

CSE 120: Software Engineering Course

Spring 2021

Midterm Exam

Total points possible: 100

Due Date: 07-APR, 11:59pm

Please note the following:

- This is a take-home exam with no proctoring. You can start at any time once you get access to this exam. You must submit your solution by the due date through CatCourses (Midterm Exam under Assignments). You can resubmit any number of times until the deadline. If there are any technical issues with uploading, it is extremely important to immediately contact the instructor or the TA.
- This is an open-book exam. The only resources you can use during the exam are all **course materials** uploaded to CatCourses plus the **textbooks**. This means that you are NOT allowed to search for solutions on the internet. You must take the exam by yourself.
- There are 3 tasks in total. You can earn some partial points if you show progress even if you do not solve the tasks to completion.
- Please answer precisely. If there is something in the question that you believe is open to interpretation, then please go ahead and interpret, but state your assumptions in your answer.
- If you have questions, you can email the instructor and the TA.
- You are required to take the following honor pledge prior to taking the exam.

By completing this exam, I acknowledge and confirm that I will not give or receive any unauthorized assistance on this examination. I will conduct myself within the guidelines of the university academic integrity guidelines.

The Office of Student Life of a university has hired you to design a mobile app to help students ease their frustrations when it is time to register for classes.

Below is a list of features that your client would like to include in the app:

- Generate up to 50 schedules that fit your classes.
- Filters to tailor the schedule to your life such as focusing on late classes, minimizing gaps, and even input your work schedule and meeting times.
- Port your created schedule to Google Calendar with the click of a button.
- Follow classes and receive a notification when a spot opens up.

Task 1: Create a user story for each of the feature mentioned in the list above.

Task 2: For each of the user stories from Task 1, list the following use case information:

- Name
- Actors
- Entry Condition
- Exit Condition
- Event Flow

Task 3: Create a UML use-case diagram for this app. There should be only one diagram that includes all the use cases described.