University Database

A PROJECT REPORT

Submitted by

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Under the guidance of

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KARNAVATI UNIVERSITY

BONAFIDE CERTIFICATE

Certified that this project report "**University Database"** is the bonafide work of **Dhyana parmar (21BTAI24), Arpit Ranjan (21BTAI05)** who carried out the project work under my supervision as a part of Project Based Learning in Course-Database Management System Lab (21BTCS23C08).

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VIVA-VOCE EXAMINATION

The viva-voice examination of the project work titled "**University Database"** submitted by **Dhyana Parmar (21BTAI24) , Arpit Ranjan (21BTAI24)** is held on _____

INTERNAL EXAMINER **EXTERNAL EXAMINER**

ACKNOWLEDGEMENT

I thank the **Almighty** for showering his blessing upon me in completing the project. I submit this project with a deep sense of gratitude and reverence for my beloved parents for their moral support and encouragement.

I express my sincere gratitude to **Dr.RAJU SHANMUGAM**, Professor & Dean, Department Of Computer Engineering, Unitedworld School of Computational Intelligence for providing strong oversight of vision, strategic direction , encouragement and valuable suggestions.

I convey my earnest thanks to **Ms.DIVYA MOHAN**, Assistant Professor , Department Of Computer Applications, for her valuable guidance and support throughout the project.

I extend my sincere thanks to all my staff members for their valuable suggestions, timely advice and support throughout.

- Dhyana Parmar

- Arpit Ranjan

Abstract

UNIVERSITY MANAGEMENT SYSTEM deals with the maintenance of university, college, faculty, student information and other department employee information within the university. UMS has a relational database, which is used to store the college, faculty, student, courses and information of a college.

Starting from registration of a new student in the college, it maintains all the details regarding the course enrolled by the student, attendance and marks of the students. The project deals with retrieval of information through an internet-based campus wide portal. It collects related information from all the departments of an organization and maintains files, which are used to generate reports in various forms to measure individual and overall performance of the students.

The university management system is store and retrieve the information through web-based application. So, it collects the information of individual and overall performance of students in various departments. UMS focuses on the basic need of accomplishing the task of maintaining the large stock of information in a university by creating a database. The interface is a very efficient application for the management of a university which not only benefits the user of the university but also plays a major role in enabling the management of the university to work in a proficient manner. This system will be a platform where users will have access to the facilities of the university including blackboard from anywhere using the Internet. This project report will provide a detailed account of the functionalities of the user interface which is taken as a reference to manage a university. Each subsection of this phase report will feature the important functionalities of the database design.

TABLE OF CONTENTS

Chapter 1

INTRODUCTION

This chapter deals with the general introduction of the project, existing system and the proposed system of this project. General gives a broad introduction of the project and tools to implement it. Existing system explains the deals of the current system and its limitations and the proposed system provide solution to overcome those limitations.

1.1 SYSTEM DESCRIPTION

Generally, this project makes it easier for the University to get access to any information needed. This project provides the following advantages to the University:

Find Information Quickly And Efficiently:

University database software allows the higher management to access a vast network of information gathered from Students, courses, faculties and other employees in different departments in the University. With access to billions of records, faculties, management and others can locate the information they need regarding the students, courses, faculties or other employees.

Access Data From Any Location:

With University database software, higher management can obtain information while in and out of the office. By the use of any web-enabled device with which they have access to the software, they can obtain information or records.

Collaborate With Other university departments:

With the development of University database software, higher management and

departments across the university can easily share information and work together to gather and store information.

Easily Integrate Software With Existing Systems:

The right university database software will easily integrate into the university or department existing system.

Focus On Important Police Work Instead Of Technology:

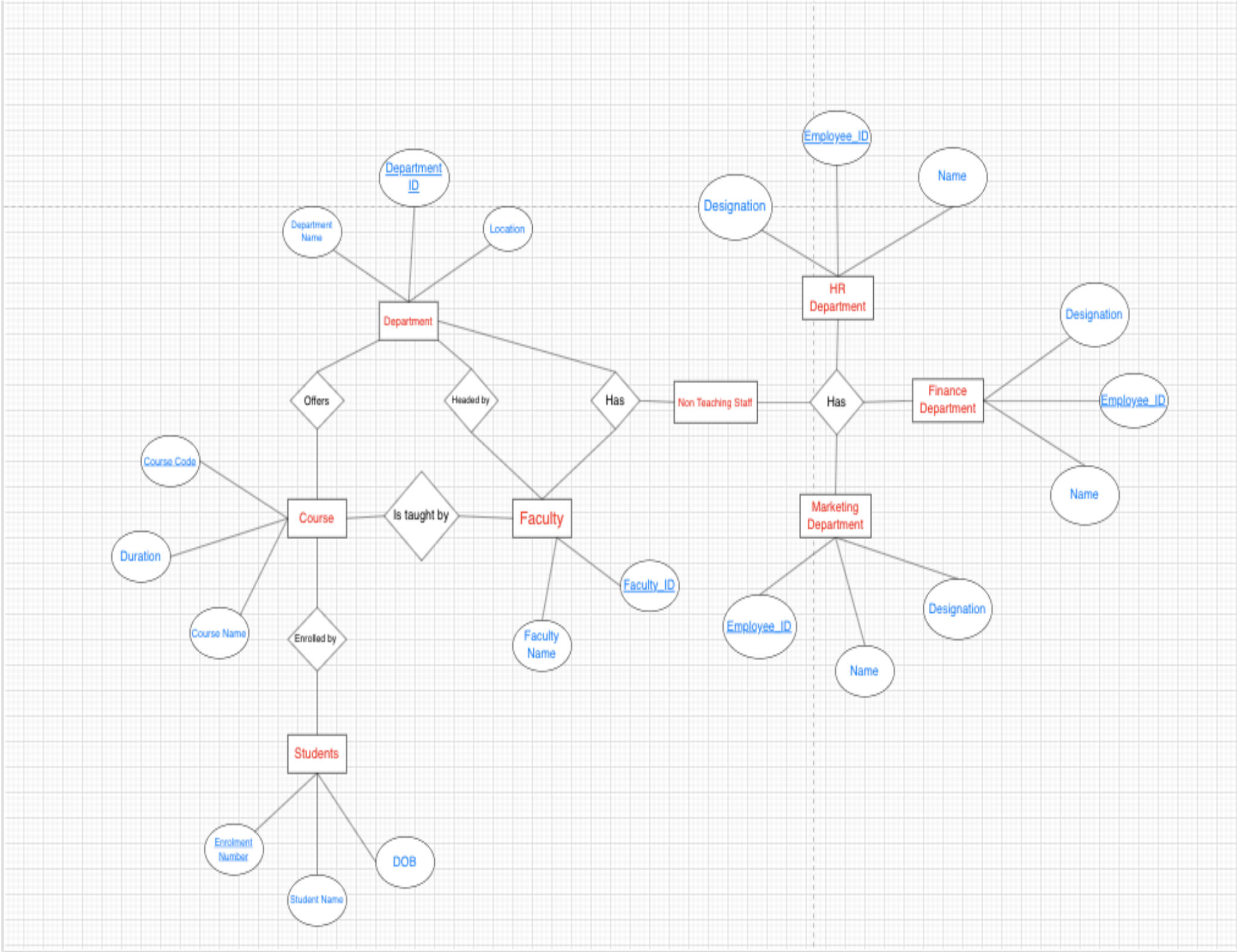
With the right university database software, higher management and the university can put more time and focus into other important work and in making the university better and less time struggling with complex IT issues. university database software also eliminates other time-consuming aspects, such as photocopying and paper document mailing, and physically recording the data.

Chapter 2

SYSTEM DESIGN

In this project we are helping to University to link and find data about the Students and the courses enrolled by them. The faculties and the different departments available in the university.

