Guidelines: COMP353 Main Project

IMPORTANT: For the main project, you must use the DBMS managed by the AITS to which you have been provided access in this course.

In your DB application system, each project P is owned by and managed by a single department say D and led by an employee E who works in D. Other employees who are assigned to project P work under E, the project leader. Examples of typical queries and transactions are as follows:

1. Inserting/updating/tuples to relations/tables in your database. Examples of such tables include Projects, Employees, Departments, etc. The system should also allow operations of insert/update/delete of tuples and/or attributes. For example, we should be able to update attribute "Hours worked", which is used to calculate the stipend of employees based on the hours she/he worked on different projects, considering the "hourly" charge for each employee (it is not necessary the same for all employees).
2. Queries like who works under which employee, How much each employee gets, In what stage a project is (considering for instance 4 levels: preliminary, intermediate, advanced, and complete), Who works on which project; List the project managed by each department?
3. Each employee is involved in most and least number projects?
4. What is the total pay for each project? For each department? For the company in a certain period?
5. Which department manager is also the manager of some projects?
6. Etc....

Distribution of Marks

TASKS	POINTS
Conceptual DB Design (ER)	10
ER to Relations Converstion	5
Normalization Process Details	5
Sample Test Data	5
Implemented Functionalities	60
Organization & Report content	15
Total	100

Your project report should be submitted before your project demo and should include the following:

- Your team name, official names of the team members, and the student ID's should clearly appear on
  the cover page
- Include a signed originality form
- Include a section that clearly explains the distribution of the workload among the team members: each member of the project is expected to be responsible and contributed to a fair part of the project. A section in the report should include a description of the contributions of each member to indicate who did which part of the project.

Please note that not every member of a team may get the same grade in the project, especially in obvious cases of insufficient participation and contribution by a member.

Your project report MUST contain:

1. Reasonable Assumptions made in the proposed database design or system.
2. ER-Diagram (no UML diagram please)

3. ER to Relation conversion
4. Normalization steps and assumptions
5. Functionalities that have been implemented to satisfy the project requirements
6. Additional features (if any) that complements the project description

Guidelines for the Demo

All the members MUST be present and participate in their project demo. Therefore, you should decide ahead and practice who will be responsible and present for which part of the project.

In the demo, you will be asked to formulate some queries based on the requirements provided. Examples of such queries and transactions are provided above. Using these queries, you can demonstrate the features, performance, and the functionalities of your project. The demo must be done on the DBMS managed by the faculty AITS.

Any additional feature(s) that you might have implemented which exceeds the requirements should be introduced and presented during the demo.