



Individual Project Guidelines

1. Project Selection

- **Select a Mini World**
 - Choose a specific scenario or dataset for your project. The current options are available in this Google Sheets document: [Mini World Selection](#).

2. System Design Requirements

- **Documentation of Process**
 - Gather all requirements for system design. (Through research, real-world interviews, surveys)
 - Document each step of your process, including how you determined the requirements.

3. Entity-Relationship (ER) Diagrams

- **Chen Style ER Diagram**
 - Draw an ER diagram using the Chen notation by hand to represent the entities and their relationships based on the gathered requirements. Use chapters 3 and 4 as references.
- **UML Style ER Diagram**
 - Create an ER diagram using UML notation with the help of MySQL Workbench. This diagram should also accurately represent the entities and their relationships within your system.

4. Database Creation

- **Development in MySQL Workbench**
 - Utilize the UML ER diagram to create the database and its tables in MySQL Workbench.
 - Ensure all entities and relationships are properly represented.
- **SQL Scripts**
 - Generate and provide all SQL scripts necessary for creating the database, tables, and any other required structures or data manipulations. Save the SQL file.
- **MySQL Workbench File**
 - Save and include the MySQL Workbench file (.mwb), which contains the designed database and ER diagrams.

5. Project Submission

- **GitHub Repository**
 - Upload all source code files, ER diagrams, SQL scripts, the .mwb file, and the final project report to a public GitHub repository.
 - Ensure that the repository is well-organized with clear descriptions and readmes for navigation and understanding of the project structure.
- **Blackboard Submission**
 - Submit the URL to your public GitHub repository on Blackboard for evaluation.



Project Grading Rubric

1. Selection and Documentation (20 Points)

- **Mini World Selection (5 Points)**
 - Appropriate choice of mini world considering the scope and requirements of the project.
- **Process Documentation (15 Points)**
 - Comprehensive documentation detailing the system design requirements and decision-making process.

2. ER Diagrams (30 Points)

- **Chen Style ER Diagram (15 Points)**
 - Accuracy and completeness in representing entities and relationships.
 - Clarity and readability of the diagram.
- **UML Style ER Diagram in MySQL Workbench (15 Points)**
 - Accuracy and completeness in representing entities and relationships.
 - Professional presentation and use of UML notation standards.

3. Database and SQL Scripts (30 Points)

- **Database and Table Creation (15 Points)**
 - Correct implementation of the database schema in MySQL Workbench.
- **SQL Script Quality (15 Points)**
 - Correctness and efficiency of SQL scripts for creating and manipulating the database.
 - Scripts include all necessary commands for setup and are free of errors.

4. Submission and Organization (20 Points)

- **GitHub Repository (10 Points)**
 - Organization and clarity of the GitHub repository.
 - Inclusion of all required files: source code, ER diagrams, SQL script files, .mwb file, and project report.
- **Completeness and Quality of Final Report (10 Points)**
 - Comprehensive coverage of the project's scope, challenges, and outcomes.
 - Quality of writing, structure, and adherence to academic standards.

Total: 100 Points