

LIST OF MINI PROJECTS IDENTIFIED FOR DATABASE MANAGEMENT SYSTEMS COURSE

1. MINI PROJECT 1

Title of Mini Project - INVENTORY CONTROL MANAGEMENT

Objective of Mini Project

Objective of this project is to design a database to record proper variety of required items in inventory, maintain optimized inventory, safety stock levels and obtain low raw material prices, storage cost, insurance cost, taxes

Scope of Mini Project (project description listing out functionalities / features to be developed)

Scope of project will include the following:

- Develop ER Diagrams
- Design Database by converting ER Diagrams to Tables
- Development of DDL, DML and Database Queries to achieve the following functionalities
 - Enter, modify, delete items in inventory
 - Enter, modify, delete suppliers of inventory items
 - View details of inventory items and all associated costs to aid in decision making on placing orders with suppliers
 - View details of suppliers of inventory items
 - Generate reports on inventory re-order level to aid in decision making in procurement of inventory items

Technology to be used – MySql

Timeline of Mini Project (in terms of no. of lab classes required for project completion)– 6 hrs

Team size – 3 students/project team

Project deliverables

ER Diagrams, Converting ER Diagrams into Tables and Making SQL Queries.

Any special requirement of h/w, s/w environment, tools -No

2. MINI PROJECT 2

Title of Mini Project - STUDENT RECORD MANAGEMENT SYSTEM (SRMS)

Objective of Mini Project

Objective of this project is to design a database to record students' details that are enrolled in various programmes offered by different departments of a University at various locations.

Scope of Mini Project (project description listing out functionalities / features to be developed)

Scope of project will include the following:

- Develop ER Diagrams considering that the university is offering various programme under different department at different location
- Design Database by converting ER Diagrams to Tables
- Development of DDL, DML and Database Queries to achieve the following functionalities
 - Enter, modify, delete students details
 - Enter, modify, delete course and department details
 - View details of all students category wise, location wise, programme wise etc.
 - View performance of students enrolled in different programme
 - Generate reports of detained students' list programme wise, course wise etc.

Technology to be used – MySQL

Timeline of Mini Project (in terms of no. of lab classes required for project completion)– 6 hrs

Team size – 3 students/project team

Project deliverables

ER Diagrams, Converting ER Diagrams into Tables and Making SQL Queries.

Any special requirement of h/w, s/w environment, tools -No

3. MINI PROJECT

Title of Mini Project – HEALTH CLUB MANAGEMENT SYSTEM (HCMS)

Objective of Mini Project

Objective of this project is to design a database for recordkeeping of a health club. The system will efficiently manage employee, member, and payroll, receipts, and products information.

Scope of Mini Project (project description listing out functionalities / features to be developed)

Scope of project will include the following:

- Develop ER Diagrams
- Design Database by converting ER Diagrams to Tables
- Development of DDL, DML and Database Queries to achieve the following functionalities
 - Enter, modify, delete membership of a person
 - Enter, modify, delete list of employee and their roles
 - Enter, modify, delete list of products and offerings
 - View details of products/ facility available for a specific types of members
 - Generate fitness reports of a member

Technology to be used – MySQL

Timeline of Mini Project (in terms of no. of lab classes required for project completion)– 6 hrs

Team size – 3 students/projectteam

Project deliverables

ER Diagrams, Converting ER Diagrams into Tables and Making SQL Queries.

Any special requirement of h/w, s/w environment, tools -No

4. MINI PROJECT 4

Title of Mini Project – COLLEGE MANAGEMENT SYSTEM (CMS)

Objective /Goal of Mini Project – To design a database of a college where the college may have various department, courses, staffs and students enrolled.

Scope of Mini Project (project description listing out functionalities / features to be developed)

Scope of project will include the following:

- Develop ER Diagrams
- Design Database by converting ER Diagrams to Tables

- Development of DDL, DML and Database Queries to achieve the following functionalities
 - Enter, modify, delete staffs details
 - Enter, modify, delete course details
 - Enter, modify, delete department details
 - View details of all staffs category wise, location wise, programme wise etc.
 - View details of all student categories wise, location wise, programme wise etc.
 - View performance of staffs and their significant achievement year wise
 - Generate reports of detained students' performance course wise

Technology to be used – MySQL

Timeline of Mini Project (in terms of no. of lab classes required for project completion)– 6 hrs

Team size – 3 students/project team

Project deliverables

ER Diagrams, Converting ER Diagrams into Tables and Making SQL Queries.

Any special requirement of h/w, s/w environment, tools -No

5. MINI PROJECT 5

Title of Mini Project– BUSTICKET BOOKING SYSTEM (BTBS)

Objective /Goal of Mini Project –

Objective of this project is to design a database to efficiently manage Bus ticket booking for a city tour.

Scope of Mini Project (project description listing out functionalities / features to be developed)

Scope of project will include the following:

- Develop ER Diagrams
- Design Database by converting ER Diagrams to Tables

- Development of DDL, DML and Database Queries to achieve the following functionalities
 - Enter, modify, delete staffs details
 - Enter, modify, delete passengers details
 - Enter, modify and delete Bus details (Bus No, Category, Vendor etc.)
 - View details of reservation day wise, month wise etc.
 - View details of regular passengers
 - View staffs details categories wise
 - Generate reports of unsold seat Bus wise, Class wise etc.

Technology to be used – MySql

Timeline of Mini Project (in terms of no. of lab classes required for project completion)– 6 hrs

Team size – 3 students/project team

Project deliverables

ER Diagrams, Converting ER Diagrams into Tables and Making SQL Queries.

