



MARATHA VIDYA PRASARAK SAMAJ'S

**Karmaveer Adv. Baburao Ganpatrao Thakare
College of Engineering** (An Autonomous Institute)

Permanently Affiliated to Savitribai Phule Pune University Vid. Letter No. : CAH 267 & Approval by AICTE New Delhi - Vide Letter No. : 140-89-32 (E) ET/98, AICTE Copy : C-1622



Electronics & Telecommunication Engineering

Academic Year – 2025-2026	Class: Third Year
Semester – I	Date : 15/07/25 to 14/10/25
CO: 1,2,3	PO: 1,2,3,4 ,10,12

Innovative Teaching Methods

Title of Innovation method/activity: Project Based Learning

1. **Name of Faculty:** Mr. Viraj R Sonawane.

2. **Subject:** Database Management

3. Objective of Method:

1. Apply the concept of database management in the real-life problem.
2. Develop problem solving ability in Student.

4. Topic Covered through Activity:

Fundamental of DBMS, SQL , Database integration with front end like Python or JAVA or Cpp.

5. Description of method with Benefits (8 – 10 lines) :

Project-Based Learning (PBL) is a dynamic and engaging approach to education where students actively explore real-world problems and challenges to acquire deeper knowledge. Students work on projects over an extended period, which allows them to apply their theoretical understanding in practical scenarios.

Key Features of PBL:

- **Real-world Relevance:** Projects are often rooted in real-world issues or challenges.
- **Student-Centered:** Learners take ownership of their work and decisions.
- **Collaboration:** Encourages teamwork and communication among peers.
- **Critical Thinking and Creativity:** Students analyze, create, and innovate to solve problems.
- **Assessment:** Learning is assessed through the process and final outcomes rather than just exams.

Roles and Responsibilities

- **Teacher**

- Provide the Introduction to all the topic.
- Aware the student about the length, Breadth, Depth of Topic
- Provide the Study Material and appropriate guide lines at every stage
- Remain available all the time during all stages of process.
- Prepare assessment methodology.

- **Student**

- Go through all the material provided on particular topic
- Identify the project in nearby vicinity which is aligned with core concept learned.
- Actively participate in group and contribute by means of discussion, hand-out
- Share the expertise topic when joins a new group.

- **Group**

- Develop the guidelines to establish group.(i.e. Decide the roll of all participants)
- Every group should gain the expertise on particular topic.
- Prepare at least one page Hand-out / Report which cover all the details corresponding to the topic.
- While preparing the report make sure all the content are covered.
- Appropriate references should be given.
- Grammatical mistake should be checked.
- Develop the guidelines with which every group member can share the topic they learn

6. Assessment Tools & Rubrics :

	Rubrics	5	4	3	2	1
R1	Timely Submission	On Time	Day Dealy	Week Dealy	Reported but Incomplete	
R2	Problem Innovation / Application	Help Full to Enterprise	Real Life Problem	Simple	Theoretical	Less Relevant
R3	ER / Flow Diagram/ Connectivity	ER Diagram	Flow Chart	Connectivity established	Connectivity not Established	Slight Relevant
R4	Report	Organized & Complete	Complete but Not Organized	Not Complete but organized	Submitted	Not Submitted
R5	Codd's Rule	More Than 5, used and Justified	4 used and Justified	3 used and Justified	2 used and Justified	1 used and Justified
R6	Normalization	3 NF or More Justified	3 NF or More	2 NF Justified	2 NF	1 NF
R7	Use of PL SQL	3 PL SQL	2 PL SQL	1 PL SQL	No PLSQL	No PL SQL



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Electronics & Telecommunication Engineering
 Innovative Teaching Methods

Title of Innovation method/activity: Project Based Learning
Evaluation Sheet

RN	First Name	Last Name	Project Title	R1	R2	R3	R4	R5	R6	R7	Total out of 35	Out of 25	Sign
	Purab	Patil									0	0.0	
	Saurabh	Singh	personal growth application	4	4	4	4	3	5	4	28	20.0	<i>Patil</i>
	Rushikesh	Patil	<i>Book store Management</i>	<i>5</i>	<i>3</i>	<i>3</i>	<i>5</i>	<i>3</i>	<i>3</i>	<i>3</i>	<i>025</i>	0.0	<i>Patil</i>
1	Soham	Amrikar	Student Database Management	3	3	3	1	0	3	2	15	10.7	<i>S.K.</i>
2	Komal	Chavhan									0	0.0	<i>Amrikar</i>
3	Nikhil	Dengle	Cafe Menu Management	4	3	5	3	3	4	3	25	17.9	<i>N.S. Dengle</i>
4	Tejaswini	Devare	Juice centre	5	5	5	5	4	4	4	32	22.9	<i>Devare</i>
5	Trupti	Dhamane	Juice centre	5	4	5	5	4	5	4	32	22.9	<i>Dhamane</i>
6	Sanika	Dixit	<i>Student Database Management</i>	<i>5</i>	<i>3</i>	<i>4</i>	<i>4</i>	<i>5</i>	<i>4</i>	<i>5</i>	<i>26</i>	<i>00 20</i>	<i>S.D.</i>
7	Harshala	Garje	Juice centre	5	5	5	5	4	4	4	32	22.9	<i>Garje</i>
8	Subodh	Gawale	Electronic Voting Machine	3	5	5	4	5	5	5	32	22.9	<i>Gawale</i>
9	Nirmal	Gawali	Bank Management System	4	3	3	4	3	3	4	24	17.1	<i>Gawali</i>
10	Riya	Ghegadmal	college management system	3	3	3	4	5	5	5	28	20.0	<i>Riya</i>
11	Yadnesh	Gunjal	Cafe Menu Management	4	3	5	3	3	4	3	25	17.9	<i>Gunjal</i>
12	Harsh	Patil		5	4	3	5	4	4	5	30	21.4	<i>Patil</i>
13	Nikita	Hire	<i>Student Database Management</i>	<i>5</i>	<i>3</i>	<i>4</i>	<i>4</i>	<i>5</i>	<i>4</i>	<i>5</i>	<i>26</i>	<i>00 20</i>	<i>Hire</i>
14	Vedant	Jagtap	Bank Management System	4	3	3	4	3	3	4	24	17.1	<i>Jagtap</i>
15	Sakshi	Gawali	cafe management system	4	4	5	5	5	4	4	31	22.1	<i>Gawali</i>
16	Siddharth	Kedare	Bank Management System	4	3	3	4	3	3	4	24	17.1	<i>Kedare</i>
17	Shrushti	Naphade	Gate pass system	5	5	5	5	5	5	4	34	24.3	<i>N.S.</i>



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	Sagar	Nikam	Cafe Menu Management	4	3	5	3	3	4	3	25	17.9	
18	Sushant	Jadhav	Shri Ram Construction	3	4	3	4	3	3	3	23	16.4	
19	Snehal	Ushir	Torna Construction Site	4	4	4	4	4	4	3	027	0019.3	
20	Shivani	Shinde	Torna Construction Site	4	4	4	4	4	4	3	27	19.3	
21	Dipesh	More	Shri Ram Construction	3	4	3	4	3	3	3	23	16.4	
22	Pratyush	Deore									0	0.0	
23	Mohit	Pawar	Shri Ram Construction	3	4	3	4	3	3	3	23	16.4	
24	Janhavi	Ahirrao	Cafe management system	4	4	5	5	5	4	4	31	22.1	
25	Apurva	Arote	cafe management system	4	4	5	5	5	4	4	31	22.1	
26	Urmila	Amrutkar	Student database system	4	4	3	5	3	2	4	25	17.9	
27	Bhushan	Aswale	Plant Disease Detector	4	3	5	4	3	2	5	26	18.6	
28	Durvesh	Bagul	College Attendance	3	3	3	4	2	3	3	21	15.0	
29	Yuvraj	Bhosale	Cricket Player Management	3	3	5	4	4	3	4	26	18.6	
30	Sanika	Bodke	college management system	3	3	3	4	5	5	5	28	20.0	
31	Aarti	Boraste	DMART DATABASE SYSTEM	4	2	3	4	3	4	5	25	17.9	
32	Dulita	Borse	DMART DATABASE SYSTEM	4	4	4	3	3	5	4	27	19.3	
33	Tanmay	Chaudhari	College attendance management	3	3	3	4	2	3	3	21	15.0	
34	Tejal	Chaudhari	Xerox Shop Billing System	5	5	4	4	5	5	5	33	23.6	
35	Digambar	Dharrao	Electronic Voting Machine	3	5	5	4	5	5	5	32	22.9	
36	Siddhi	Chavan	Xerox Shop Billing System	5	5	4	4	5	5	5	33	23.6	
37	Snehal	Deore	ATM Management System	4	5	4	5	4	4	4	30	21.4	



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NBA
 MECHANICAL
 ELECTRICAL
 CIVIL
 INFORMATION TECHNOLOGY



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	Arnav	Deshmukh	Hotel management system	5	4	4	5	4	4	4	4	4	0.30	21.4	Resh
39	Ayush	Dhivare											0	0.0	
40	Shivam	Gadekar	Electronic Voting Machine	3	5	5	4	5	5	5	5	5	32	22.9	Bar
41	Ayush	Gatkal	Plant Disease Detector	4	3	5	4	3	2	5	5	5	26	18.6	Atkar
42	Shivani	Jadhav	ATM Management System	4	5	4	5	5	4	4	4	4	31	22.1	Bar
43	Shravani	Jadhav	juice centre	5	4	3	5	4	4	4	4	5	30	21.4	Sharma
44	Vidya	Jadhav	Hotel Management System	5	4	4	5	4	4	4	4	4	30	21.4	Sharma
45	Sakshi	Kale	Library Management System	3	2	2	4	4	2	3	20			14.3	Sharma
46	Siddhesh	Kale											0	0.0	Sharma
47	Komal	Kardel	Event registration form	4	3	5	5	3	4	5	29			20.7	Sharma
48	Gargi	Khairnar	DMART DATABASE SYSTEM	4	3	4	3	2	4	5	25			17.9	Sharma
49	Rupali	Kuwar	Library Management System	3	2	2	4	4	2	3	20			14.3	Sharma
50	Mayuri	Mali	Event registration form	4	3	5	5	3	4	5	29			20.7	Sharma
51	Sahil	Mandlik	Library management system	5	4	3	4	4	4	5	29			20.7	Sharma
52	Shardul	Mangrulkar	library management system	5	4	3	4	4	4	5	29			20.7	Sharma
53	Riddhi	Metkar	BOOKSHOP MANAGEMENT	5	3	3	3	5	3	3	25			17.9	Sharma
54	Abhinav	Mogal	Online movie ticket booking system	5	4	5	4	5	4	3	30			21.4	Sharma
55	Khushi	Nikam	Library Management System	3	2	2	4	4	2	3	20			14.3	Sharma
56	Vaishnavi	Pagar	BOOKSHOP MANAGEMENT	5	3	3	3	5	3	3	25			17.9	Sharma
57	Disha	Patil	Library Management System	3	2	2	4	4	4	4	23			16.4	Sharma
58	Divya	Patil	Hotel Management System	5	4	4	5	4	4	4	30			21.4	Sharma



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60	Siddesh	Patil	Farmers Export System	4	4	4	5	5	4	4	30	21.4	<i>Patil</i>
61	Prabha	Pawar	Attendance Management System	3	3	4	4	4	2	4	24	17.1	<i>Pawar</i>
62	Siddhant	Pawar	College Attendance	3	3	3	4	2	3	3	21	15.0	<i>Pawar</i>
63	Samip	Pimpalkar	gym performance tracker	4	5	5	4	5	3	4	30	21.4	<i>Pimpalkar</i>
64	Yachana	Rajput	ATM Management System	4	5	4	5	5	4	4	31	22.1	<i>Rajput</i>
65	Arati	Raut	hostel mess management	4	5	4	4	4	4	4	29	20.7	<i>Raut</i>
66	Sanika	Raut	college management system	3	3	3	4	5	5	5	28	20.0	<i>Raut</i>
67	Sanskriti	Raut	Student Attendance Management System	3	3	4	4	4	2	4	24	17.1	<i>Raut</i>
68	Nishant	Salke	Farmers Export System	4	4	4	5	5	4	4	30	21.4	<i>Salke</i>
69	Aditya	Sandhan	Personal growth application	4	4	4	4	3	5	4	28	20.0	<i>Sandhan</i>
70	Sakshi	Shelke	hostel mess management	4	5	4	4	3	4	4	28	20.0	<i>Shelke</i>
71	Vaishnavi	Shinde	<u>Library Management System</u>	5	5	5	5	5	4	4	033	0023.6	<i>Shinde</i>
73	Suyash	Sonawane	Gym Performance Tracker	4	5	5	4	5	3	4	30	21.4	<i>Sonawane</i>
74	Yukta	Sonawane	College Placement Management System	5	4	5	5	4	4	4	31	22.1	<i>Sonawane</i>
75	Saburi	Targe	ATM Management System	4	4	4	5	4	4	5	30	21.4	<i>Targe</i>
76	Ayushi	Vadodkar	Attendance Management System	3	3	4	4	4	2	4	24	17.1	<i>Vadodkar</i>

Impact Analysis**Course Teacher**

	4- Excellent	3- High	2- Moderate	1- Slight
Do you find Methodology Helpful	39	7	1	0
Does this helps for building a good team	36	10	1	0
Does the content covered are relevant	35	7	5	0
Rate your ability to connect MySql Server with JAVA or Python or Cpp.	38	7	1	1
Rate Your ability to utilize PL SQL block using this activity	38	7	2	0
Would You Like to Participate in This PBL Methodology again	47	0		

9 Activity Photo / Project :

Attached Separately

10. For review and critique contact: e-mail address of faculty and HODsonawane.viraj@kbtcoe.orghod@kbtcoe.org

Mr. V. R. Sonawane
Course Teacher



Dr. B. N. Rajole
HoD