2.1 ER DIAGRAM


Department ID
Department Name
Location
Department
Offers
Headed by
Has
Course Code
Course
Is taught by
Faculty
Duration
Course Name
Enrolled by
Faculty_ID
Faculty Name
Students
Enrolment Number
DOB
Student Name
Non Teaching Staff
Has
Employee_ID
Designation
Name
HR Department
Finance Department
Designation
Employee_ID
Name
Marketing Department
Employee_ID
Name
Designation

2.2 NORMALIZATION AND NORMAL FORMS

1st NORMAL FORM

Department
Dept_ID
Dept_Name
Location

Course
Course_code
Course_Name
Duration

Student
Enrol_no
Name
DOB
Joining Year
Grad Year

Faculty
Faculty_ID
Faculty_Name

HR Department
Emplyoee_ID
Name
Designation

Finance Department
Emplyoee_ID
Name
Designation

Marketing Department
Employee_ID
Name
Designation

Table 2.2

2nd NORMAL FORM

Department
Dept_ID(PK)
Dept_Name
Location

Course
Course_code(PK)
Course_Name
Duration
Dept_ID(FK)

Student
Enrol_no(PK)
Name
DOB
Joining Year
Grad Year

Faculty
Faculty_ID(PK)
Faculty_Name
Dept_no(FK)

HR Department
Emplyoee_ID(PK)
Name
Designation

Finance Department
Emplyoee_ID(PK)
Name
Designation

Marketing Department
Employee_ID(PK)
Name
Designation

Table 2.3

3rd NORMAL FORM

Department
Dept_ID(PK)
Dept_Name
Location

Course
Course_code(PK)
Course_Name
Duration
Dept_ID(FK)

Student
Enrol_no(PK)
Name
DOB

Student_1
Enrol_no(FK)
Course_code(FK)
Joining_year
Grad_year

Faculty
Faculty_ID(PK)
Faculty_Name
Dept_no(FK)

HR Department
Emplyoee_ID(PK)
Name
Designation

Finance Department
Emplyoee_ID(PK)
Name
Designation

Marketing Department
Employee_ID(PK)
Name
Designation

Table 2.4

Chapter 3

DEVELOPMENT PROCESS

Development process and documentation are one of the activities in the software development life cycle. Development processes include requirement analysis, technologies used to implement the project, design and implementation.

3.1 HARDWARE AND SOFTWARE REQUIREMENTS

Software requirements:-

- Operating System: macOS Big Sur
- Database: My SQL

Hardware requirements:-

- Processor: 1.4 GHz Dual-Core intel Core i5
- Hard Disk: 500 GB
- RAM: 2 GB
- Cache Memory: 512KB
- Operating System: macOS

3.2 DATABASE TABLES DESIGN

One of the most crucial phases of a project is the design phase. The project modules are identified during this phase. The design alone provides the project with half of the solution. Data management systems can be designed, developed, implemented, and maintained with the help of database design. The following tables provide an overview of the many types of data stored in a database: The Table 3.1 represents store of Department data, Table 3.2 represents store of Course data. Table 3.3 Represents store of Student data. Table 3.4 Represents store of

Faculty data. Table 3.5 Represents store of HR Department data. Table 3.6 Represents store of Finance Department data. Table 3.7 Represents store of Marketing Department data.

Table 3.1 Table store of Department data

S.No	Attributes	Type
1	Dept_no	int
2	Department_Name	Varchar(40)
3	Location	Varchar(20)

Table 3.2 Table store of Course data

S.No	Attributes	Type
1	Course_code	Varchar(10)
2	Course_Name	Varchar(30)
3	Duration	Varchar(20)

Table 3.3 Table store of Students Data

S.No	Attributes	Type
1	Enrol_no	int
2	Name	Varchar(20)
3	Date_of_Birth	DATE
4	Joining_year	Int
5	Grad_year	int

Table 3.4 Table store of Faculty data

S.No	Attributes	Type
1	Faculty_ID	Varchar(10)
2	Faculty_Name	Varchar(10)

Table 3.1 Table store of HR Department data

S.No	Attributes	Type
1	Employee_ID	Varchar(10)
2	Name	Varchar(10)
3	Designation	Varchar(40)

Table 3.1 Table store of Finance Department data

S.No	Attributes	Type
1	Employee_ID	Varchar(10)
2	Name	Varchar(10)
3	Designation	Varchar(50)

Table 3.1 Table store of Marketing Department data

S.No	Attributes	Type
1	Employee_ID	Varchar(10)
2	Name	Varchar(10)
3	Designation	Varchar(50)

3.4 BACK-END IMPLEMENTATION

```
mysql> select * from Department;
+---------+----------------------+----------+
| Dept_ID | Department_Name      | Location |
+---------+----------------------+----------+
|    1001 | Design               | C Block  |
|    1002 | Engineering          | D Block  |
|    1003 | Law                  | B Block  |
|    1004 | Business Manegement  | H Block  |
|    1005 | Dental               | A Block  |
|    1006 | Mass Communication   | E Block  |
|    1007 | Architecture         | F Block  |
|    1008 | Science              | G Block  |
|    1009 | Language & Humanities| I Block  |
|    1010 | Psychology           | J Block  |
+---------+----------------------+----------+
10 rows in set (0.00 sec)
```

```
mysql> select * from Course;
+-------------+--------------------------------+----------+---------+
| Course_code | Course_Name                    | Duration | Dept_ID |
+-------------+--------------------------------+----------+---------+
| AS40        | Architectural Science          | 4 Years  |    1007 |
| BBA18       | BBA                            | 4 Years  |    1004 |
| BJMC03      | BJMC                           | 2 Years  |    1006 |
| BSC24       | B.Sc.                          | 3 Years  |    1008 |
| CSE23       | Computer Science & Engineering | 4 Years  |    1002 |
| DS34        | Dental Surgery                 | 3 Years  |    1005 |
| E25         | English                        | 2 Years  |    1009 |
| FD21        | Fashion Design                 | 5 Years  |    1001 |
| LLB15       | LLB                            | 3 Years  |    1003 |
| SP08        | Social Pyschology              | 4 Years  |    1010 |
+-------------+--------------------------------+----------+---------+
10 rows in set (0.01 sec)
```

```
mysql> select * from Students;
+-----------+----------+---------------+
| Enrol_no  | Name     | Date_of_Birth |
+-----------+----------+---------------+
| 191010001 | Raj      | 2002-11-05    |
| 191010002 | Rahul    | 2002-05-11    |
| 191010003 | Pooja    | 2003-06-10    |
| 191010004 | Priyanka | 2002-08-23    |
| 191010005 | Dhruv    | 2002-10-11    |
| 191010006 | Aayush   | 2001-04-25    |
| 191010007 | Kinjal   | 2000-08-24    |
| 191010008 | Mayur    | 2001-08-15    |
| 191010009 | Kriti    | 2003-11-15    |
| 191010010 | Deepika  | 2002-02-04    |
| 191010011 | Varun    | 2003-06-18    |
| 191010012 | Ranbir   | 2004-11-29    |
| 191010013 | Aditya   | 2002-07-01    |
| 191010014 | Vedant   | 2001-02-14    |
| 191010015 | Pranav   | 2003-01-25    |
| 191010016 | Hetal    | 2002-03-17    |
| 191010017 | Kiara    | 2002-03-08    |
| 191010018 | Tanvi    | 2003-03-20    |
| 191010019 | Nitya    | 2002-04-28    |
| 191010020 | Tanya    | 2000-10-21    |
| 191010021 | Shubh    | 2003-12-11    |
| 191010022 | Het      | 2000-07-31    |
| 191010023 | Yashvi   | 2003-01-06    |
| 191010024 | Janhvi   | 2002-09-19    |
| 191010025 | Ananya   | 2003-08-08    |
| 191010026 | Shanaya  | 2003-12-07    |
| 191010027 | Arjun    | 2000-05-16    |
| 191010028 | Ishan    | 2003-04-22    |
| 191010029 | Kartik   | 2001-07-03    |
| 191010030 | Aryan    | 2002-10-09    |
+-----------+----------+---------------+
30 rows in set (0.01 sec)
```

```
mysql> select * from Students_1;
+-----------+-------------+--------------+-----------+
| Enrol_no  | Course_code | Joining_year | Grad_year |
+-----------+-------------+--------------+-----------+
| 191010001 | LLB15       |         2020 |      2023 |
| 191010002 | BBA18       |         2021 |      2025 |
| 191010003 | DS34        |         2019 |      2022 |
| 191010004 | E25         |         2020 |      2022 |
| 191010005 | CSE23       |         2020 |      2024 |
| 191010006 | AS40        |         2019 |      2023 |
| 191010007 | BSC24       |         2021 |      2024 |
| 191010008 | BJMC03      |         2019 |      2021 |
| 191010009 | FD21        |         2020 |      2025 |
| 191010010 | SP08        |         2018 |      2022 |
| 191010011 | BJMC03      |         2020 |      2022 |
| 191010012 | BBA18       |         2019 |      2023 |
| 191010013 | CSE23       |         2020 |      2024 |
| 191010014 | CSE23       |         2021 |      2025 |
| 191010015 | CSE23       |         2021 |      2025 |
| 191010016 | DS34        |         2021 |      2024 |
| 191010017 | FD21        |         2021 |      2026 |
| 191010018 | LLB15       |         2019 |      2022 |
| 191010019 | SP08        |         2022 |      2026 |
| 191010020 | AS40        |         2021 |      2025 |
| 191010021 | BSC24       |         2022 |      2025 |
| 191010022 | E25         |         2022 |      2024 |
| 191010023 | LLB15       |         2018 |      2021 |
| 191010024 | FD21        |         2022 |      2027 |
| 191010025 | FD21        |         2021 |      2026 |
| 191010026 | SP08        |         2023 |      2027 |
| 191010027 | BBA18       |         2020 |      2024 |
| 191010028 | FD21        |         2023 |      2028 |
| 191010029 | LLB15       |         2023 |      2026 |
| 191010030 | AS40        |         2022 |      2026 |
+-----------+-------------+--------------+-----------+
30 rows in set (0.01 sec)
```

```
mysql> select * from Faculty;
+------------+--------------+---------+
| Faculty_ID | Faculty_Name | Dept_ID |
+------------+--------------+---------+
| T0012      | Sonia        |    1001 |
| T0013      | Maitri       |    1002 |
| T0014      | Nidhi        |    1003 |
| T0015      | Vijay        |    1004 |
| T0016      | Abhishek     |    1005 |
| T0017      | Abhinav      |    1006 |
| T0018      | Pratham      |    1007 |
| T0019      | Anisha       |    1008 |
| T0020      | Priti        |    1009 |
| T0021      | Sanjana      |    1010 |
+------------+--------------+---------+
10 rows in set (0.00 sec)
```

```
mysql> select * from HR_Department;
+-------------+--------+-----------------------+
| Employee_ID | Name   | Designation           |
+-------------+--------+-----------------------+
| HR01        | Govind | HR Director           |
| HR02        | Dhruv  | Director of Recruiting |
| HR03        | Ananya | HR Coordinator        |
| HR04        | Tanvi  | Manager               |
+-------------+--------+-----------------------+
4 rows in set (0.00 sec)
```

```
mysql> select * from Finance_Department;
+-------------+--------+------------------+
| Employee_ID | Name   | Designation      |
+-------------+--------+------------------+
| F001        | Pooja  | Finance Director |
| F002        | Abhay  | Finance Manager  |
| F003        | Deepika | Budget Analyst  |
| F004        | Kushal | CFO              |
+-------------+--------+------------------+
4 rows in set (0.01 sec)
```

```
mysql> select * from Marketing_Department;
+-------------+----------+--------------------------+
| Employee_ID | Name     | Designation              |
+-------------+----------+--------------------------+
| M001        | Laura    | Chief Marketing Officer  |
| M002        | Tanishka | Marketing Manager        |
| M003        | Vansh    | Marketing Coordinator    |
| M004        | Mohit    | Director of Marketing    |
+-------------+----------+--------------------------+
4 rows in set (0.01 sec)
```

3.5 TESTING

Testing refers to the testing of the system in artificial conditions to ensure that the system performs as expected and as required. From a systems development perspective, testing refers to the testing performed by the programmers and techniques to ensure that the system works module by module and as a whole.

```
mysql> select Course_code, Course_Name,Duration, Dept_ID, Department_Name,Location from course left join Department using (Dept_ID);
+-------------+--------------------------------+----------+---------+----------------------+----------+
| Course_code | Course_Name                    | Duration | Dept_ID | Department_Name      | Location |
+-------------+--------------------------------+----------+---------+----------------------+----------+
| AS40        | Architectural Science          | 4 Years  |    1007 | Architecture         | F Block  |
| BBA18       | BBA                            | 4 Years  |    1004 | Business Manegement  | H Block  |
| BJMC03      | BJMC                           | 2 Years  |    1006 | Mass Communication   | E Block  |
| BSC24       | B.Sc.                          | 3 Years  |    1008 | Science              | G Block  |
| CSE23       | Computer Science & Engineering | 4 Years  |    1002 | Engineering          | D Block  |
| DS34        | Dental Surgery                 | 3 Years  |    1005 | Dental               | A Block  |
| E25         | English                        | 2 Years  |    1009 | Language & Humanities | I Block  |
| FD21        | Fashion Design                 | 5 Years  |    1001 | Design               | C Block  |
| LLB15       | LLB                            | 3 Years  |    1003 | Law                  | B Block  |
| SP08        | Social Pyschology              | 4 Years  |    1010 | Psychology           | J Block  |
+-------------+--------------------------------+----------+---------+----------------------+----------+
10 rows in set (0.01 sec)
```

```
mysql> select Enrol_no, Course_code, Joining_year, Grad_year, Name, Date_of_Birth
    -> from Students_1
    -> left join Students using (Enrol_no);
+-----------+-------------+--------------+-----------+----------+---------------+
| Enrol_no  | Course_code | Joining_year | Grad_year | Name     | Date_of_Birth |
+-----------+-------------+--------------+-----------+----------+---------------+
| 191010001 | LLB15       |         2020 |      2023 | Raj      | 2002-11-05    |
| 191010002 | BBA18       |         2021 |      2025 | Rahul    | 2002-05-11    |
| 191010003 | DS34        |         2019 |      2022 | Pooja    | 2003-06-10    |
| 191010004 | E25         |         2020 |      2022 | Priyanka | 2002-08-23    |
| 191010005 | CSE23       |         2020 |      2024 | Dhruv    | 2002-10-11    |
| 191010006 | AS40        |         2019 |      2023 | Aayush   | 2001-04-25    |
| 191010007 | BSC24       |         2021 |      2024 | Kinjal   | 2000-08-24    |
| 191010008 | BJMC03      |         2019 |      2021 | Mayur    | 2001-08-15    |
| 191010009 | FD21        |         2020 |      2025 | Kriti    | 2003-11-15    |
| 191010010 | SP08        |         2018 |      2022 | Deepika  | 2002-02-04    |
| 191010011 | BJMC03      |         2020 |      2022 | Varun    | 2003-06-18    |
| 191010012 | BBA18       |         2019 |      2023 | Ranbir   | 2004-11-29    |
| 191010013 | CSE23       |         2020 |      2024 | Aditya   | 2002-07-01    |
| 191010014 | CSE23       |         2021 |      2025 | Vedant   | 2001-02-14    |
| 191010015 | CSE23       |         2021 |      2025 | Pranav   | 2003-01-25    |
| 191010016 | DS34        |         2021 |      2024 | Hetal    | 2002-03-17    |
| 191010017 | FD21        |         2021 |      2026 | Kiara    | 2002-03-08    |
| 191010018 | LLB15       |         2019 |      2022 | Tanvi    | 2003-03-20    |
| 191010019 | SP08        |         2022 |      2026 | Nitya    | 2002-04-28    |
| 191010020 | AS40        |         2021 |      2025 | Tanya    | 2000-10-21    |
| 191010021 | BSC24       |         2022 |      2025 | Shubh    | 2003-12-11    |
| 191010022 | E25         |         2022 |      2024 | Het      | 2000-07-31    |
| 191010023 | LLB15       |         2018 |      2021 | Yashvi   | 2003-01-06    |
| 191010024 | FD21        |         2022 |      2027 | Janhvi   | 2002-09-19    |
| 191010025 | FD21        |         2021 |      2026 | Ananya   | 2003-08-08    |
| 191010026 | SP08        |         2023 |      2027 | Shanaya  | 2003-12-07    |
| 191010027 | BBA18       |         2020 |      2024 | Arjun    | 2000-05-16    |
| 191010028 | FD21        |         2023 |      2028 | Ishan    | 2003-04-22    |
| 191010029 | LLB15       |         2023 |      2026 | Kartik   | 2001-07-03    |
| 191010030 | AS40        |         2022 |      2026 | Aryan    | 2002-10-09    |
+-----------+-------------+--------------+-----------+----------+---------------+
30 rows in set (0.02 sec)
```

```
mysql> select Enrol_no, Course_code, Joining_year, Grad_year, Course_Name, Duration, Dept_ID
    -> from Students_1
    -> left join Course using (Course_code);
```

Enrol_no	Course_code	Joining_year	Grad_year	Course_Name	Duration	Dept_ID
191010001	LLB15	2020	2023	LLB	3 Years	1003
191010002	BBA18	2021	2025	BBA	4 Years	1004
191010003	DS34	2019	2022	Dental Surgery	3 Years	1005
191010004	E25	2020	2022	English	2 Years	1009
191010005	CSE23	2020	2024	Computer Science & Engineering	4 Years	1002
191010006	AS40	2019	2023	Architectural Science	4 Years	1007
191010007	BSC24	2021	2024	B.Sc.	3 Years	1008
191010008	BJMC03	2019	2021	BJMC	2 Years	1006
191010009	FD21	2020	2025	Fashion Design	5 Years	1001
191010010	SP08	2018	2022	Social Pyschology	4 Years	1010
191010011	BJMC03	2020	2022	BJMC	2 Years	1006
191010012	BBA18	2019	2023	BBA	4 Years	1004
191010013	CSE23	2020	2024	Computer Science & Engineering	4 Years	1002
191010014	CSE23	2021	2025	Computer Science & Engineering	4 Years	1002
191010015	CSE23	2021	2025	Computer Science & Engineering	4 Years	1002
191010016	DS34	2021	2024	Dental Surgery	3 Years	1005
191010017	FD21	2021	2026	Fashion Design	5 Years	1001
191010018	LLB15	2019	2022	LLB	3 Years	1003
191010019	SP08	2022	2026	Social Pyschology	4 Years	1010
191010020	AS40	2021	2025	Architectural Science	4 Years	1007
191010021	BSC24	2022	2025	B.Sc.	3 Years	1008
191010022	E25	2022	2024	English	2 Years	1009
191010023	LLB15	2018	2021	LLB	3 Years	1003
191010024	FD21	2022	2027	Fashion Design	5 Years	1001
191010025	FD21	2021	2026	Fashion Design	5 Years	1001
191010026	SP08	2023	2027	Social Pyschology	4 Years	1010
191010027	BBA18	2020	2024	BBA	4 Years	1004
191010028	FD21	2023	2028	Fashion Design	5 Years	1001
191010029	LLB15	2023	2026	LLB	3 Years	1003
191010030	AS40	2022	2026	Architectural Science	4 Years	1007

30 rows in set (0.02 sec)

```
mysql> select Faculty_ID, Faculty_Name, Dept_ID, Department_Name, Location
    -> from Faculty
    -> left join Department using (Dept_ID);
```

Faculty_ID	Faculty_Name	Dept_ID	Department_Name	Location
T0012	Sonia	1001	Design	C Block
T0013	Maitri	1002	Engineering	D Block
T0014	Nidhi	1003	Law	B Block
T0015	Vijay	1004	Business Manegement	H Block
T0016	Abhishek	1005	Dental	A Block
T0017	Abhinav	1006	Mass Communication	E Block
T0018	Pratham	1007	Architecture	F Block
T0019	Anisha	1008	Science	G Block
T0020	Priti	1009	Language & Humanities	I Block
T0021	Sanjana	1010	Psychology	J Block

10 rows in set (0.00 sec)

```
mysql> select Enrol_no, Name, Date_of_Birth, Joining_year, Grad_year, Course_code, Course_Name, Duration, Dept_ID
    -> from Students_1
    -> left join Students using (Enrol_no)
    -> left join Course using (Course_code)
    -> order by Enrol_no;
```

Enrol_no	Name	Date_of_Birth	Joining_year	Grad_year	Course_code	Course_Name	Duration	Dept_ID
191010001	Raj	2002-11-05	2020	2023	LLB15	LLB	3 Years	1003
191010002	Rahul	2002-05-11	2021	2025	BBA18	BBA	4 Years	1004
191010003	Pooja	2003-06-10	2019	2022	DS34	Dental Surgery	3 Years	1005
191010004	Priyanka	2002-08-23	2020	2022	E25	English	2 Years	1009
191010005	Dhruv	2002-10-11	2020	2024	CSE23	Computer Science & Engineering	4 Years	1002
191010006	Aayush	2001-04-25	2019	2023	AS40	Architectural Science	4 Years	1007
191010007	Kinjal	2000-08-24	2021	2024	BSC24	B.Sc.	3 Years	1008
191010008	Mayur	2001-08-15	2019	2021	BJMC03	BJMC	2 Years	1006
191010009	Kriti	2003-11-15	2020	2025	FD21	Fashion Design	5 Years	1001
191010010	Deepika	2002-02-04	2018	2022	SP08	Social Pyschology	4 Years	1010
191010011	Varun	2003-06-18	2020	2022	BJMC03	BJMC	2 Years	1006
191010012	Ranbir	2004-11-29	2019	2023	BBA18	BBA	4 Years	1004
191010013	Aditya	2002-07-01	2020	2024	CSE23	Computer Science & Engineering	4 Years	1002
191010014	Vedant	2001-02-14	2021	2025	CSE23	Computer Science & Engineering	4 Years	1002
191010015	Pranav	2003-01-25	2021	2025	CSE23	Computer Science & Engineering	4 Years	1002
191010016	Hetal	2002-03-17	2021	2024	DS34	Dental Surgery	3 Years	1005
191010017	Kiara	2002-03-08	2021	2026	FD21	Fashion Design	5 Years	1001
191010018	Tanvi	2003-03-20	2019	2022	LLB15	LLB	3 Years	1003
191010019	Nitya	2002-04-28	2022	2026	SP08	Social Pyschology	4 Years	1010
191010020	Tanya	2000-10-21	2021	2025	AS40	Architectural Science	4 Years	1007
191010021	Shubh	2003-12-11	2022	2025	BSC24	B.Sc.	3 Years	1008
191010022	Het	2000-07-31	2022	2024	E25	English	2 Years	1009
191010023	Yashvi	2003-01-06	2018	2021	LLB15	LLB	3 Years	1003
191010024	Janhvi	2002-09-19	2022	2027	FD21	Fashion Design	5 Years	1001
191010025	Ananya	2003-08-08	2021	2026	FD21	Fashion Design	5 Years	1001
191010026	Shanaya	2003-12-07	2023	2027	SP08	Social Pyschology	4 Years	1010
191010027	Arjun	2000-05-16	2020	2024	BBA18	BBA	4 Years	1004
191010028	Ishan	2003-04-22	2023	2028	FD21	Fashion Design	5 Years	1001
191010029	Kartik	2001-07-03	2023	2026	LLB15	LLB	3 Years	1003
191010030	Aryan	2002-10-09	2022	2026	AS40	Architectural Science	4 Years	1007

```
30 rows in set (0.13 sec)
```

CHAPTER 4

RESULTS & CONCLUSION

In the previous chapter the requirement analysis, overall design of project implementation and testing are discussed. The chapter deals with the result analysis, conclusion and future enhancement

