

Fall 2018 Homework 1 Due by Oct 8, 2018

CS 319 Object-Oriented Software Engineering

Q1) Weekly Meeting Hours [2 pts]

Agree on and specify regular weekly meeting hours (we suggest 2 two-hour time slots per week = 4 hours per week) with your project teammates. You get credit **only** if all your teammates specify the same meeting schedule as you do!

Q2) CASE Tool and Object Modeling [3 pts]

Assume that you are to develop a computer system as follows:

Single elevator moves vertically to serve users in all floors. When passengers wish to use the elevator, they press the button. In elevator system, there are two types of button for elevator request system; up or down, correlating to the direction they want to move. Elevator is responsible for the specified paths; one is the pressing of this button via the path of predetermined travel routes or cycles. The other one is if it is idle it will return the ground.

In elevator control system, there are various buttons for floors, doors open/close, and emergency stop. Also, for emergency situations, phone is ready. If the phone is removed from its cabin, it will call directly to the system manager. Doors stay open for 30 seconds but if "Doors Open" button is pressed, it will add 30 seconds to time door open, vs. if "Doors close" button is pressed, it will decrease 10 seconds to time door open.

Elevator control system and request system has to work collaboratively. Elevator has to stop all the floors that are requested by the request system and control system in order.

Elevator system has some limitations. No more than 4 passenger and 320 kg is allowed. Otherwise, elevator will be stopped and the doors will open to allow passengers to go out.

Draw a UML Use Case Diagram that summarizes the main use cases of the above system, using a CASE tool such as Visual Paradigm (see course page for software and license). Note that the goal is to get you started with a UML tool, so we will only check your notation. Do **not** use generic drawing tools like PowerPoint but a proper CASE tool supporting UML.

Q3) User Interface Mockups [3 pts]

As you know, normally mockups are drawn **before** the UI is actually implemented to agree on what the UI will be like! In this exercise, just for the sake of learning a new mockup tool (see examples in course page), we are asking you to draw a mockup of the following web page:

<https://www.iscb.org/index.php>

Q4) GitHub [2 pts]

You are going to maintain your group projects as GitHub repositories as detailed in the [Project Description Document](#). One person from each group is to create a GitHub repository as described in this document and each group member is to share their GitHub repository URL here. You will get credit only if all the required *branches* and *directories* have been successfully created and your instructor and the your TA is *invited* to the project by the time of your submission.

I hereby affirm that the work submitted in this homework is my own exclusively unless asked otherwise.

Name & Signature: