



# MUKESH PATEL SCHOOL OF TECHNOLOGY MANAGEMENT & ENGINEERING

Department of Computer Science

**Sub: Database Management System**

Academic year (2020-21)

Class: BTECH CS 2<sup>nd</sup> yr

Sem: IV

## **Project-Based Learning (PBL)**

### **Objective:**

To enhance students' practical understanding of Database Management Systems through hands-on, projects that build critical skills in database design, query optimization, and management.

### **Overview:**

The Project-Based Learning (PBL) approach for the DBMS course emphasizes experimental learning by engaging students in projects that simulate real-world database scenarios. This pedagogical method promotes collaborative problem-solving, critical thinking, and active learning as students work on designing and implementing databases for practical applications.

### **Implementation Steps:**

1. **Project Assignment:**
  - Students are divided into small groups and assigned a project related to database application such as library management, hospital management, an inventory control system etc.
  - Each project covers key DBMS concepts, including ER modeling, schema design, normalization, SQL querying, and database optimization.
2. **Hands-On Labs and Tools:**
  - Students use industry-standard database management tools like MySQL, Oracle, SQL server for project implementation.
  - Practical labs help students practice SQL queries, normalization techniques, and optimization strategies, reinforcing project work.
3. **Regular Peer Reviews and Feedback:**
  - Periodic peer reviews encourage collaborative learning, with team members sharing insights and offering constructive feedback.
  - Instructors provide formative feedback after each milestone to guide students' progress and ensure quality in database design and functionality.
4. **Final Presentation and Evaluation:**
  - Each team presents its completed project, showcasing the database design, key features, and query optimizations.

- Evaluation criteria include project complexity, creativity in solving problems, adherence to DBMS principles, and team collaboration.

### Expected Outcomes:

- **Enhanced Practical Knowledge:** Students gain a comprehensive understanding of database systems by applying theoretical concepts to real-world problems.
- **Improved Critical Thinking and Problem Solving:** Working on complex database projects hones students' analytical skills and their ability to troubleshoot and optimize database systems.
- **Collaboration and Communication Skills:** Team projects foster essential interpersonal skills as students communicate their ideas and present their findings.

### Group and project details:

Sr.No	SAP ID	Roll.No.	Students Name	Project Title
1	70021119073	B260	Raghav Agarwal	LIBRARY MANAGEMENT SYSTEM
	70011119028	A224	Utkarsh Jain	
2	70021119081	B268	Dishika Arora	Bank Management System
	70021119079	B265	Shristi Kala	
3	70021119074	B259	Malay Bhadane	Online Examination Management System
	70021119061	B250	Shreyansh Sohane	
4	70021119027	B222	VAISHNAVI JARIWALA	RAILWAY MANAGEMENT SYSTEM
	70021119004	B204	DIVYA BHANUSHALI	
5	70021119005	B205	VED BHATKAR	Banking System
	70021119032	B226	KUNJ JOSHI	
	70021119017	B215	Adit Goyal	
6	70021119009	B209	Kunal Booch	Sports Management System with MySQL
	70021119011	B211	Abhraneel Das	
	70021119030	B225	Kushal Jha	
7	70021119080	B266	Suyash Singh	UNIVERSITY DATABASE System
	70021119082	B269	Arpit Choudhary	
8	70021119029	B224	Dwij Jha	Pizza Delivery Management System
	70021119001	B203	Rishi Agrawal	
9	70021119006	B206	Samarth Bhatt	Anime rating management System
	70021119008	B208	Harshad Behre	
10	70021119035	B228	Pranav Kolhe	Hotel Management System
	70021119012	B212	Dhairya Desai	
11	70021119015	B213	Yash Garg	COURIER MANAGEMENT SERVICE
	70021119021	B219	Charvi Hasaliya	
12	70021119040	B232	Rohan Mathur	DELIVERY MANAGEMENT SYSTEM (DMS)
	70021119016	B214	Naman Gokharu	
13	70021119007	B207	Mohit Bhavsar	DVD Management System
	70021119017	B215	Adit Goyal	

14	70021119010	B210	Tirth Butani Archit Gupta	HOSPITAL MANAGEMENT SYSTEM
	70021119018	B216	Archit Gupta	
15	70021119019	B217	Shambhavi Gupta	ORDER DELIVERY MANAGEMENT SYSTEM
	70021119036	B229	Priyanshu Mahajan	
16	70021119024	B221	Arnav Kumar Jain	Blood Bank Management System
	70021119023	B220	Arihant Jain	
17	70021119075	B261	CHAITANYA JUMALE	LIBRARY MANAGEMENT SYSTEM (LMS)
	70021119060	B249	PRANAY SIROYA	
18	70021119077	B263	AagamShah	Organ Donation System
	70021119033	B227	KritishaKhandelwal	
	70021119057	B247	MehrinNaaz	
19	70021119038	B230	Priyanshi Mapara	COLLEGE DATA MANAGEMENT SYSTEM
	70021119066	B254	Shruthi Sunil	
20	70021119039	B231	Vipul Mashruwala	Music Management Database System
	70021119044	B236	Urvaang Naik	
21	70021119043	B235	Aayush Naik	UNIVERSITY DATABASE System
	70021119078	B264	Raj Patel	
22	70021119046	B237	Kenil Navadiya	Airport Management System
	70021119055	B246	Trushil Shah	
23	70021119048	B239	Preetkumar. S. Patil	HOSPITAL MANAGEMENT SYSTEM
24	70021119062	B251	Chhavi Somani	Library Management System
	70021119076	B262	Dev Pithva	
25	70021119049	B240	Amogh Pradeep	Supermarket Management System
	70021119063	B252	Roshan Somayajula	
26	70021119047	B238	Varad Nilakhe	Library management System.
	70021119050	B241	Alpesh Ranjan	
27	70021119051	B242	Siddhivinayak Sahoo	Hospital Management
	70021118055	B267	Anshul Soni	
28	70021119052	B243	Nishit Saraf	Blood bank management system
	70021119058	B248	Aditya Sharma	
29	70021119054	B245	Samyak Shah	MOVIE BOOKING SYSTEM
	70021119069	B255	Harshvardhan Thakur	
30	70021119071	B257	Eshaan Vyas	Railway Reservation System
	70021119053	B244	Rishi Shah	