4.1 RESULTS

This website help management to view the filtered data of the students, course enrolled and the faculties.

```
| T0016      | Abhishek      |    1005 | Dental               | A Block  |
| T0017      | Abhinav       |    1006 | Mass Communication   | E Block  |
| T0018      | Pratham       |    1007 | Architecture         | F Block  |
| T0019      | Anisha        |    1008 | Science              | G Block  |
| T0020      | Priti         |    1009 | Language & Humanities | I Block  |
| T0021      | Sanjana       |    1010 | Psychology           | J Block  |
+------------+---------------+---------+----------------------+----------+
10 rows in set (0.00 sec)

mysql> select Enrol_no, Name, Date_of_Birth, Joining_year, Grad_year, Course_code, Course_Name, Duration, Location
    -> from Students
    -> ";
    "> ";
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near '";
" at line 3
mysql> select Enrol_no, Name, Date_of_Birth, Joining_year, Grad_year, Course_code, Course_Name, Duration, Location
    -> from Students_1
    -> left join Students using (Enrol_no)
    -> left join Course using (Course_code)
    -> order by Enrol_no;
ERROR 1054 (42S22): Unknown column 'Location' in 'field list'
mysql> select Enrol_no, Name, Date_of_Birth, Joining_year, Grad_year, Course_code, Course_Name, Duration, Dept_ID
    -> from Students_1
    -> left join Students using (Enrol_no)
    -> left join Course using (Course_code)
    -> order by Enrol_no;
+------------+---------+---------------+--------------+------------+-------------+---------------------------------+----------+---------+
| Enrol_no   | Name    | Date_of_Birth | Joining_year | Grad_year | Course_code | Course_Name                     | Duration | Dept_ID |
+------------+---------+---------------+--------------+------------+-------------+---------------------------------+----------+---------+
| 191010001 | Raj     | 2002-11-05    |         2020 |      2023 | LLB15       | LLB                             | 3 Years  |    1003 |
| 191010002 | Rahul   | 2002-05-11    |         2021 |      2025 | BBA18       | BBA                             | 4 Years  |    1004 |
| 191010003 | Pooja   | 2003-06-10    |         2019 |      2022 | DS34        | Dental Surgery                  | 3 Years  |    1005 |
| 191010004 | Priyanka | 2002-08-23    |         2020 |      2022 | E25         | English                         | 2 Years  |    1009 |
| 191010005 | Dhruv   | 2002-10-11    |         2020 |      2024 | CSE23       | Computer Science & Engineering  | 4 Years  |    1002 |
| 191010006 | Aayush  | 2001-04-25    |         2019 |      2023 | AS40        | Architectural Science           | 4 Years  |    1007 |
| 191010007 | Kinjal  | 2000-08-24    |         2021 |      2024 | BSC24       | B.Sc.                           | 3 Years  |    1008 |
| 191010008 | Mayur   | 2001-08-15    |         2019 |      2021 | BJMC03      | BJMC                            | 2 Years  |    1006 |
| 191010009 | Kriti   | 2003-11-15    |         2020 |      2025 | FD21        | Fashion Design                  | 5 Years  |    1001 |
| 191010010 | Deepika | 2002-02-04    |         2018 |      2022 | SP08        | Social Pyschology               | 4 Years  |    1010 |
| 191010011 | Varun   | 2003-06-18    |         2020 |      2022 | BJMC03      | BJMC                            | 2 Years  |    1006 |
| 191010012 | Ranbir  | 2004-11-29    |         2019 |      2023 | BBA18       | BBA                             | 4 Years  |    1004 |
| 191010013 | Aditya  | 2002-07-01    |         2020 |      2024 | CSE23       | Computer Science & Engineering  | 4 Years  |    1002 |
| 191010014 | Vedant  | 2001-02-14    |         2021 |      2025 | CSE23       | Computer Science & Engineering  | 4 Years  |    1002 |
| 191010015 | Pranav  | 2003-01-25    |         2021 |      2025 | CSE23       | Computer Science & Engineering  | 4 Years  |    1002 |
| 191010016 | Hetal   | 2002-03-17    |         2021 |      2024 | DS34        | Dental Surgery                  | 3 Years  |    1005 |
| 191010017 | Kiara   | 2002-03-08    |         2021 |      2026 | FD21        | Fashion Design                  | 5 Years  |    1001 |
| 191010018 | Tanvi   | 2003-03-20    |         2019 |      2022 | LLB15       | LLB                             | 3 Years  |    1003 |
| 191010019 | Nitya   | 2002-04-28    |         2022 |      2026 | SP08        | Social Pyschology               | 4 Years  |    1010 |
| 191010020 | Tanya   | 2000-10-21    |         2021 |      2025 | AS40        | Architectural Science           | 4 Years  |    1007 |
| 191010021 | Shubh   | 2003-12-11    |         2022 |      2025 | BSC24       | B.Sc.                           | 3 Years  |    1008 |
| 191010022 | Het     | 2000-07-31    |         2022 |      2024 | E25         | English                         | 2 Years  |    1009 |
| 191010023 | Yashvi  | 2003-01-06    |         2018 |      2021 | LLB15       | LLB                             | 3 Years  |    1003 |
| 191010024 | Janhvi  | 2002-09-19    |         2022 |      2027 | FD21        | Fashion Design                  | 5 Years  |    1001 |
| 191010025 | Ananya  | 2003-08-08    |         2021 |      2026 | FD21        | Fashion Design                  | 5 Years  |    1001 |
| 191010026 | Shanaya | 2003-12-07    |         2023 |      2027 | SP08        | Social Pyschology               | 4 Years  |    1010 |
| 191010027 | Arjun   | 2000-05-16    |         2020 |      2024 | BBA18       | BBA                             | 4 Years  |    1004 |
| 191010028 | Ishan   | 2003-04-22    |         2023 |      2028 | FD21        | Fashion Design                  | 5 Years  |    1001 |
| 191010029 | Kartik  | 2001-07-03    |         2023 |      2026 | LLB15       | LLB                             | 3 Years  |    1003 |
| 191010030 | Aryan   | 2002-10-09    |         2022 |      2026 | AS40        | Architectural Science           | 4 Years  |    1007 |
+------------+---------+---------------+--------------+------------+-------------+---------------------------------+----------+---------+
30 rows in set (0.13 sec)

mysql>
```

4.2 SCOPE FOR FURTHER WORK

It will be possible to achieve a similar setup for some, more applications, which will identify with recommender frameworks and can show the same improvements.

This project can be created using Python Idle, while it can also be created using another web development language to create a website or perhaps an app. We intend to continue this project and finish it with a more professional result.

APPENDICES

SAMPLE CODING:

BACK-END SAMPLE CODE:

```
mysql> Select Database (DBMS_PROJECT);
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'DBMS_PROJECT)' at line 1
mysql> Use DBMS_PROJECT;
Database changed
mysql> CREATE TABLE Department(
    -> Dept_ID int,
    -> Department_Name varchar(40),
    -> Location varchar(20)
    -> );
Query OK, 0 rows affected (0.17 sec)

mysql> insert into Department (Dept_ID, Department_Name, Location) values (1001, "Design", "C Block");
Query OK, 1 row affected (0.23 sec)

mysql> insert into Department (Dept_ID, Department_Name, Location) values (1002, "Engineering", "D Block");
Query OK, 1 row affected (0.01 sec)

mysql> insert into Department (Dept_ID, Department_Name, Location) values (1003, "Law", "B Block");
Query OK, 1 row affected (0.01 sec)

mysql> insert into Department (Dept_ID, Department_Name, Location) values (1004, "Business Manegement", "H Block");
Query OK, 1 row affected (0.01 sec)

mysql> insert into Department (Dept_ID, Department_Name, Location) values (1005, "Dental", "A Block");
Query OK, 1 row affected (0.01 sec)

mysql> insert into Department (Dept_ID, Department_Name, Location) values (1006, "Mass Communication", "E Block");
Query OK, 1 row affected (0.02 sec)

mysql> insert into Department (Dept_ID, Department_Name, Location) values (1007, "Architecture", "F Block");
Query OK, 1 row affected (0.01 sec)

mysql> insert into Department (Dept_ID, Department_Name, Location) values (1008, "Science", "G Block");
Query OK, 1 row affected (0.01 sec)

mysql> insert into Department (Dept_ID, Department_Name, Location) values (1009, "Language & Humanities", "I Block");
Query OK, 1 row affected (0.01 sec)

mysql> insert into Department (Dept_ID, Department_Name, Location) values (1010, "Psychology", "J Block");
Query OK, 1 row affected (0.00 sec)

mysql> Select * from Department;
+---------+----------------------+----------+
| Dept_ID | Department_Name      | Location |
+---------+----------------------+----------+
|    1001 | Design               | C Block  |
|    1002 | Engineering          | D Block  |
|    1003 | Law                  | B Block  |
|    1004 | Business Manegement  | H Block  |
|    1005 | Dental               | A Block  |
|    1006 | Mass Communication   | E Block  |
|    1007 | Architecture         | F Block  |
|    1008 | Science              | G Block  |
|    1009 | Language & Humanities | I Block  |
|    1010 | Psychology           | J Block  |
+---------+----------------------+----------+
10 rows in set (0.05 sec)

mysql> Alter Table Department
    -> Add Primary key (Dept_ID);
Query OK, 0 rows affected (0.22 sec)
Records: 0  Duplicates: 0  Warnings: 0
```

```
    -> Dept_ID int';
    '> ';
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near '';
'' at line 5
mysql> Create table Course(Course_code int primary key, Course_Name varchar(30), Duration varchar(20), Dept_ID int, constraint fk_did foreign key (Dept_ID) references Department(Dept_ID));
Query OK, 0 rows affected (0.09 sec)

mysql> DROP table Course;
Query OK, 0 rows affected (0.36 sec)

mysql> Create table Course(Course_code varchar(10) primary key, Course_Name varchar(30), Duration varchar(20), Dept_ID int, constraint fk_did foreign key (Dept_ID) references Department(Dept_ID));
Query OK, 0 rows affected (0.05 sec)

mysql> insert into Course (Course_ID, Course_Name, Duration, Dept_ID) values ("FD21", "Fashion Design", "5 Years", 1001);
ERROR 1054 (42S22): Unknown column 'Course_ID' in 'field list'
mysql> insert into Course (Course_code, Course_Name, Duration, Dept_ID) values ("FD21", "Fashion Design", "5 Years", 1001);
Query OK, 1 row affected (0.03 sec)

mysql> insert into Course (Course_code, Course_Name, Duration, Dept_ID) values ("CSE23", "Computer Science & Engineering", "4 Years", 1002);
Query OK, 1 row affected (0.01 sec)

mysql> insert into Course (Course_code, Course_Name, Duration, Dept_ID) values ("LLB15", "LLB", "3 Years", 1003);
Query OK, 1 row affected (0.00 sec)

mysql> insert into Course (Course_code, Course_Name, Duration, Dept_ID) values ("BBA18", "BBA", "4 Years", 1004);
Query OK, 1 row affected (0.00 sec)

mysql> insert into Course (Course_code, Course_Name, Duration, Dept_ID) values ("DS34", "Dental Surgery", "3 Years", 1005);
Query OK, 1 row affected (0.01 sec)

mysql> insert into Course (Course_code, Course_Name, Duration, Dept_ID) values ("BJMC03", "BJMC", "2 Years", 1006);
Query OK, 1 row affected (0.01 sec)

mysql> insert into Course (Course_code, Course_Name, Duration, Dept_ID) values ("AS40", "Architectural Science", "4 Years", 1007);
Query OK, 1 row affected (0.01 sec)

mysql> insert into Course (Course_code, Course_Name, Duration, Dept_ID) values ("BSC24", "B.Sc.", "3 Years", 1008);
Query OK, 1 row affected (0.01 sec)

mysql> insert into Course (Course_code, Course_Name, Duration, Dept_ID) values ("E25", "English", "2 Years", 1009);
Query OK, 1 row affected (0.01 sec)

mysql> insert into Course (Course_code, Course_Name, Duration, Dept_ID) values ("SP08", "Social Pyschology", "4 Years", 1010);
Query OK, 1 row affected (0.01 sec)

mysql> Select * from Course;
+-------------+---------------------------------+----------+---------+
| Course_code | Course_Name                     | Duration | Dept_ID |
+-------------+---------------------------------+----------+---------+
| AS40        | Architectural Science           | 4 Years  |    1007 |
| BBA18       | BBA                             | 4 Years  |    1004 |
| BJMC03      | BJMC                            | 2 Years  |    1006 |
| BSC24       | B.Sc.                           | 3 Years  |    1008 |
| CSE23       | Computer Science & Engineering  | 4 Years  |    1002 |
| DS34        | Dental Surgery                  | 3 Years  |    1005 |
| E25         | English                         | 2 Years  |    1009 |
| FD21        | Fashion Design                  | 5 Years  |    1001 |
| LLB15       | LLB                             | 3 Years  |    1003 |
| SP08        | Social Pyschology               | 4 Years  |    1010 |
+-------------+---------------------------------+----------+---------+
10 rows in set (0.03 sec)

mysql>
```

```
+-------------+---------------------------------+----------+---------+
10 rows in set (0.03 sec)

mysql> create table Students(Enrol_no int primary key, Name varchar(20), Date_of_Birth DATE);
Query OK, 0 rows affected (0.06 sec)

mysql> insert into Students (Enrol_no, Name, Date_of_Birth) values (191010001, "Raj", "2002-11-05");
Query OK, 1 row affected (0.03 sec)

mysql> insert into Students (Enrol_no, Name, Date_of_Birth) values (191010002, "Rahul", "2002-05-11");
Query OK, 1 row affected (0.01 sec)

mysql> insert into Students (Enrol_no, Name, Date_of_Birth) values (191010003, "Pooja", "2003-06-10");
Query OK, 1 row affected (0.01 sec)

mysql> insert into Students (Enrol_no, Name, Date_of_Birth) values (191010004, "Priyanka", "2002-08-23");
Query OK, 1 row affected (0.02 sec)

mysql> insert into Students (Enrol_no, Name, Date_of_Birth) values (191010005, "Dhruv", "2002-10-11");
Query OK, 1 row affected (0.01 sec)

mysql> insert into Students (Enrol_no, Name, Date_of_Birth) values (191010006, "Aayush", "2001-04-25");
Query OK, 1 row affected (0.01 sec)

mysql> insert into Students (Enrol_no, Name, Date_of_Birth) values (191010007, "Kinjal", "2000-08-24");
Query OK, 1 row affected (0.02 sec)

mysql> insert into Students (Enrol_no, Name, Date_of_Birth) values (191010008, "Mayur", "2001-08-15");
Query OK, 1 row affected (0.01 sec)

mysql> insert into Students (Enrol_no, Name, Date_of_Birth) values (191010009, "Kriti", "2003-11-15");
Query OK, 1 row affected (0.01 sec)

mysql> insert into Students (Enrol_no, Name, Date_of_Birth) values (191010010, "Deepika", "2002-02-04");
Query OK, 1 row affected (0.02 sec)

mysql> insert into Students (Enrol_no, Name, Date_of_Birth) values (191010011, "Varun", "2003-06-18");
Query OK, 1 row affected (0.00 sec)

mysql> insert into Students (Enrol_no, Name, Date_of_Birth) values (191010012, "Ranbir", "2004-11-29");
Query OK, 1 row affected (0.00 sec)

mysql> insert into Students (Enrol_no, Name, Date_of_Birth) values (191010013, "Aditya", "2002-07-01");
Query OK, 1 row affected (0.01 sec)

