# CSCI 40 Software Tools and Development Frameworks Second Semester (Q3), SY 2020–2021

#### Read all instructions before working on the project.

## Questboard (100 points)

**Description:** The Questboard is a gamified project selection mechanism implemented by Neithan Casano in his classes. The idea is simple: the teacher creates quests (i.e. project options) that students can choose from. The students can call dibs on the quest/s that they would like to take on. That's it! Your task is to implement a Questboard similar to this.

## Requirements (60 points):

- 1. (10 points) The teacher has a Homepage. In this Homepage the teacher can do 2 things:
  - a. create Questboards; and
  - b. view a list of existing Questboards, which links to a Questboard page.
- (10 points) Questboards should contain the following: name, description, and required stars. The name is the course code (e.g. CSCI 40). Since a teacher may be handling multiple courses, the website should allow them to create as many Questboards as they need.
- 3. (10 points) Once a Questboard has been created, this should redirect to a view where all details of a Questboard are visible. From this view, the teacher should be able to:
  - a. edit the Questboard's name, description, and required stars, and
  - b. add quests to the Questboard
- 4. (20 points) Quests are displayed as quest cards as shown <a href="here">here</a>, and should contain the following details:
  - a. name,
  - b. **description**
  - c. corresponding number of stars,
  - d. allow 3 students to call sign up/call dibs on a quest, or
  - e. say whether a quest is for everyone to do.
- 5. (10 points) The data (i.e. Questboards created, student dibs, available slots) must persist, that is, they should be shown when teachers and students visit the Questboards.

#### **Assumptions:**

- 1. The <u>sample Questboard</u> shows projects to be completed by groups. For simplicity, do not implement groupings, that is, each person can call dibs on a slot.
- 2. You are free to be creative in designing the aesthetics of the website.
- 3. There is no need to implement a log-in mechanism that will differentiate between a student and a teacher.

## Additional Instructions (20 points):

- 1. (10 points) Practice clean code as prescribed in the lectures.
- 2. (10 points) You will be using Git and GitLab (https://gitlab.discs.ateneo.edu/) to manage your code for this project. The commit history should tell the story about how you worked on it. Make sure to commit **worthwhile** changes in your code. Add your teacher to your GitLab repository.
- 3. You can work individually or in groups of up to three members. Kindly fill out <u>this form</u> by end-of-day Monday, 22 March 2021 to indicate your group members. Those working individually still need to fill out the form.
  Note: If you work in a group, you will have to give each group member including yourself
  - Note: If you work in a group, you will have to give each group member including yourself a peer rating. The peer rating ranges from 0 to 1.00. Each students' final grade for the project will be multiplied by the average of the peer rating.
- 4. Expected date of submission: Wednesday, 7 April 2021

# Add-ons (20 points):

- 1. (10 points) The teacher can share the link to a specific course Questboard to their students. Students can call dibs on the quests by typing in their name in any available slot. The website asks the student to confirm their quest choice. If the student says yes, their name is displayed on that slot. Students cannot retract their dibs once they have confirmed it. Hence, once a dibs slot has been taken, it can no longer be edited.
- 2. (10 points) The teacher can only edit a quest if no students have called dibs on it or if a quest was initially set to be for everyone.