



**Submission:**

*Submit your project code and report on MS Teams. While bring your project report during your viva time-slot.*

**Designing and Implementing a Database Management System**

**Overview:**

Database Management Systems provides students with hands-on experience in designing and implementing a database management system tailored to address a specific business need or scenario. The goal is to apply theoretical knowledge to practical scenarios, enhancing skills in database design, development, and management.

**Project Milestones:**

Project Milestones are listed below:

**Business Scenario Analysis:** Identify a business need or scenario where a database management system can provide significant value.

**Entity Relationship Diagram (ERD) Design:** Design an ERD that accurately represents the entities, relationships, and attributes relevant to the business scenario.

**Relational Database Schema:** Convert the ERD into logical relational database schemas in 3NF or higher by going through the normalization process.

**Data Population:** Populate the database with sample data representative of the business scenario.

**Querying and Reporting:** Implement a set of queries and reports relevant to the business scenario.



GHULAM ISHAQ KHAN INSTITUTE OF ENGINEERING SCIENCES AND TECHNOLOGY  
CS232 – Database Management Systems (Spring 2024)

**Semester Project**

**Weightage: 10%**

**Submission Date: 26<sup>th</sup>-April-2024**

**User Interface:** If developing a user interface, present a prototype demonstrating basic functionality for data input, retrieval, and manipulation.

**Documentation and Final Submission:** Compile comprehensive documentation covering the database design, normalization process, queries, and any additional information. Submit the final project deliverables.

***Should you have any questions or require clarification regarding the project assignment, please contact the instructor.***