAR SHRUTI CHETAN (TL)				
		KALE KARTIK SUNIL		Video Colling/Conferencing	Prof A. P.	
	7	KALE SHASHIKANT PADMAKAR	9325433005	Video Calling/Conferencing Website like Zoom		
		DINDE RUSHI SHRIKANT (TL)		website like Zoom	Gaigol	
	8	MOHITE RUSHIKESH SUJAY				
		SANIKA MANOHAR HIPPARAGI (TL)	8208163484	To do list app with advanve	Dr. V. S. Wadne	
		SANIKA MAGAR	8208103484	features	Dr. v. S. wadne	
		PAWAR ANAND YUVARAJ				
	9	SANJANA DILIP SANGIDWAR (TL)				
		PIMPALGAONKAR MITALI MAKARAND	9356873580	Emojify- create your own	Prof V. U.	
	9	MULANI ALFAIJ SALIM	9550875580	emoji with python	Rathod	
		SALUNKHE DHANASHRI DNYANESHWAR				
		PATIL SWARANGI PRABHAKAR (TL)		Temperature Converter and		
	10	PALASKAR KSHITIJA SHASHIKANT	9423905554	real time temperature find	Prof M.	
		PAWAR APURVA SOMNATH		using location and API	Kulkarni	
		PATHARE PRATIKSHA BABAJI		Website		
A2	11	PATIL GAYATRI GOPAL (TL)				
		NIKAM JOGESHWARI JIJABRAO	7020020270	Sain wifin Calanda a Sanda a	Prof S. R.	
		MEDHE SHWETA ANIL	7820830370	Scientific Calculator System	Bhandari	
		PUNDE ADESH ROHINESHWAR	1			
	12	ROUT ABHISHEK RATNAKAR				
		RANDHE PRASAD NANASAHEB (TL)	0250172221	Notfliv Home Dage Clans	Prof A. P.	
	12	PATIL SHRINATH SHEKHAR	9359173231	Netflix Home Page Clone	Gaigol	
		NALE AKHILESH RAMCHANDRA	1			
		KURKELLI ADITYA JAYPRAKASH				
		KUMAVAT YASH RAJENDRA	]		Dr. V. S. Wadne	
	13	LANDE YASH BABASAHEB	9309581782	Online exam website		
		SANAP JAGDISH DILIP (TL)	]			

		PAWAR SURAJ LAXMAN			D 611 11
	14	TELANG NILESH JAGANNATH (TL)	7447654275	Travel Guide Website using	Prof V. U.
		SAWANT ARPITA VINOD	, , 60 . 2 / 6	Travel advisor API	Rathod
	15	THOKE UMESH BHAUSING		Student Result Management System	Prof M. Kulkarni
		WAKCHAURE OMKAR SUYASH	9130201700		
		SHRIKHANDE SHIVAM SANJAY (TL)			
		SONAVALE ALANKAR NARESH			Prof S. R. Bhandari
	16	SHINDE GAURAV SANJAY	9552047540	Weather Forecast Website	
	16	DEOKAR SANU RAVI (TL)	8552047540	weather Forecast website	
		SONAVANE GANESH BHAGWAN			
		KSHIRSAGAR ATHARVA SATISH (TL)		Quiz Application	Prof A. P. Gaigol
	17	RAJPUT ANSHUSINGH SANJAYSINGH	9146107312		
		SHINDE PRADIP RAJENDRA			
A3		BALGUDE SHARAD SAURABH			
	18	SHUBHAM VINOD KAKDE (TL)		Ecommerce website	Dr. V. S. Wadne
		HUMNABADKAR VRUSHANK	9284706541		
		KHARDE AISHWARYA RANGNATH			
		KANTALE ADITI VIJAY			
		WABLE YASH SUBHASH (TL)		Certificate Creation/Management System	Prof V. U. Rathod
		SHINDE MAYUR AKASH			
	19	WAGH ADITYA NETAJI	9359479794		
		TARAKH SANDIP PRAVIN			
		SHELKE ADITYA PRADIP			
	20	SHINDE ADITYA SANJAY		Ticket Raising and	D. CM
		SONAWANE ABHIDNYA BABASAHEB (TL)	8626006912	Management System for IT	Prof M.
		THOMBARE SAHIL DATTATRAY		Company	Kulkarni

#### PRESENTED BY:-

#### UNDER GAUIDENCE OF:

Prof. S.R.Bhandari



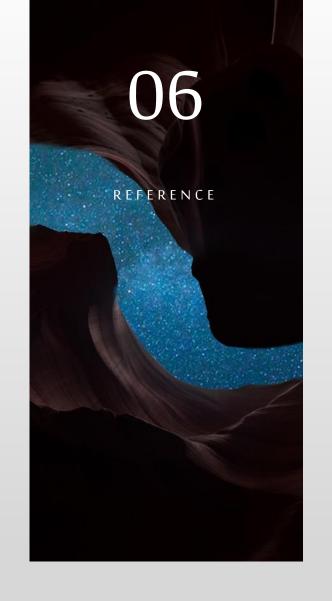


















## **Introduction**

Weather forecasting means the prediction of the weather through the application of the principles of physics, supplemented by a variety of statistical and empirical techniques. In addition to predictions of atmospheric phenomena themselves, weather forecasting includes prediction of changes on the Earth's surface climate. These changes are caused by atmospheric conditions like snow and ice cover, storm tides, and floods.







