Introduction:

In this course, CSE303 Database Management System you have been provided with a real world problem related to automation of manual business process using information system. The main objective is to apply the knowledge you are gaining from this course to solve the provided problem. Understanding the total business processes and identifying the existing business problems are the main issues. After analysis the problem you have to be able to identify the cause of the problems and provide a suitable solution. While you provide any solution you must need to consider the constraints. Please make appointment with the instructor in case you have any problem while working with your project.

Your tasks:

Plan for the project is given below:

Task	Outcome
Find a company (real world problem), approach the management, learn the business processes, analysis the processes and share your idea to motivate the management to accept automated IS.	**Report 1: C**hapter 2
Logical System Design in the next phase of the project. In this phase you have to draw the Entity Relationship diagram based on your proposed solution. And need to transform the ERD to Relations. You have to normalize the relational model up to BCNF with appropriate description. Finally, you have to prepare data dictionary for the system.	**Report 2:** Chapter 3
Physical System design is divided into two phases, i. Database design and ii. Front end (GUI) design. In case of database design you have to prepare all DDL, DML statements. On the other hand for GUI you have design the forms and reports. You need to describe the purpose and methods along with required SQL and challenges. Architectural design issues must be addressed here. Finally, you need to discuss the problems along with the solutions arise during development phases.	**Report 3:** Chapter 4, 5
Complete Project: you have to make a project that works without error. Demonstrate the project and submit the report after making required changed based on the suggestion of the faculty.	1. **Final Report** 2. **Final Project.**

Final report is the combination of all the tasks that you have done so far. The guideline for the report is given below:

Cover Page, approval page, originality statement and acknowledgement as per template.

Table of contents (Should be Automated, should include list of Tables and List of figures)

Ch-1 Introduction
   a. Background of the Organization
   b. Background of the Project
   c. Objectives of the Project
   d. Scope of the Project

Ch-2: Requirement Analysis
   a. Describe Existing Business System (with rich picture)
   b. Processes along with six system elements.
   c. Process Diagram (As Is)
   d. Existing Problems & Analysis of the problem
   e. Describe Proposed Business System (with rich picture)
   f. Proposed processes along with six system elements.
   g. Process Diagram (to be)

Ch-3 Logical System Design
   a. Business Rules
   b. ERD
   c. ERD to Relations
   d. Normalization

e.   Data Dictionary

Ch-4 Physical System Design
a.   Input Forms
- o   Purpose
- o   Controls and flow controls of the form
- o   Related SQL Used

b.   Output Query & Reports
- o   Purpose and use
- o   Controls and flow of controls (in case of customizable report)
- o   Description along with SQL

c.   System Design Architecture

Ch-5 Conclusion
- **Problem & Solution** (Write down the problems you have experienced while working in this project and how you have solved those problems. In case of any unsolved issues include some ideas to overcome those problems.)
- **Additional feature & Future Development** (This section deals with the additional nonfunctional requirement of the system. i.e., the extra features of the software should be provided in this section.)
- Conclusion & Recommendations

Reference: reference number should be provided in third bracket ([ ]) in the text and in this section the details of the reference should be given using the following style. IEEE style available in MS office.)

Appendix (To reduce the size of the main report an extension of the report is given in this area. The main report should refer to this area. The part that is so important that you can't exclude it from the report neither can include in the main part is normally placed in this section.)

Formatting convention of the report:
1. Headings: Times new roman or Arial 24 to 14 size, Bold, Shadow, All Cap, 12 point before paragraph and 3 point after paragraph.
2. Body Text: Times new roman 12 or Arial 10, justified, normal, 1.5 spacing and 6 point after paragraph.
3. Auto generated Table of Contents, List of Figures should be provided.
4. Bottom of each diagram the caption of the diagram should be given. Caption should be Times new roman with 10 size, After paragraph space should be 18 points and centered aligned.
5. Page Setup: Size: A4, Top 1", Bottom 1", Left 1.25" and Right 1".
6. Page number should be in the footer in the right.
7. Project name should be on the header (left side) along with the group name (right side).

What to Do and what Not to do?
1. Each student should submit the reports in group. With the final report student should mention their role in the report clearly.
2. Should submit the Hard copy and softcopy of your report.
3. Final hardcopy should be spiral bind.
4. Should make a presentation in Power point on the Report.
5. For the Viva you have to prove that you have done the program by yourself. In case you fail to proof so, you will get zero in the project, report and presentation.
6. If you are weak in programming then just do the physical design part to get the pass mark in the course.

Good Luck