**Project Marks Distribution**

Sr. No	Roll No	SAP ID	Name of the Student	Design and Implementation and presentation[5]	Q/A[5]	Total [10]
				5	5	10
1	A224	70011119028	JAIN, UTKARSH	4	4	8
2	B203	70021119001	AGRAWAL, RISHI	3	3	6
3	B204	70021119004	BHANUSHALI, DIVYA	5	3	8
4	B205	70021119005	BHATKAR, VED	4	4	8
5	B206	70021119006	BHATT, SAMARTH	4	4	8
6	B207	70021119007	BHAVSAR, MOHIT	4	4	8
7	B208	70021119008	BHERE, HARSHAD	5	4	9
8	B209	70021119009	BOOCH, KUNAL	4	5	9
9	B210	70021119010	BUTANI, TIRTH	4	4	8
10	B211	70021119011	DAS, ABHRANEEL	5	3	8
11	B212	70021119012	DESAI, DHAIRYA	4	4	8
12	B213	70021119015	GARG, YASH	4	5	9
13	B214	70021119016	GOKHARU, NAMAN	5	4	9
14	B215	70021119017	GOYAL, ADIT	4	5	9
15	B216	70021119018	GUPTA, ARCHIT	4	5	9
16	B217	70021119019	GUPTA, SHAMBHAVI	4	4	8
17	B219	70021119021	HASALIYA, CHARVI	4	4	8
18	B220	70021119023	JAIN, ARIHANT	5	3	8
19	B221	70021119024	JAIN, ARNAV KUMAR	4	4	8
20	B222	70021119027	JARIWALA, VAISHNAVI	5	3	8
21	B224	70021119029	JHA, DWIJ	5	3	8
22	B225	70021119030	JHA, KUSHAL	4	4	8
23	B226	70021119032	JOSHI, KUNJKUMAR	5	3	8
24	B227	70021119033	KHANDELWAL, KRITISHA	4	4	8
25	B228	70021119035	KOLHE, PRANAV	4	4	8
26	B229	70021119036	MAHAJAN, PRIYANSHU	5	4	9
27	B230	70021119038	MAPARA, PRIYANSHI	4	4	8
28	B231	70021119039	MASHRUWALA, VIPUL	5	4	9
29	B232	70021119040	MATHUR, ROHAN	4	5	9
30	B235	70021119043	NAIK, AAYUSH	5	3	8
31	B236	70021119044	NAIK, URVAANG	5	4	9
32	B237	70021119046	NAVADIYA, KENIL	5	3	8
33	B238	70021119047	NILAKHE, VARAD	5	4	9
34	B239	70021119048	PATIL, PREETKUMAR	5	4	9
35	B240	70021119049	PRADEEP, AMOGH	5	4	9
36	B241	70021119050	RANJAN, ALPESH	5	4	9

37	B242	70021119051	SAHOO, SIDDHIVINAYAK			
38	B243	70021119052	SARAF, NISHIT	4	4	8
39	B244	70021119053	SHAH, RISHI	5	3	8
40	B245	70021119054	SHAH, SAMYAK	4	4	8
41	B246	70021119055	SHAH, TRUSHIL	4	5	9
42	B247	70021119057	SHAIKH, MAHERIN NAAZ	5	3	8
43	B248	70021119058	SHARMA, ADITYA	4	4	8
44	B249	70021119060	SIROYA, PRANAY	4	4	8
45	B250	70021119061	SOHANE, SHREYANSH	4	5	9
46	B251	70021119062	SOMANI, CHHAVI	5	4	9
47	B252	70021119063	SOMAYAJULA, ROSHAN	5	4	9
48	B254	70021119066	SUNIL, SHRUTHI	5	3	8
49	B255	70021119069	THAKUR, HARSH VARDHAN	4	4	8
50	B257	70021119071	VYAS, ESHAAN	5	4	9
51	B259	70021119074	BHADANE, MALAY	4	5	9
52	B260	70021119073	AGARWAL, RAGHAV	4	5	9
53	B261	70021119075	JUMALE, CHAITANYA	5	3	8
54	B262	70021119076	PITHVA, DEV	5	4	9
55	B263	70021119077	SHAH, AAGAM	4	5	9
56	B264	70021119078	PATEL, RAJ	5	3	8
57	B265	70021119079	KALA, SHRISTI	4	4	8
58	B266	70021119080	SINGH, SUYASH	4	5	9
59	B267	70021118055	SONI, ANSHUL	4	4	8
60	B268	70021119081	ARORA, DISHIKA	5	3	8
61	B269	70021119082	CHOUDHARY, ARPIT	4	5	9
				4	4	8

*Varsha Nemade*

Prof. Varsha Nemade

Subject Incharge