## **Problem Statement**

## To create a website for Weather Forecast

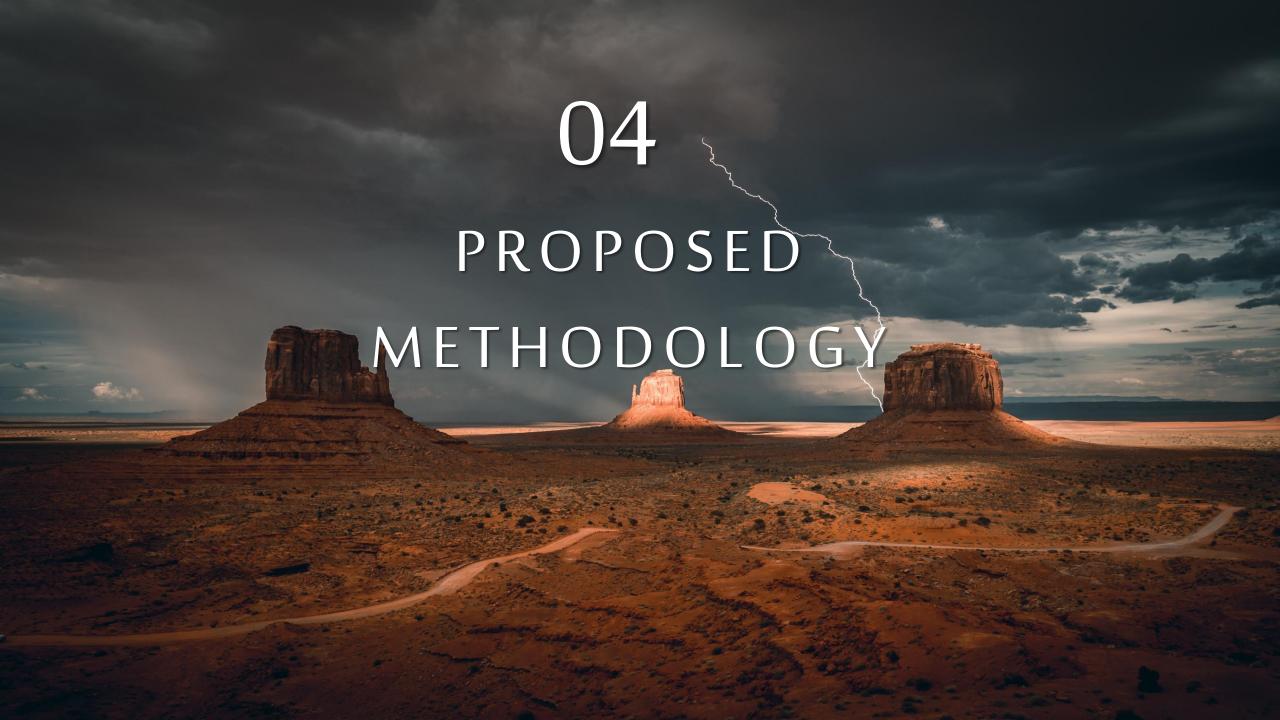






## **OBJECTIVES**

# To Find the Weather Forecast Details of User Entered Location



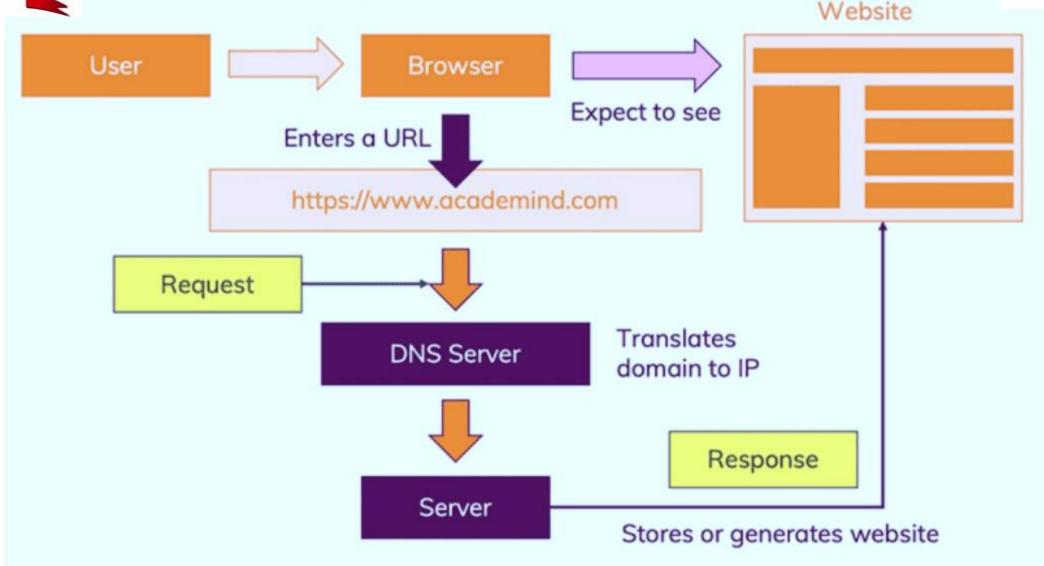




# How Websites Work











#### ▼ General

Request URL: https://academind.com/

Request Method: GET

Status Code: 
200

Remote Address: 99.84.92.105:443

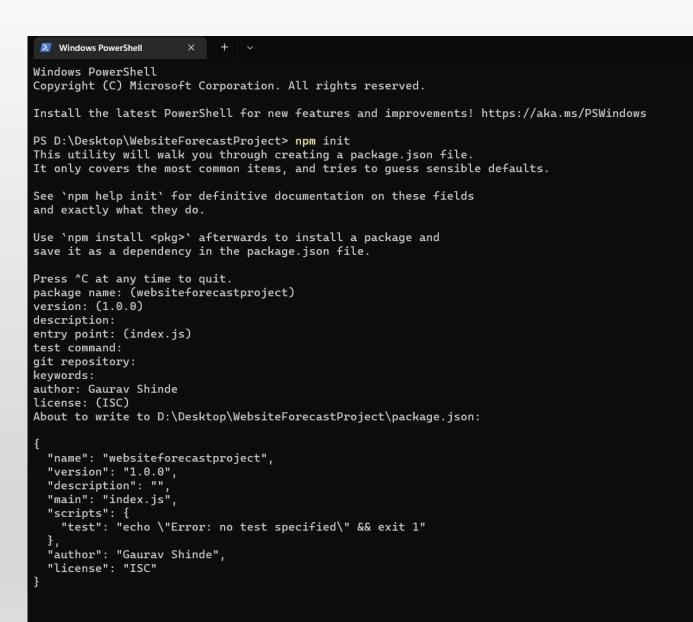
Referrer Policy: no-referrer-when-downgrade



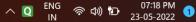


## Setting Up Server

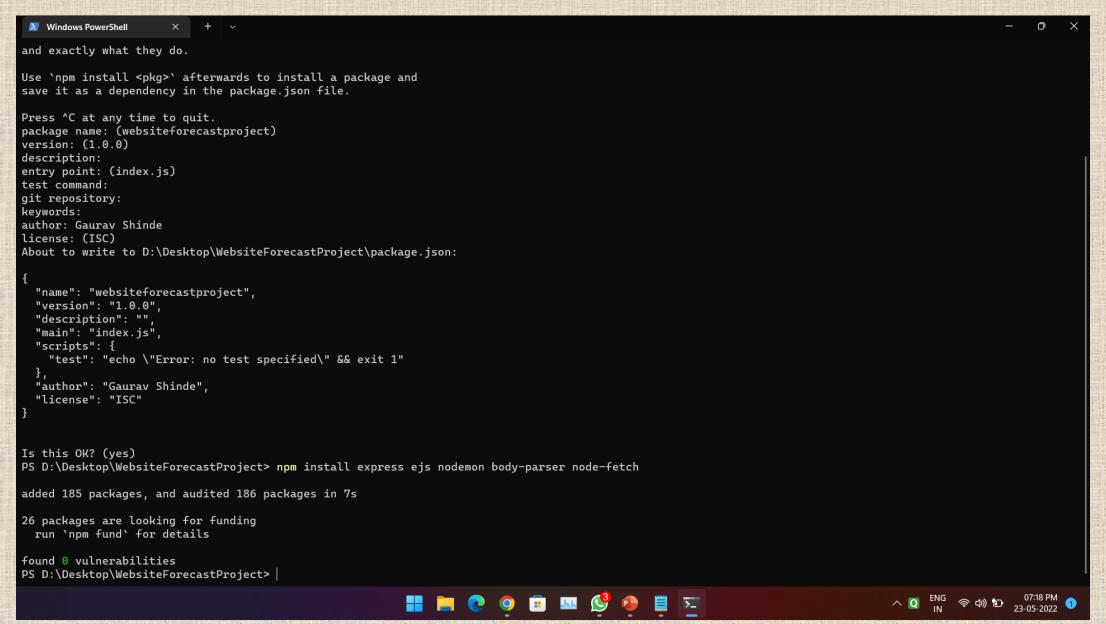
- Firstly Making the Node.js Server
- >Installed the required packages
- ➤ Ported the Server at Localhost







## **Packages Installation**







## **Front-End**

- >Starting Making EJS Templates
- >Inserted Bootstrap, custom style-sheet, images
- Linked EJS and Style-sheet Server





