

Assignment 2

Entity-Relationship Diagram (ERD) and Relational Data Model

Objective: Using the functional requirements identified in the previous assignment, design the database structure by creating an Entity-Relationship Diagram (ERD) and a corresponding relational Data Model.

Systems:

- Library System.
- Bank System.
- University System.
- Restaurant System.
- Supermarket System.
- ATM System.
- Job Boards System (Companies that offer job vacancies).
- Hospital System.
- Car Rental System.
- Hotel System.
- Nursery System.
- Clinics System.
- Food Delivery System.
- Real Estate System.
- Pharmacy System.

Instructions:

1. Select the system you worked on in the first assignment.
2. Based on the functional requirements you identified in Assignment One, create an Entity-Relationship Diagram (ERD) to visualize the database structure for the system.
3. The ERD should clearly represent:
 - Entities: The main objects in your system (e.g., Users, Orders, Products, etc.).
 - Attributes: Key data points for each entity (e.g., Name, Date, ID, etc.).

- Relationships: How the entities relate to each other (e.g., one-to-one, one-to-many, many-to-many).
4. Design a Relational data model (Check lecture 3).
 5. The ERD and Relational data model **SHOULD BE HANDWRITTEN**, scanned, and uploaded to both Moodle and your GitHub account.
 6. Ensure that you attach the link to your GitHub repository in your assignment submission on Moodle.

Submission Guidelines:

1. The assignment is **individual**, and each student must work independently.
2. Submit the handwritten ERD and Relationship Table as a **scanned PDF** on both Moodle and your GitHub repository.
3. Include the **GitHub link** in your Moodle submission.
4. Ensure your GitHub repository is accessible to non-owners. (to allow anyone (including people who are not the owner of the repository) to view the contents. This usually involves making the repository **public** rather than private).