

## CS348 – Project – Stage 2

Due date: 3/21/2021 at 11:59 pm

In stage 2, you will design your database and user interface. You will also start development by setting up your database system and implement a few basic pages to get familiar with the programming language/framework. The deliverables for stage 2 are:

1. Create a document in your shared folder to describe your ERD and database schema. The document should include the following:
  - a. **ERD** (Entity Relationship Diagram).
  - b. Your **database schema** should include your **tables, columns, column domains, primary keys, and foreign keys**. If you are using a relational database, use the ERD-to-relational-model transformation rules (the rules will be covered next week).
2. Create a document in your shared folder to describe your **user interface (UI) design**. Provide sketches of the user interface for the main features and reports in your application. You can use PowerPoint or any other tool to draw how a page or report will look like when you finish development. You do not need to show the UI for every data entry page. For example, if the UI for add/edit/delete data is the same for all tables, you only need to show the UI for accessing one table.
3. A **proof** that you have a database installed and data entered and a proof that you have some basic features in your application (e.g., a page for inserting new students). In your shared folder, include a url to your application or a 5-minute recorded demo (e.g., show that you can enter data in your application and then you can retrieve it). You can use Zoom to record your demo and then upload the video to your shared folder.
4. In your shared folder, create the **tasks sheet** that describes how you distribute the tasks among team members. The sheet should include the columns: task description, member who will work on the task, date assigned, and date finished.
  - a. Each member should develop **both back-end and front-end** components for some features/reports. Avoid having a member working only on the front end.
  - b. **Tasks should be independent** as much as possible. Each member should be able to work on their part regardless of the progress of other members.
  - c. Suggestion: Split the tasks into three or four equal groups then randomly assign members to groups.
5. Create a **GitHub repository** and share with your team TA.

### Grading:

Stage 2 counts for 30% of the project grade. Your assigned TA will grade your ERD, database design, and user interface design. The TA will also make sure you have set up a database and you have some basic features working.

We will use **team-based grading** in **stage 2**. All members of a team get the same grade. However, in **stage 3**, we will use **member-based grading**. Each member is graded separately based on their assigned task(s) (described in the task sheet). Therefore, members of a team may receive different grades in stage 3.