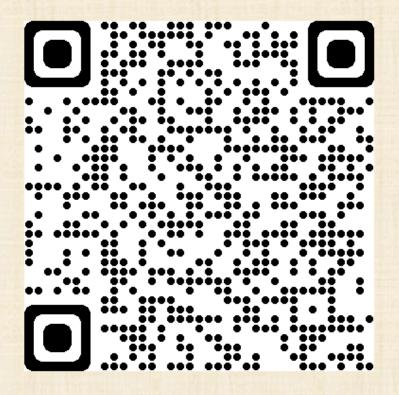
## Connecting Frond-End with Server

- >Added get request to homeroute
- ➤ Added 1'st API to convert user entered city names to co-ordinates
- >Added 2'nd API and fetched weather data using fetch module
- Added function's to convert Unix date and time received from 2'nd API to UTC(Co-ordinated Universal Time)
- Rendered required data to webpage as a response of post request from user





#### Scan the QR Code to visit the site:



Link: <a href="https://limitless-shelf-83830.herokuapp.com/">https://limitless-shelf-83830.herokuapp.com/</a>







## Conclusion

Weather forecasts are increasingly skillful and useful, and their benefits extend widely across the economy. The forecasting community works closely with users to ensure that forecast information meets their specific needs. This includes collaborations between physical and social scientists to ensure that accurate and reliable forecast information is communicated in ways that enable users to incorporate it in their decision-making processes. Simultaneously, the forecasting community is improving existing forecast tools, developing new forecast techniques, and leveraging new and expanding observation networks to help improve forecast skill. These efforts have increased, and continue to increase, the value of forecast information to everyone.







## References

> node.js

Link: <a href="https://nodejs.org/en/docs/">https://nodejs.org/en/docs/</a>

express.js

Link: <a href="https://expressjs.com/en/5x/api.html#express">https://expressjs.com/en/5x/api.html#express</a>

> ejs

Link: <a href="https://ejs.co/#docs">https://ejs.co/#docs</a>

# Thank You

#### PROJECT BASED LEARNING REPORT

#### Submitted to

#### SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE

#### Submitted By

- 1) Deokar Sanu Ravi (S190514209)
- 2) Shinde Gaurav Sanjay (S190514261)
- 3) Sonavale Alankar Naresh (S190514266)
- 4) Sonavane Ganesh Bhagwan (S190514267)

Under the Guidance of Prof S.R.Bhandari



#### DEPARTMENT OF COMPUTER ENGINEERING

JSPM's IMPERIAL COLLEGE OF ENGINEERING &
RESEARCH
WAGHOLI, PUNE- 412207
2021-22

# JSPM's Imperial College of Engineering & Research, Wagholi Pune – 412207



#### CEITITICITE

This is to certify that the PBL Project entitled "Weather Forecast Website"

Submitted by "Deokar Sanu Ravi" is a record the bonafide work carried by her, under my guidance as a part of Project Based Learning course.

Guide Head of Department Principal

Computer Department Computer Department I.C.O.E.R, Pune

(External Examiner)

Place: Pune

Date:

#### **CONTENTS**

Sr No.	Торіс	Page No.
1)	Abstract	1
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#### WEATHER FORECAST WEBSITE

#### **Abstract:**

Weather forecasting is the attempt by meteorologists to predict the weather conditions at some future time and the weather conditions that may be expected. The climatic condition parameters are based on the temperature, wind, humidity, rainfall and size of data set.

Weather forecasting is the prediction of the state of the atmosphere for a given location using the application of science and technology. This includes temperature, rain, cloudiness, wind speed, and humidity. Weather warnings are a special kind of short-range forecast carried out for the protection of human life. Weather warnings are issued by the governments throughout the world for all kinds of threatening weather events including tropical storms and tropical cyclones depending upon the location. The forecast may be short-range or Long-range. It is a very interesting and challenging task. This report provides a basic understanding of the purpose and scope of weather forecasts, the basic principles and the general models developed for forecasting.

#### **Introductions:**

Weather forecasting means the prediction of the weather through the application of the principles of physics, supplemented by a variety of statistical and empirical techniques. In addition to predictions of atmospheric phenomena themselves, weather forecasting includes prediction of changes on the Earth's surface climate. These changes are caused by atmospheric conditions like snow and ice cover, storm tides, and floods.

The basis for weather prediction started with the theories of the ancient Greek philosophers and continued with Renaissance scientists. It was followed by the scientific revolution of the 17th and 18th centuries. The theoretical models of 20th- and 21st-century atmospheric scientists and meteorologists helped for the betterment in applications. The so-called synoptic weather map came to be the principal tool of 19th-century meteorologists. This is used today in weather stations and on television weather reports all over the world. All can happen only through a comprehensive weather forecast. Any weather prediction, needs a systematic collection of weather record of various places and proper analysis using the data for prediction.

#### <u>Problem Statement:</u> To create a website for Weather Forecast <u>Literature Survey:</u>

Weather forecasting has been one of the most challenging difficulties around the world because of both its practical value in popular scope for scientific study and meteorology. Weather is a continuous, dynamic, multidimensional chaotic process, and data-intensive and these properties make weather forecasting a stimulating challenge. It is one of the most imperious and demanding operational responsibilities that must be carried out by many meteorological services all over the globe. Various organizations workers in India and abroad have done demonstrating using supported time series data manipulation. The various methodologies viz. statistic decomposition models, Exponential smoothing models, ARIMA models and their dissimilarities like seasonal ARIMA models, vector ARIMA models using flexible time series, ARMAX models i.e., ARIMA with following informative variables etc., which has been used for forecasting purposes. Many trainings have taken place within the analysis of pattern and circulation of rainfall in many regions of the world. Totally altered time series methods with different purposes are used to investigate weather information in many different literatures. Accurate and timely weather forecasting is a major challenge for the scientific research. Weather prediction modelling involves a combination of many computer models, observations and acquaintance of trends and designs. Using these methods, practically accurate forecasts can be made up. Regression is a statistical experimental technique and it must be widely used in many businesses, the behavioural sciences, social and climate recasting and many other areas.

Agrawal et al. (1980) explained the phenomena for time series regression models for forecasting the yield of rice in Raipur district on weekly data using weather parameters [1]. In [2] the author Kou and Sun, (1993) was used to Associate in having intervention model for average10 days stream flow forecast and synthesis that was investigated by to affect the extraordinary phenomena caused by typhoons and different serious irregularities of the weather of the Tan Shui geographical area in Taiwan. In [3] Chiew et al, (1993) conducted a comparison of six rainfall-runoff modelling approaches to

pretend daily, monthly and annual flows in eight tolerant catchments. They concluded that time-series approaches will agreement adequate estimates of monthly and annual yields within the water capitals of the catchments. In [4] Langu, (1993) is another approach which used statistical analysis to observe changes in weather and runoff patterns to go and look for important changes inside the parts of variety of weather statistic. Box and Jenkins (1994), in early 1970's, pioneered in developing methodologies for statistic indicating within the univariate case often known to Univariate Box-Jenkins (UBJ) ARIMA modelling in this approach of the author[5]. The variables which describes weather conditions vary continuously with time in this explanation we found that the author [6], describing time series of each and every parameter and can be used to develop a forecasting model either statistically or using some new means that uses this time series data (Chatfield 1994; Montgomery and Lynwood 1996). Several authors have discussed the fuzziness associated with the weather systems. In [7] Chaotic features are associated with the atmospheric phenomena also have fascinated the attention of the modern scientists (Sivakumar 2001; Sivakumar et al. 1999; Men et al. 2004). At present, the valuation of the nature and causes of seasonal climate variability is still formation. Since, it is a complicated phenomenon that includes many specialized fields of know-how to work for weather prediction (Guhathakurata, 2006); therefore, in the field of meteorology all assumptions are to be taken in the visage of uncertainty connected with local of and global climatic variables. Different scientists over the world have developed stochastic weather models. It is mainly used to predict and warn about how natural disasters that are caused by abrupt modification in climate conditions and has been approached using Climatic means [8]. In [9] Seyed, A., Shamsnia, M., Naeem, S. and Ali, L., (2011) was explained that the modelled weather parameter using some of the random methods (ARIMA Model) It include the Case Study: Abadeh station, Iran. Mahsin et al. (2012) used Box-Jenkins methodology to form seasonal ARIMA model for monthly weather information taken for Dhaka station, Bangladesh, for the significant amount from 1981-2010. In their paper, ARIMA (0, 0, 1) (0, 1, 1) model was found suitable and also the model is working for forecasting the monthly climate

prediction. Marmara University, Vocational School of Technical Sciences, Turkey(2010) comparative study of statistical and neuro-fuzzy network models for forecasting the weather of Gazette, İstanbul, Turkey Adaptive Network Based Fuzzy Inference System and Auto Regressive Moving Average models have been applied that ensure the efficiency of ARIMA and ANFIS techniques, different models using a different training and test data set have been tested [10] and the criteria of performance evaluation which are calculated for estimating and then comparing the performances of ARIMA and ANFIS models for forecasting has mentioned the clear review .Mahmudur Rahman, A.H.M. Saiful Islam, Sahah Yaser Magnoon Nadvi, Rashedur M Rahman (2013) consider Arima and Anfis Model and explained how ARIMA Model can more efficiently capture the dynamic behavior of the weather property, say, Minimum Temperature, Maximum Temperature, Humidity and Air pressure which must be compared by different performance metrics, for example, with Root Mean Square Error (RMSE), R-Square Error and The Sum of the Square Error(SSE) [11] and author can prove that ARIMA would give the more efficient result than other modeling techniques like ANFIS.

#### **Information:**

Practical applications of weather forecasting: Systematic weather records were kept after the invention of the instruments for measuring atmospheric conditions during the 17th century. Undoubtedly, these early records were employed mainly by those engaged in agriculture. Planting and harvesting can be planned better and carried out more efficiently if all the long-term weather patterns are estimated in advance.

Weather warnings are a special kind of short-range forecasts. It is needed for the protection of human life from weather extremes. Weather warnings are issued by government and military organizations throughout the world for all kinds of threatening weather events like tropical storms which are called as hurricanes, typhoons, or tropical cyclones, depending on location.

Weather forecasting became an important tool for aviation during the 1920s and '30s. Many oceangoing shipping vessels as well as military ships use optimum ship routing forecasts to plan their routes in order to minimize the loss of time, potential damage, and fuel consumption in heavy seas. Any observer who has learned the nature's signs in the sky can interpret the appearance of the sky, the wind, and other local effects and "foretell the weather."

A scientist can use instruments at one location to determine the same effectively. The modern approach to weather forecasting uses data of many such observations made at different places. These are exchanged quickly by experts at various weather stations and entered on a synoptic weather map. This synoptic weather maps are used to depict the patterns of pressure, wind, temperature, clouds, and precipitation at a specific time.

## **Establishment of weather-station networks and services:**

The increase in the number of weather-station networks linked by telegraphy, made synoptic forecasting a reality. It happened by the close of the 19th century.

Forecasters are able to produce synoptic weather maps of the upper atmosphere twice each day on the basis of radiosonde observations.

The Radar observation of the growth, motion, and characteristics of such storms provide clues as to their severity.

Meteorological measurements are made from satellites and aircraft. The era of numerical weather prediction began in the 1950s. As computing power grew, so did the complexity, speed, and capacity for detail of the weather and climatic models. The new and latest observations became available from such sources as Earth-orbiting satellites, radar systems, and drifting weather balloons. Advanced methods with sophisticated equipment are used to ingest the data into the models to produce the initial synoptic maps. Numerical forecasts have improved steadily over the last fifty years.

## **Weather prediction / Forecast:**

Weather Forecasting serves many purposes and needs. It can help people and organizations to plan for the future and to make rational decisions. The fundamental aim of meteorologists is to understand the atmospheric processes and then predict the future weather as much ahead as possible. Adaptation to the climatic environment, which means adjusting to the normal occurrences and withstanding the unfavourable extremes is an important feature for the survival of life. So, it is inevitable to go for weather forecast in the world everywhere.

### Goal of atmospheric research:

Weather prediction is said to be the ultimate goal of atmospheric research. It is the most advanced area in the subject and application of meteorology. First, to make an accurate forecast, a meteorologist must first understand what processes are occurring in the atmosphere to produce the current weather at the location for which the meteorologist is forecasting. This is done by measuring certain elements (making observations) of the atmosphere. They are called as weather elements. It includes the temperature, pressure, wind direction and speed, humidity, cloud cover, precipitation, etc. Frequency, accuracy and area of coverage are important in this work. The more complete measurement coverage across the earth's surface and vertically through the atmosphere of these elements will give a better picture about the trending situations. By observing the changes which take place to these elements over time and comparing the changing patterns with historical

patterns, an understanding of expected weather conditions can be made. The differences in warming across the earth's surface from solar radiation, radiational cooling at night, warming of the atmosphere due to latent heat release during condensation are some of the important things to be recorded.

## **Meteorologists in weather Forecasting:**

If meteorologists can understand how the atmosphere changes over time in response to various factors, they can write the governing mathematical equations to express these changes. These equations are developed into numerical models to find out how the atmosphere is changing and will appear in the future. The output from these models can be used as an aid to forecasters in preparing the forecasts both in short range or long range.

- Different methods used in modern weather forecasting are:
- (1) Synoptic weather forecasting,
- (2) Numerical methods, and
- (3) Statistical methods.

## **Synoptic weather forecasting:**

It is the traditional and basic approach adopted in weather prediction. This method continued to be in use until the late 1950s. "Synoptic" means that the observation of different weather elements refers to a specific time of observation. Thus, a weather map that depicts the atmospheric conditions at a given time is a synoptic chart to a meteorologist. In order to have an average view of the changing pattern of weather, a modern meteorological centre prepares a series of synoptic charts every day. Such synoptic charts form the basis of all general weather forecasts. The task of preparing synoptic charts on a regular basis involves huge collection and analysis of observational data obtained from thousands of weather stations. From the careful study of weather charts over many years, certain empirical rules are formulated. These rules help the forecaster in estimating the rate and direction of the movement of weather systems.

#### **Numerical methods:**

The numerical method involves a lot of mathematics. Modern weather forecasting is now using the techniques of Numerical Weather Prediction

(NWP). This method is based on the fact that gases of the atmosphere follow a number of physical principles. If the current conditions of the atmosphere are known, these physical laws may be used to forecast the future weather situations.

A series of mathematical equations are used to develop the theoretical models of the general circulation of the atmosphere. These equations are used to specify changes in the atmosphere as the time passes on. For these equations certain weather elements like air movements, temperatures, humidity, evaporation at the ground, clouds, rain, snow and interactions of air with ground and oceans are taken into account. The daily weather prediction model is one such thing. In mobile phones we see these forecasts.

## Daily weather prediction model:

The daily weather prediction model makes use of a numerical model in which the atmosphere is divided into 6 distinct layers. In certain cases, the atmosphere is divided into as many as 11 layers. The use of mathematical models makes it necessary that the initial state of the atmosphere is completely known. These models, in fact, represent a hypothetical atmosphere. The equations are solved by the computer at each nodal point for a very short period of time, say 10 minutes. By repetitive calculations for every next 10 minutes, forecast is obtained for 24, 48 or 72 hours ahead.