mysql> insert into Students (Enrol_no, Name, Date_of_Birth) values (191010014, "Vedant", "2001-02-14");
Query OK, 1 row affected (0.01 sec)

mysql> insert into Students (Enrol_no, Name, Date_of_Birth) values (191010015, "Pranav", "2003-01-25");
Query OK, 1 row affected (0.01 sec)

mysql> insert into Students (Enrol_no, Name, Date_of_Birth) values (191010016, "Hetal", "2002-03-17");
Query OK, 1 row affected (0.01 sec)

mysql> insert into Students (Enrol_no, Name, Date_of_Birth) values (191010017, "Kiara", "2002-03-08");
Query OK, 1 row affected (0.00 sec)

mysql> insert into Students (Enrol_no, Name, Date_of_Birth) values (191010018, "Tanvi", "2003-03-20");
Query OK, 1 row affected (0.01 sec)

mysql> insert into Students (Enrol_no, Name, Date_of_Birth) values (191010019, "Nitya", "2002-04-28");
Query OK, 1 row affected (0.01 sec)
```

```
mysql> insert into Students (Enrol_no, Name, Date_of_Birth) values (191010023, "Yashvi", "2003-01-06");
Query OK, 1 row affected (0.00 sec)

mysql> insert into Students (Enrol_no, Name, Date_of_Birth) values (191010024, "Janhvi", "2002-09-19");
Query OK, 1 row affected (0.01 sec)

mysql> insert into Students (Enrol_no, Name, Date_of_Birth) values (191010025, "Ananya", "2003-08-08");
Query OK, 1 row affected (0.01 sec)

mysql> insert into Students (Enrol_no, Name, Date_of_Birth) values (191010026, "Shanaya", "2003-12-07");
Query OK, 1 row affected (0.01 sec)

mysql> insert into Students (Enrol_no, Name, Date_of_Birth) values (191010027, "Arjun", "2000-05-16");
Query OK, 1 row affected (0.01 sec)

mysql> insert into Students (Enrol_no, Name, Date_of_Birth) values (191010028, "Ishan", "2003-04-22");
Query OK, 1 row affected (0.00 sec)

mysql> insert into Students (Enrol_no, Name, Date_of_Birth) values (191010029, "Kartik", "2001-07-03");
Query OK, 1 row affected (0.01 sec)

mysql> insert into Students (Enrol_no, Name, Date_of_Birth) values (191010030, "Aryan", "2002-10-09");
Query OK, 1 row affected (0.01 sec)

mysql> Select * from Students;
+-----------+----------+---------------+
| Enrol_no  | Name     | Date_of_Birth |
+-----------+----------+---------------+
| 191010001 | Raj      | 2002-11-05    |
| 191010002 | Rahul    | 2002-05-11    |
| 191010003 | Pooja    | 2003-06-10    |
| 191010004 | Priyanka | 2002-08-23    |
| 191010005 | Dhruv    | 2002-10-11    |
| 191010006 | Aayush   | 2001-04-25    |
| 191010007 | Kinjal   | 2000-08-24    |
| 191010008 | Mayur    | 2001-08-15    |
| 191010009 | Kriti    | 2003-11-15    |
| 191010010 | Deepika  | 2002-02-04    |
| 191010011 | Varun    | 2003-06-18    |
| 191010012 | Ranbir   | 2004-11-29    |
| 191010013 | Aditya   | 2002-07-01    |
| 191010014 | Vedant   | 2001-02-14    |
| 191010015 | Pranav   | 2003-01-25    |
| 191010016 | Hetal    | 2002-03-17    |
| 191010017 | Kiara    | 2002-03-08    |
| 191010018 | Tanvi    | 2003-03-20    |
| 191010019 | Nitya    | 2002-04-28    |
| 191010020 | Tanya    | 2000-10-21    |
| 191010021 | Shubh    | 2003-12-11    |
| 191010022 | Het      | 2000-07-31    |
| 191010023 | Yashvi   | 2003-01-06    |
| 191010024 | Janhvi   | 2002-09-19    |
| 191010025 | Ananya   | 2003-08-08    |
| 191010026 | Shanaya  | 2003-12-07    |
| 191010027 | Arjun    | 2000-05-16    |
| 191010028 | Ishan    | 2003-04-22    |
| 191010029 | Kartik   | 2001-07-03    |
| 191010030 | Aryan    | 2002-10-09    |
+-----------+----------+---------------+
30 rows in set (0.03 sec)

mysql>
```

```
mysql> insert into Students_1 (Enrol_no, Course_code, Joining_year, Grad_year) values (191010023, "LLB15", 2018, 2021);
Query OK, 1 row affected (0.01 sec)

mysql> insert into Students_1 (Enrol_no, Course_code, Joining_year, Grad_year) values (191010024, "FD21", 2022, 2027);
Query OK, 1 row affected (0.01 sec)

mysql> insert into Students_1 (Enrol_no, Course_code, Joining_year, Grad_year) values (191010025, "FD21", 2021, 2026);
Query OK, 1 row affected (0.01 sec)

mysql> insert into Students_1 (Enrol_no, Course_code, Joining_year, Grad_year) values (191010026, "SP08", 2023, 2027);
Query OK, 1 row affected (0.01 sec)

mysql> insert into Students_1 (Enrol_no, Course_code, Joining_year, Grad_year) values (191010027, "BBA18", 2020, 2024);
Query OK, 1 row affected (0.02 sec)

mysql> insert into Students_1 (Enrol_no, Course_code, Joining_year, Grad_year) values (191010028, "FD21", 2023, 2028);
Query OK, 1 row affected (0.00 sec)

mysql> insert into Students_1 (Enrol_no, Course_code, Joining_year, Grad_year) values (191010029, "LLB15", 2023, 2026);
Query OK, 1 row affected (0.01 sec)

mysql> insert into Students_1 (Enrol_no, Course_code, Joining_year, Grad_year) values (191010030, "AS40", 2022, 2026);
Query OK, 1 row affected (0.01 sec)

mysql> select * from Students_1;
+-----------+-------------+--------------+------------+
| Enrol_no  | Course_code | Joining_year | Grad_year |
+-----------+-------------+--------------+------------+
| 191010001 | LLB15       |         2020 |       2023 |
| 191010002 | BBA18       |         2021 |       2025 |
| 191010003 | DS34        |         2019 |       2022 |
| 191010004 | E25         |         2020 |       2022 |
| 191010005 | CSE23       |         2020 |       2024 |
| 191010006 | AS40        |         2019 |       2023 |
| 191010007 | BSC24       |         2021 |       2024 |
| 191010008 | BJMC03      |         2019 |       2021 |
| 191010009 | FD21        |         2020 |       2025 |
| 191010010 | SP08        |         2018 |       2022 |
| 191010011 | BJMC03      |         2020 |       2022 |
| 191010012 | BBA18       |         2019 |       2023 |
| 191010013 | CSE23       |         2020 |       2024 |
| 191010014 | CSE23       |         2021 |       2025 |
| 191010015 | CSE23       |         2021 |       2025 |
| 191010016 | DS34        |         2021 |       2024 |
| 191010017 | FD21        |         2021 |       2026 |
| 191010018 | LLB15       |         2019 |       2022 |
| 191010019 | SP08        |         2022 |       2026 |
| 191010020 | AS40        |         2021 |       2025 |
| 191010021 | BSC24       |         2022 |       2025 |
| 191010022 | E25         |         2022 |       2024 |
| 191010023 | LLB15       |         2018 |       2021 |
| 191010024 | FD21        |         2022 |       2027 |
| 191010025 | FD21        |         2021 |       2026 |
| 191010026 | SP08        |         2023 |       2027 |
| 191010027 | BBA18       |         2020 |       2024 |
| 191010028 | FD21        |         2023 |       2028 |
| 191010029 | LLB15       |         2023 |       2026 |
| 191010030 | AS40        |         2022 |       2026 |
+-----------+-------------+--------------+------------+
30 rows in set (0.04 sec)

mysql>
```

```
| 191010024 | FD21       |         2022 |      2027 |
| 191010025 | FD21       |         2021 |      2026 |
| 191010026 | SP08       |         2023 |      2027 |
| 191010027 | BBA18      |         2020 |      2024 |
| 191010028 | FD21       |         2023 |      2028 |
| 191010029 | LLB15      |         2023 |      2026 |
| 191010030 | AS40       |         2022 |      2026 |
+-----------+------------+--------------+-----------+
30 rows in set (0.04 sec)

mysql> create table Faculty(Faculty_ID varchar(10) primary key, Faculty_Name varchar(10), Dept_ID int, constraint fk_did foreign key (Dept_ID) references Department(Dept_ID));
ERROR 1826 (HY000): Duplicate foreign key constraint name 'fk_did'
mysql> create table Faculty(Faculty_ID varchar(10) primary key, Faculty_Name varchar(10), Dept_ID int, constraint fk_did2 foreign key (Dept_ID) references Department(Dept_ID));
Query OK, 0 rows affected (0.09 sec)

mysql> insert into Faculty (Faculty_ID, Faculty_Name, Dept_ID) values ("T0012", "Sonia", 1001);
Query OK, 1 row affected (0.01 sec)

mysql> insert into Faculty (Faculty_ID, Faculty_Name, Dept_ID) values ("T0013", "Maitri", 1002);
Query OK, 1 row affected (0.01 sec)

mysql> insert into Faculty (Faculty_ID, Faculty_Name, Dept_ID) values ("T0014", "Nidhi", 1003);
Query OK, 1 row affected (0.01 sec)

mysql> insert into Faculty (Faculty_ID, Faculty_Name, Dept_ID) values ("T0015", "Vijay", 1004);
Query OK, 1 row affected (0.01 sec)

mysql> insert into Faculty (Faculty_ID, Faculty_Name, Dept_ID) values ("T0016", "Abhishek", 1005);
