

### **Step 1 – Project Group & Title (0%):**

- Choose a project topic and submit your project title (first come first served) and members. There can be minimum 4, maximum 5 students in each group.
- Submit your work for step 1 through MS Teams before 13:30 on October 18<sup>th</sup>. During submission, make sure you write down your group title and the members of your group to the shared file below.

[https://docs.google.com/spreadsheets/d/13R1b1OT2U5ZtA9F2vN-nIxXPUF8\\_80r-/edit?usp=sharing&ouid=111790274781342193727&rtpof=true&sd=true](https://docs.google.com/spreadsheets/d/13R1b1OT2U5ZtA9F2vN-nIxXPUF8_80r-/edit?usp=sharing&ouid=111790274781342193727&rtpof=true&sd=true)

### **Step 2 – Project Design Report (8%):**

- Describe your project in detail.
  - List all entity sets (at least 6-7 entity sets) and their attributes.
  - List and explain all relationship sets and their attributes (if necessary).
  - List all users of the system.
- Draw the ER diagram. List and explain all assumptions and business rules. Give any explanations that would help to make your model easier to understand.
- Convert the ER diagram to relational schema.
- Submit your work for step 2 through MS Teams before November 8<sup>th</sup> 13:30.

### **Step 3 & 4 – Final Project Design Report (2%) & Implementation of the Project (10%)**

#### **Step 3**

- Update the work in Step 2 according to the feedback.
- Submit your work for step 3 through MS Teams before December 27<sup>th</sup> 13:30.

#### **Step 4**

- Create the tables on the Oracle DBMS. Make sure that you specify all constraints such as the primary keys, foreign keys, “not null” fields, “unique” fields, etc.
- Populate your tables with at least 20 tuples.
- Write a script for “create” and “insert” commands so that you can easily create your tables and re-populate them in case something goes wrong.
- Run your script and take screenshots of the outputs.
- Submit your work for step 4 through MS Teams before December 27<sup>th</sup> 13:30.

### **Step 5 – Presentation (5%)**

- Prepare a presentation which summarizes your project topic, users of the system, fundamental queries. Also explain some constraints and/or triggers that you used in your project. (3 minutes)
- Show your populated tables in Oracle DBMS. Run 2 queries which join at least 3 tables. (3 minutes)
- Questions and Answers (4 minutes)