**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).