Any special requirement of h/w, s/w environment, tools -No

6. **MINI PROJECT 6**

Title of Mini Project - HOSPITAL MANAGEMENT DATABASE

Objective /Goal of Mini Project: Objective of this project is to design database for recording and managing hospital information to reduce the burden of handling manually the activities of all sections of hospital like reception, lab, inpatient/outpatient management and patient billing etc., which improve the processing efficiency.

Scope of Mini Project - Project description listing out functionalities / features to be developed–

Scope of project will include the following:

- Develop ER Diagrams
- Design Database by converting ER Diagrams to Tables
- Development of DDL, DML and Database Queries to achieve the following functionalities

- Enter, modify, delete out-patient details, in-patient details, doctors details
- Enter, modify, delete patients' treatment details, charges of all diagnostic activities
- Booking of appointments with doctors
- View patient details, doctors' details, treatment details
- Search facility on specialisation, availability of doctors, charges of diagnostic tests, charges for Operation Theatre, ICU, different room categories
- Generate and view bills

Technology to be used – MySQL

Timeline of Mini Project (in terms of no. of lab classes required for project completion) – 6 hrs

Team size – 3 students/project team

Project deliverables – ER Diagrams, Converting ER Diagrams into Tables, DDLs, DMLs and SQL Queries.

Any special requirement of h/w, s/w environment, tools – No

7. MINI PROJECT 7

Title of Mini Project–Library Management System (LMS)

Objective –the main objective is to automate the existing system of manually maintain the records of book issue ,book return from the student, stock maintenance, catalogue and book search to be computerized

Scope of Mini Project - Project description listing out functionalities / features to be developed–

Scope of project will include the following:

- Develop ER Diagrams
- Design Database by converting ER Diagrams to Tables
- Development of DDL, DML and Database Queries to achieve the following functionalities
 - Enter, modify, delete complete details of books
 - Enter, modify, delete students details
 - Search book according to Title, Author etc.

- Generate report of per students issued book and return book etc.
- Generate and view fine according to delay or lost
- Generate reports like total number of books, Number of issued books, Number of Journals etc.

Technology to be used – MySql

Timeline of Mini Project (in terms of no. of lab classes required for project completion) – 6 hrs

Team size – 3 students/project team

Project deliverables – ER Diagrams, Converting ER Diagrams into Tables, DDLs, DMLs and SQL Queries.

Any special requirement of h/w, s/w environment, tools – No

8. **MINI PROJECT 8**

Title of Mini Project –RESTAURANT MANAGEMENT SYSTEM (RMS)

Objective Mini Project – Objective of this project is to design database for recording and managing food items, raw materials, monthly sale, working staffs and profits which improve the processing efficiency.

Scope of Mini Project (project description listing out functionalities / features to be developed)

Scope of project will include the following:

- Develop ER Diagrams
- Design Database by converting ER Diagrams to Tables
- Development of DDL, DML and Database Queries to achieve the following functionalities
 - Enter, modify, delete staff details
 - Enter, modify, delete raw materials details
 - Enter, modify and delete item available details
 - View menu list category wise
 - View details of regular visitors
 - View staffs details categories wise
 - Generate reports of profit.

Technology to be used – MySQL

Timeline of Mini Project (in terms of no. of lab classes required for project completion)– 6 hrs

Team size – 3 students/project team

Project deliverables

ER Diagrams, Converting ER Diagrams into Tables and Making SQL Queries.

Any special requirement of h/w, s/w environment, tools -No

9. MINI PROJECT 9

Title of Mini Project –HOTEL MANAGEMENT SYSTEM (HMS)

Objective Mini Project – Objective of this project is to design database for recording and managing day to day activity of a hotel to reduce the burden of handling manually the activities of all sections of hotel like reception, employee, booking status, Visitors check in, check out status, and billing etc., which improve the processing efficiency.

Scope of Mini Project (project description listing out functionalities / features to be developed)

Scope of project will include the following:

- Develop ER Diagrams
- Design Database by converting ER Diagrams to Tables
- Development of DDL, DML and Database Queries to achieve the following functionalities
 - Enter, modify, delete employee details
 - Enter, modify, delete visitors details
 - Enter, modify, and delete Room details (Room No, Category etc.)
 - View details of reservation day wise, month wise etc.
 - View details of regular visitors
 - View staffs details categories wise
 - Generate reports of unsold Room Fare wise, Class wise etc.

Technology to be used – MySQL

Timeline of Mini Project (in terms of no. of lab classes required for project completion)– 6 hrs

Team size – 3 students/project team

Project deliverables

ER Diagrams, Converting ER Diagrams into Tables and Making SQL Queries.

Any special requirement of h/w, s/w environment, tools -No

10.MINI PROJECT 10

Title of Mini Project – CAR RETAIL MANAGEMENT SYSTEM (CRMS)

Objective Mini Project – Objective of this project is to design database for recording and managing Car sell shop to reduces the burden of handling manually the activities of all subdivision of shop like employee, types of car and brand, customers detail , vendors details, and billing etc., which improve the processing efficiency.

Scope of Mini Project (project description listing out functionalities / features to be developed)

Scope of project will include the following:

- Develop ER Diagrams
- Design Database by converting ER Diagrams to Tables
- Development of DDL, DML and Database Queries to achieve the following functionalities
 - Enter, modify, delete Car details
 - Enter, modify, delete customers details
 - Enter, modify, delete mode of payment details (Cash, EMI etc.)
 - View customers feedback
 - View details of customers
 - Generate inventory report
 - Generate sell and purchase reports on daily and monthly basis

Technology to be used – MySQL

Timeline of Mini Project (in terms of no. of lab classes required for project completion)– 6 hrs

Team size – 3 students/project team

Project deliverables

ER Diagrams, Converting ER Diagrams into Tables and Making SQL Queries.

Any special requirement of h/w, s/w environment, tools -No