#### Radio sonde data:

The accuracy of numerical weather predictions depends primarily on two factors. First, the more data that is available to a computer, the more accurate its results. Second, the faster the speed of the computer, the more calculations it can perform, and the more accurate its report will be. This is made possible by making observations of the atmosphere by means of radiosonde stations all over the world. Radio sonde data are supplemented by means of radiometric observations from satellites which also provide data on humidity and cloud cover. With the help of these quantities, maps showing the atmospheric conditions are constructed. At present automated techniques are used to draw weather maps depicting the pattern of these quantities.

### Nowcasting:

The forecasting of the weather within the next six hours is often referred to as nowcasting. In this time range, it is possible to forecast smaller events such as individual showers and thunderstorms with reasonable accuracy, as well as other features too small to be resolved by a computer model. This type of forecast therefore includes details that cannot be solved by numerical weather prediction (NWP) models running over longer forecast periods.

#### Statistical methods:

Statistical methods are mainly used along with the numerical weather prediction computations. These methods often supplement the numerical methods.

Statistical methods use the past records of weather data on the assumption that future will be a repetition of the past weather. The main purpose of studying the past weather data is to find out those aspects of the weather that are good indicators of the future events.

After establishing these relationships, correct data can be safely used to predict the future conditions. Only overall weather can be predicted in this way. It is particularly of use in projecting only one aspect of the weather at a time.

## **Forecast Range Types:**

A short-range forecast is a weather forecast made for a time period up to 48 hours.

Extended forecasts are for a period extending beyond three or more days (e.g., a three to five-day period) from the day of issuance.

Medium range forecasts are for a period extending from about three days to seven days in advance.

Long-range forecasts are for a period greater than seven days in advance but there are no absolute limits to the period.

Short-range forecast predictions, where the forecast is made for a time period for today and/or tomorrow (up to 48 hours), are generally more accurate than the other types of forecasts.

### **Long Range Weather Forecasting:**

A long-range forecast must be able to indicate how the weather over the extended period will differ from the climatic normal. As the climate of a region and season is a summary of all types of weather conditions which occur, long-range forecasts may have to attempt to describe the future weather, in terms of the types of weather situations to be expected. The realization that the climate is not constant and invariant, makes the forecasting of future climate all the more important.

Consistent with the several needs, the scope of long-range weather prediction has extended over a wide spectrum ranging from 5 days to periods of the length of months, seasons or more.

## **Basis of long-range forecasting:**

Long-range forecast of weather will have to depend upon the routine observations of the several phenomena, made over the entire globe.

The number of atmospheric elements/parameters concerned is so enormous that to maintain an accurate record of their locations, their physical state and their changes is practically impossible.

### Periodicity is yet another factor in this process:

The study of periodic variations in weather has attracted many meteorologists. Much of the work done in long-range forecasting of weather by climatic cycles is based on the expected influences of the major planets.

## Correlation approach:

Statistical relations expressing the relationships between past and present weather on the one hand and the future weather in the same or other regions of the globe on the other, have been in use in various parts of the world. These were used particularly where large scale processes dominate the weather over a wide range of land areas.

### **Dynamical approach:**

In this method, beginning with the observed state of the atmosphere at a given time, the future state is predicted on the basis of a set of thermodynamical and hydrodynamical differential equations. Most of these

equations involve the first law of thermodynamics and Newton's second law of motion.

## **Challenges of Tropical Weather Forecasting:**

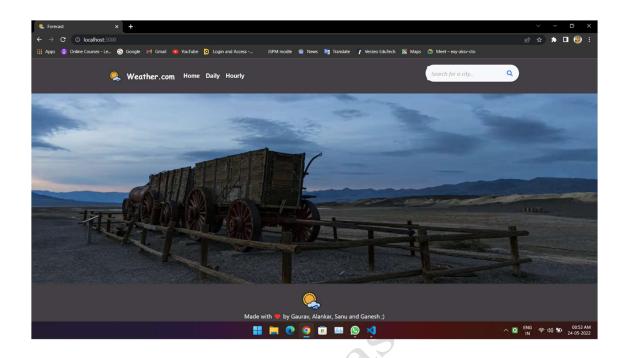
Tropical weather is difficult to forecast. Midlatitude weather is dominated by synoptic systems moving in the westerlies, which formed the basis for the weather analysis methods developed in the 19th and 20th centuries. In the midlatitudes, baroclinic instability results from air masses with contrasting temperature and density. There, energy is concentrated in extratropical cyclones that can be tracked fairly easily. But tropical cyclones may be very difficult to predict. Tropical forecasters are faced with a variety of synoptic-scale systems that can produce heavy rain, strong winds, severe weather, dust storms, and high surf. The most hazardous of the synoptic systems are tropical cyclones.

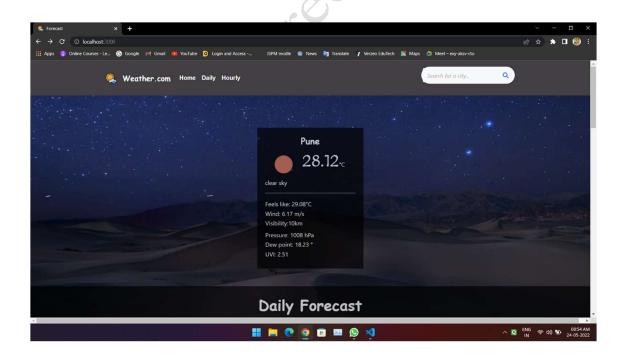
## Algorithm:

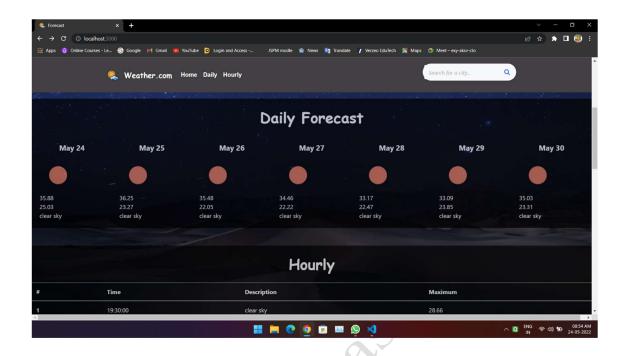
- **Step1:** We have used Node.js which is an open source, cross-platform runtime environment for developing server-side and networking applications. Node.js applications can be run within the Node.js runtime on OS X, Microsoft Windows, and Linux.
- **Step2:** Installed express.js framework and made our server run on localhost.
- **Step3:** Now we had to process our home route post request on this server which returns our homepage of website in response.
- **Step4:** Now we started to work on frontend of website and made files index.ejs and searchlocation.ejs
- **Step5:** Index.ejs would be the homepage of our site. We used bootstrap and also customized it according to our requirement
- **Step6:** Added Static Folder so that we can place static files in it like images and CSS stylesheet which we used to customize webpage in step5.
- **Step7:** Now stated working of searchloc.ejs which will be going to result of post request to home route.()
- Step8: Started working on CSS of searchloc.ejs
- **Step9:** Now we started working on server created in step1 and step2.
- **Step10:** The problem is to find weather forecast info on particular searched city. So in order to get weather data we used openweathermap's One Call API which returns current weather info and weather forecast for 7 days.
- **Step11:** To fetch this data we used node package fetch.
- **Step 12:** But the One Call API used here takes only co-ordinates of location to be searched as parameter/query.
- **Step 13:** So to make it user friendly we used another API(Geolocation) which converts City name to its particular co-ordinates and passed its output as query to One Call API.
- **Step 14:** We parsed the JSON data got through this API and displayed it on searchloc.ejs.

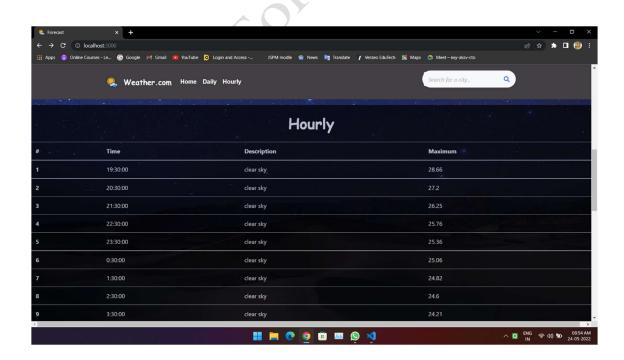
### **Results and Analysis:**

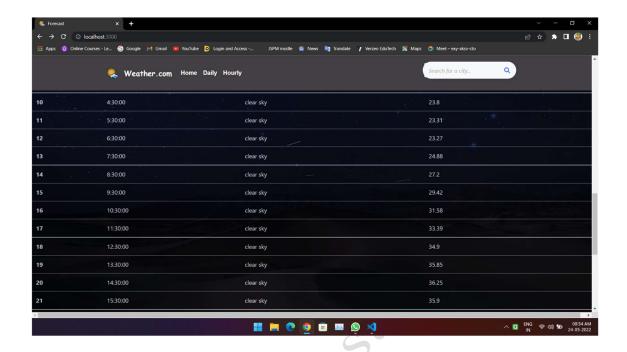
## **Results:**

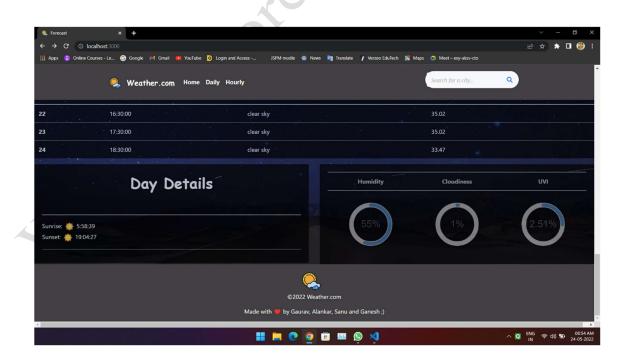












## **Scan the QR Code to visit the site:**



Link: https://limitless-shelf-83830.herokuapp.com/

### **Conclusion:**

Weather forecasts are increasingly skillful and useful, and their benefits extend widely across the economy. The forecasting community works closely with users to ensure that forecast information meets their specific needs. This includes collaborations between physical and social scientists to ensure that accurate and reliable forecast information is communicated in ways that enable users to incorporate it in their decision-making processes. Simultaneously, the forecasting community is improving existing forecast tools, developing new forecast techniques, and leveraging new and expanding observation networks to help improve forecast skill. These efforts have increased, and continue to increase, the value of forecast information to everyone.

## Reference:

Node.js is an open-source and cross-platform JavaScript runtime environment. It is a popular tool for almost any kind of project!Node.js runs the V8 JavaScript engine, the core of Google Chrome, outside of the browser. This allows Node.js to be very performant.

Link: https://nodejs.org/en/docs/

Express is the most popular Node web framework, and is the underlying library for a number of other popular Node web frameworks. It provides mechanisms to: Write handlers for requests with different HTTP verbs at different URL paths (routes). Integrate with "view" rendering engines in order to generate responses by inserting data into templates. Set common web application settings like the port to use for connecting, and the location of templates that are used for rendering the response. Add additional request processing "middleware" at any point within the request handling pipeline.

Link: https://expressjs.com/en/5x/api.html#express

➤ What is EJS used for EJS or Embedded Javascript Templating is a templating engine used by Node.js. The template engine helps to create an HTML template with minimal code. Also, it can inject data into the HTML template at the client-side and produce the final HTML.

Link: <a href="https://ejs.co/#docs">https://ejs.co/#docs</a>



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PROF. DR.T.J.SAWANT **FOUNDER SECRETARY**  DR.R.S. DESHPANDE **PRINCIPAL** 

## **Project-based learning**







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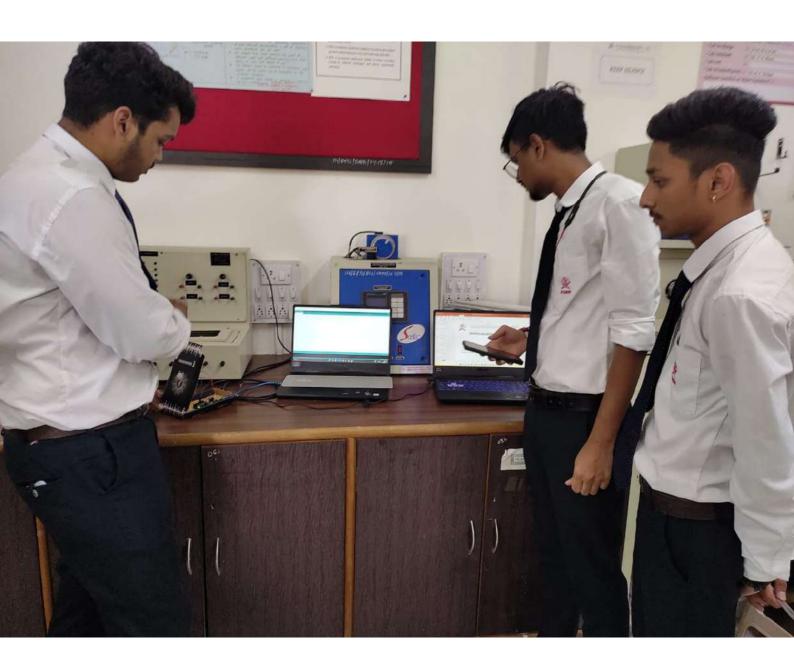