Query OK, 1 row affected (0.01 sec)

mysql> insert into Faculty (Faculty_ID, Faculty_Name, Dept_ID) values ("T0017", "Abhinav", 1006);
Query OK, 1 row affected (0.01 sec)

mysql> insert into Faculty (Faculty_ID, Faculty_Name, Dept_ID) values ("T0018", "Pratham", 1007);
Query OK, 1 row affected (0.01 sec)

mysql> insert into Faculty (Faculty_ID, Faculty_Name, Dept_ID) values ("T0019", "Anisha", 1008);
Query OK, 1 row affected (0.01 sec)

mysql> insert into Faculty (Faculty_ID, Faculty_Name, Dept_ID) values ("T0020", "Priti", 1009);
Query OK, 1 row affected (0.01 sec)

mysql> insert into Faculty (Faculty_ID, Faculty_Name, Dept_ID) values ("T0021", "Sanjana", 1010);
Query OK, 1 row affected (0.01 sec)

mysql> select * from Faculty;
+------------+--------------+---------+
| Faculty_ID | Faculty_Name | Dept_ID |
+------------+--------------+---------+
| T0012      | Sonia        |    1001 |
| T0013      | Maitri       |    1002 |
| T0014      | Nidhi        |    1003 |
| T0015      | Vijay        |    1004 |
| T0016      | Abhishek     |    1005 |
| T0017      | Abhinav      |    1006 |
| T0018      | Pratham      |    1007 |
| T0019      | Anisha       |    1008 |
| T0020      | Priti        |    1009 |
| T0021      | Sanjana      |    1010 |
+------------+--------------+---------+
10 rows in set (0.00 sec)

mysql>
```

```
mysql> select * from Marketing_Department;
Empty set (0.02 sec)

mysql> drop table Finance_Department;
Query OK, 0 rows affected (0.06 sec)

mysql> Drop table Marketing_Department;
Query OK, 0 rows affected (0.01 sec)

mysql> create table Finance_Department(Employee_ID varchar(10) primary key, Name varchar(10), Designation varchar(50));
Query OK, 0 rows affected (0.03 sec)

mysql> insert into Finance_Department (Employee_ID, Name, Designation) values ("F001", "Pooja", "Finance Director");
Query OK, 1 row affected (0.00 sec)

mysql> insert into Finance_Department (Employee_ID, Name, Designation) values ("F002", "Abhay", "Finance Manager");
Query OK, 1 row affected (0.00 sec)

mysql> insert into Finance_Department (Employee_ID, Name, Designation) values ("F003", "Deepika", "Budget Analyst");
Query OK, 1 row affected (0.01 sec)

mysql> insert into Finance_Department (Employee_ID, Name, Designation) values ("F004", "Kushal", "CFO");
Query OK, 1 row affected (0.01 sec)

mysql> select * from Finance_Department;
+-------------+---------+------------------+
| Employee_ID | Name    | Designation      |
+-------------+---------+------------------+
| F001        | Pooja   | Finance Director |
| F002        | Abhay   | Finance Manager  |
| F003        | Deepika | Budget Analyst   |
| F004        | Kushal  | CFO              |
+-------------+---------+------------------+
4 rows in set (0.00 sec)

mysql> create table Marketing_Department(Employee_ID varchar(10) primary key, Name varchar(10), Designation varchar(50));
Query OK, 0 rows affected (0.03 sec)

mysql> insert into Marketing_Department (Employee_ID, Name, Designation) values ("M001", "Laura", "Chief Marketing Officer");
Query OK, 1 row affected (0.01 sec)

mysql> insert into Marketing_Department (Employee_ID, Name, Designation) values ("M002", "Tanishka", "Marketing Manager");
Query OK, 1 row affected (0.01 sec)

mysql> insert into Marketing_Department (Employee_ID, Name, Designation) values ("M003", "Vansh", "Marketing Coordinator");
Query OK, 1 row affected (0.01 sec)

mysql> insert into Marketing_Department (Employee_ID, Name, Designation) values ("M004", "Mohit", "Director of Marketing");
Query OK, 1 row affected (0.00 sec)

mysql> select * from Marketing_Department;
+-------------+----------+--------------------------+
| Employee_ID | Name     | Designation              |
+-------------+----------+--------------------------+
| M001        | Laura    | Chief Marketing Officer  |
| M002        | Tanishka | Marketing Manager        |
| M003        | Vansh    | Marketing Coordinator    |
| M004        | Mohit    | Director of Marketing    |
+-------------+----------+--------------------------+
4 rows in set (0.01 sec)

mysql>
```

```
mysql> insert into Marketing_Department (Employee_ID, Name, Designation) values ("M004", "Mohit", "Director of Marketing");
Query OK, 1 row affected (0.00 sec)

mysql> select * from Marketing_Department;
+-------------+---------+--------------------------+
| Employee_ID | Name    | Designation              |
+-------------+---------+--------------------------+
| M001        | Laura   | Chief Marketing Officer  |
| M002        | Tanishka | Marketing Manager       |
| M003        | Vansh   | Marketing Coordinator    |
| M004        | Mohit   | Director of Marketing    |
+-------------+---------+--------------------------+
4 rows in set (0.01 sec)

mysql> desc course;
+-------------+-------------+------+-----+---------+-------+
| Field       | Type        | Null | Key | Default | Extra |
+-------------+-------------+------+-----+---------+-------+
| Course_code | varchar(10) | NO   | PRI | NULL    |       |
| Course_Name | varchar(30) | YES  |     | NULL    |       |
| Duration    | varchar(20) | YES  |     | NULL    |       |
| Dept_ID     | int         | YES  | MUL | NULL    |       |
+-------------+-------------+------+-----+---------+-------+
4 rows in set (0.33 sec)

mysql> desc Department;
+-----------------+-------------+------+-----+---------+-------+
| Field           | Type        | Null | Key | Default | Extra |
+-----------------+-------------+------+-----+---------+-------+
| Dept_ID         | int         | NO   | PRI | NULL    |       |
| Department_Name | varchar(40) | YES  |     | NULL    |       |
| Location        | varchar(20) | YES  |     | NULL    |       |
+-----------------+-------------+------+-----+---------+-------+
3 rows in set (0.02 sec)

mysql> select Course_code, Couse_Name,Duration, Dept_ID, Department_Name,Location
    -> from course
    -> left join Department using (Dept_ID);
ERROR 1054 (42S22): Unknown column 'Couse_Name' in 'field list'
mysql> from course
    -> left join Department using (Dept_ID);
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'from course
left join Department using (Dept_ID)' at line 1
mysql> select Course_code, Couse_Name,Duration, Dept_ID, Department_Name,Location from course left join Department using (Dept_ID);
ERROR 1054 (42S22): Unknown column 'Couse_Name' in 'field list'
mysql> select Course_code, Course_Name,Duration, Dept_ID, Department_Name,Location from course left join Department using (Dept_ID);
+-------------+---------------------------------+----------+---------+-----------------------+----------+
| Course_code | Course_Name                     | Duration | Dept_ID | Department_Name       | Location |
+-------------+---------------------------------+----------+---------+-----------------------+----------+
| AS40        | Architectural Science           | 4 Years  |    1007 | Architecture          | F Block  |
| BBA18       | BBA                             | 4 Years  |    1004 | Business Manegement   | H Block  |
| BJMC03      | BJMC                            | 2 Years  |    1006 | Mass Communication    | E Block  |
| BSC24       | B.Sc.                           | 3 Years  |    1008 | Science               | G Block  |
| CSE23       | Computer Science & Engineering  | 4 Years  |    1002 | Engineering           | D Block  |
| DS34        | Dental Surgery                  | 3 Years  |    1005 | Dental                | A Block  |
| E25         | English                         | 2 Years  |    1009 | Language & Humanities | I Block  |
| FD21        | Fashion Design                  | 5 Years  |    1001 | Design                | C Block  |
| LLB15       | LLB                             | 3 Years  |    1003 | Law                   | B Block  |
| SP08        | Social Pyschology               | 4 Years  |    1010 | Psychology            | J Block  |
+-------------+---------------------------------+----------+---------+-----------------------+----------+
10 rows in set (0.01 sec)

mysql>
```

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TECHNICAL BIOGRAPHY

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Thank You