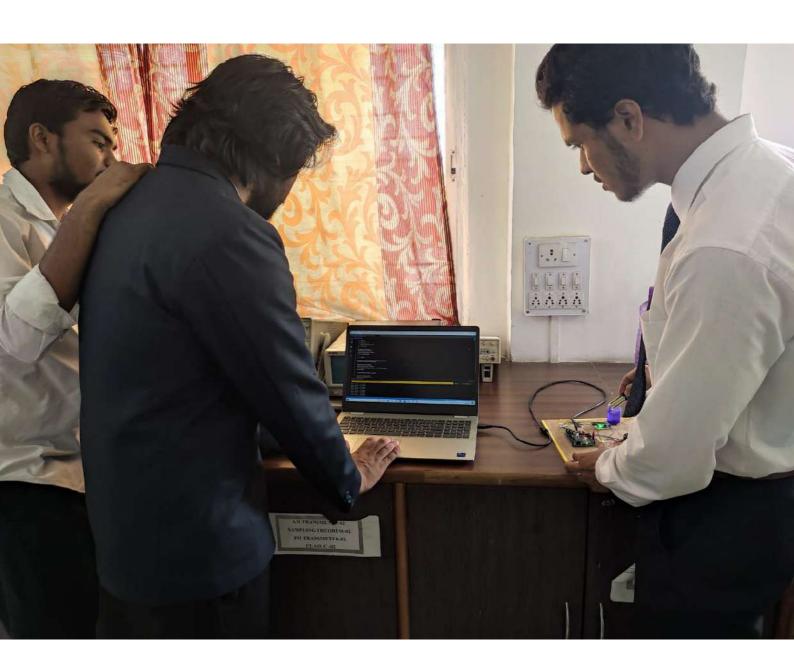


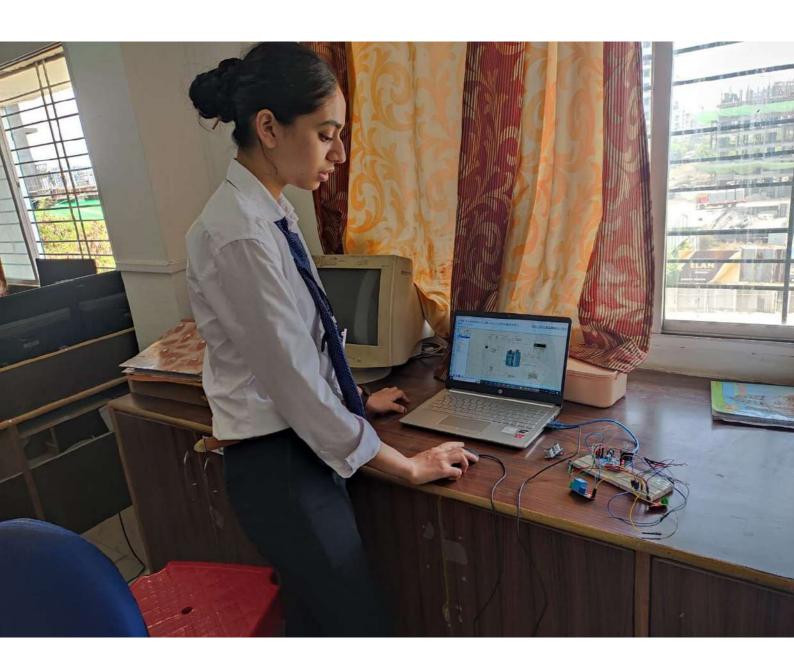














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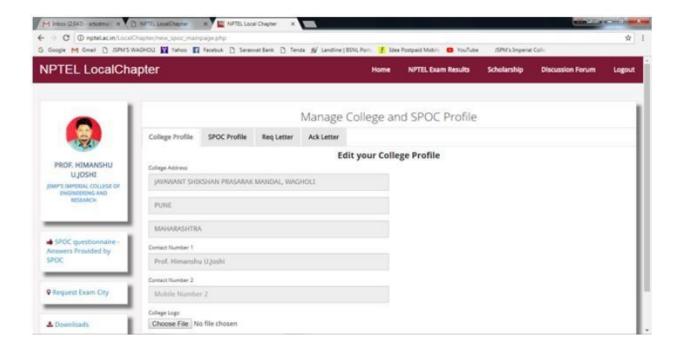


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DR.R.S. DESHPANDE
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## **MOOC/ NPTEL Courses**

The institute has established under A Project funded by MHRD, Govt. of India, NPTEL local chapter IIT madras, in line with the above initiatives; the dept has actively pursued the usage of E-learning. To take this initiative forward and to encourage more students across colleges to participate in this initiative, this will be under the headship of a faculty member of the department, who would be our Single Point of Contact (SPOC).



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## NPTEL courses attended by students (few samples)

Sr. No.	Name of students	Title of course	Course date	AY
1	Korade Nilesh Vijay	Engineering Thermodynamics	Sept- Dec2022	2022-23
2	Shahensha Pathan	Java	Sept- Dec2022	2022-23
3	Anisha Prataprao Patil	Foundation course in managerial economics	Jan-Mar 2022	21-22
4	Suraj Satish Patil	Foundation course in managerial economics	Jan-Mar 2022	21-22
5	Rehmatullah S <mark>haikh</mark>	Automation In Manufacturing	Sept- Dec2020	2020-21
6	Ayush Kumar <mark>Singh</mark>	Solid Mechanic	Jan-Mar 2020	2019-20



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Score	Type of Certificate
>=90	Elite+Gold
75-89	Elite+Silver
>=60	Elite
40-59	Successfully Completed
<40	No Certificate

No. of credits recommended by NPTEL:2

An additional 1 credit may be awarded if the University deems it fit, based on the actual student effort involved.



## Elite





This certificate is awarded to

### **SURAJ SATISH PATIL**

for successfully completing the course

### Foundation Course in Managerial Economics

with a consolidated score of Online Assignments 20.42/25 Proctored Exam 45.92/75

Total number of candidates certified in this course: 1762

Prof. Jayanta Mukhopadhyay Dean Outreach IIT Kharagpur

No:NPTEL22MG43S34111098

Jan-Mar 2022 (8 week course) Prof. Debjani Chakraborty



Indian Institute of Technology Kharagpur

To validate and check scores: https://nptel.ac.in/nc

## Roll No: NPTEL22CE09S44111940

TO ADINATH VISHWANATH KALE AT. BASWANTPUR. TQ. LATUR DIST.LATUR S.NO 40 NEAR KAPSE WORKSHOP,PUNE-411036 BASWANTPUR MAHARASHTRA - 413512 PH. NO :7745003329



Score	Type of Certificate
>=90	Elite+Gold
75-89	Elite+Silver
>=60	Elite
40-59	Successfully Completed
<40	No Certificate

## No. of credits recommended by NPTEL:2

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for successfully completing the course

## **Development and Applications of Special Concretes**

with a consolidated score of 46 %

Online Assignments | 16.25/25 | Proctored Exam | 30/75

Total number of candidates certified in this course: 139

Prof. B. V. Ratish Kumar Chairman, Centre for Continuing Education IIT Kanpur Jan-Mar 2022 (8 week course) Prof. Satyaki Roy NPTEL Coordinator IIT Kanpur





Roll No: NPTEL22MG43S44112110

TO ANISHA PRATAPRAO PATIL INDRAYANI SOCIETY AL/3/29 SECTOR 19 MAHARASHTRA - 400708 PH. NO :7506067107



	Score	Type of Certificate
	>=90	Elite+Gold
	75-89	Elite+Silver
	>=60	Elite
	40-59	Successfully Completed
Ì	<40	No Certificate

No. of credits recommended by NPTEL:2

An additional 1 credit may be awarded if the University deems it fit, based on the actual student effort involved.



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## ANISHA PRATAPRAO PATIL

for successfully completing the course

## **Foundation Course in Managerial Economics**

with a consolidated score of 55 %

Online Assignments 20/25 Proctored Exam 34.5/75

Total number of candidates certified in this course: 1762

Prof. Jayanta Mukhopadhyay
Dean Outreach
IIT Kharagpur

Jan-Mar 2022 (8 week course) Prof. Debjani Chakraborty
Coordinator, NPTEL
IIT Kharagpur



Indian Institute of Technology Kharagpur



Roll No: NPTEL22MG43S44112110

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Score	Type of Certificate
>=90	Elite+Gold
75-89	Elite+Silver
>=60	Elite
40-59	Successfully Completed
<40	No Certificate

No. of credits recommended by NPTEL:2

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## ANISHA PRATAPRAO PATIL

for successfully completing the course

## **Foundation Course in Managerial Economics**

with a consolidated score of 55 %

Online Assignments 20/25 Proctored Exam 34.5/75

Total number of candidates certified in this course: 1762

Prof. Jayanta Mukhopadhyay

Dean Outreach

IIT Kharagpur

Jan-Mar 2022 (8 week course) Prof. Debjani Chakraborty
Coordinator, NPTEL
IIT Kharagpur



Indian Institute of Technology Kharagpur



## Roll No: NPTEL22CE39S24061548

TO RAHUL MANGESH CHAVAN A 902 POLITE PANORAMA SOCITY GAIKWAD NAGAR DIGHI PUNE MAHARASHTRA - 411015 PH. NO :7057570339



Score	Type of Certificate	
>=90	Elite+Gold	
75-89	Elite+Silver	
>=60	Elite	
40-59	Successfully Completed	
<40	No Certificate	

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This certificate is awarded to

## RAHUL MANGESH CHAVAN

for successfully completing the course

## Safety in Construction

with a consolidated score of

1

Online Assignments | 21.25/25 | Proctored Exam

49.72/75

Total number of candidates certified in this course: 1898

Devendra galihal

Prof. Devendra Jalihal

Chairman
Centre for Continuing Education, IITM

Feb-Apr 2022 (8 week course) Prof. Andrew Thangaraj
NPTEL, Coordinator
IIT Madras





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Score		Type of Certificate	
	>=90	Elite+Gold	
	75-89	Elite+Silver	
	>=60	Elite	
	40-59	Successfully Completed	
	<40	No Certificate	

## No. of credits recommended by NPTEL:3

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## line Certification

(Funded by the Ministry of HRD, Govt. of India)



This certificate is awarded to

## ROHIT YADAV

for successfully completing the course

## German - I

with a consolidated score of

68

Online Assignments 21.75/25 Proctored Exam

46.5/75

Total number of candidates certified in this course: 951

Prof. Devendra Jalihal

Chairman Centre for Continuing Education, IITM

Sep-Dec 2020 (12 week course) Prof. Andrew Thangaraj **NPTEL Coordinator** 

IIT Madras





Roll No: NPTEL22MG43S34111098

TO SURAJ SATISH PATIL INDRAYANI SOCIETY AL/3/29 SECTOR 19 MAHARASHTRA - 400708 PH. NO :8830936554



Score	Type of Certificate
>=90	Elite+Gold
75-89	Elite+Silver
>=60	Elite
40-59	Successfully Completed
<40	No Certificate

No. of credits recommended by NPTEL:2

An additional 1 credit may be awarded if the University deems it fit, based on the actual student effort involved.



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## **NPTEL Online Certification**

(Funded by the MoE, Govt. of India)



This certificate is awarded to

## SURAJ SATISH PATIL

for successfully completing the course

## Foundation Course in Managerial Economics

with a consolidated score of 66 9

Online Assignments | 20.42/25 | Proctored Exam | 45.92/75

Total number of candidates certified in this course: 1762

Prof. Jayanta Mukhopadhyay Dean Outreach IT Kharagpur

Jan-Mar 2022 (8 week course) Prof. Debjani Chakraborty
Coordinator, NPTEL
IIT Kharagpur



Indian Institute of Technology Kharagpur



Roll No: NPTEL22MG43S34111098

TO SURAJ SATISH PATIL INDRAYANI SOCIETY AL/3/29 SECTOR 19 MAHARASHTRA - 400708 PH. NO :8830936554



Sco	re	Type of Certificate
>=90	)	Elite+Gold
75-8	39	Elite+Silver
>=6	0	Elite
40-5	9	Successfully Completed
<40		No Certificate

No. of credits recommended by NPTEL:2

An additional 1 credit may be awarded if the University deems it fit, based on the actual student effort involved.



## Elite

## **NPTEL** Online Certification

(Funded by the MoE, Govt. of India)



This certificate is awarded to

## **SURAJ SATISH PATIL**

for successfully completing the course

## **Foundation Course in Managerial Economics**

with a consolidated score of 66

Online Assignments | 20.42/25 | Proctored Exam | 45.92/75

Total number of candidates certified in this course: 1762

Prof. Jayanta Mukhopadhyay
Dean Outreach
IIT Kharagpur

Jan-Mar 2022 (8 week course) Prof. Debjani Chakraborty
Coordinator, NPTEL
IIT Kharagpur



Indian Institute of Technology Kharagpur



#### **ISPM's**



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## **Criterion – II: Teaching Learning & Evaluation**

## Publication of technical magazines, newsletters, etc.

Departments provides an equal opportunity to express student, faculty and department through newsletters, institute magazine. Departments publishes newsletter once in semester on 15<sup>th</sup> August and 26<sup>th</sup> January on the occasion of independence and republic days. These newsletters focus on the departmental achievements, event held and upcoming target areas. Institute magazine is institute level platform to student and faculty to put their technical, social and techno-social views. Dissemination of publication through notice board, limiting to hard copies and soft copies is done to students.

**Table 1: List of Publication of Technical Magazines** 

Sr. No.	Particulars	Academic Year	Frequency of Publication
1	'ECSTASY' Institute Magazine	2017-18	Once in Year
2	'ECSTASY' Institute Magazine	2018-19	Once in Year
3	'ECSTASY' Institute Magazine	2019-20	Once in Year
4	'ECSTASY' Institute Magazine National Assessment 8	2020-21 Accreditation Council	Once in Year
5	'ECSTASY' Institute Magazine	2021-22	Once in Year

#### **Table 2 Technical Magazine Committee**

Sr. No.	Committee Name	Committee Member
1	Chief Editor	Principal
2	Faculty Advisory Committee	Faculty from each department
3	Editors (Language Team)	Students



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4	Photography	Students
5	Interview Section	Students
6	Social Activity	Students
7	Sketches and Drawing	Students
8	Cover Page Designer	Students
9	Design Committee	Students

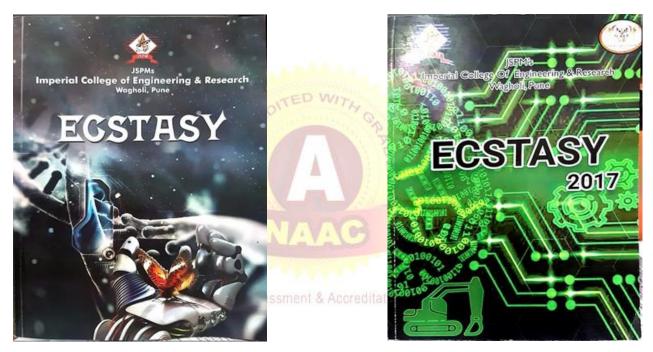


Figure 1: Screenshots of Institute Magazine (Cover Page)



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## **Table 3: List of Publication of Newsletters**

Sr. No.	Particulars	Academic Year	Date of Publication
1	'RACHANA' Departmental  Newsletter	2017-18	15/08/2017
2	'RACHANA' Departmental Newsletter		26/01/2018
3	'RACHANA' Departmental Newsletter	2018-19	15/08/2018
4	'RACHANA' Departmental  Newsletter	WITH	26/01/2019
5	'RACHANA' Departmental Newsletter	2019-20	15/08/2019
6	'RACHANA' Departmental Newsletter	A C	26/01/2020
7	'RACHANA' Departmental Newsletter	2020-21 Accreditation Council	30/03/2021
8	'RACHANA' Departmental Newsletter	2021-22	15/08/2022

# JSPM

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DR.R.S. DESHPANDE PRINCIPAL



News Letter published on 26th Jan 2018

News Letter published on 15th Aug 2018



News Letter published on 26th Jan 2019

News Letter published on 26th Jan 2020

Figure .2 Screenshots of Newsletters