**CS3733-D21 Wong**

**Assignment 1 - Functional Modeling**

Due: Sa 4-3 at 11:59pm. Late penalty of 10% off for submissions by Su 4-4 at 5pm. This assignment is to be done in **groups of two**. This assignment has been designed so each of you have to do the entire exercise but will have the assistance of your teammate to accomplish it. Each one of you, working together using Zoom, will create your own functional model including using either Figma or Adobe XD to create the mockup UI, and LucidChart to create the use case diagram. Put your name at the top of your single Word or PDF document. Have one person on your team zip the two files (one from each person) and submit both documents using the Assignment 1 Link. Note: only one of them will be chosen at random to be graded so make sure you really are working together. If you are not performing the submission, you must confirm that your teammate has submitted the assignment by the due date and time!

Your five assignments will be done with a partner according to the following rules:

1. You must work with a partner, and your partner must be a member of the team you have been assigned to.
2. You may not have the same partner(s) from any previous assignment. In other words, you will have different partners for the assignments.
3. If there is an odd number of members on the team, you may have a single assignment group of three people. Let us know so that we can add the third person to your group. However, no one can be on a three-person team more than once. Make sure all three documents are submitted.

Go to Canvas -> People, and have both of you join the same hw1partner group.

This is a simple exercise to get you started with the various different functional models.

You have been assigned to create a service request component for a hospital. The service request component consists of a request form to fill out, a button that when clicked submits the request, a help button that displays information about the form be filled out in a popup window, and a cancel button that closes the service request component without submitting a request.

As a team, split up the following service request systems among the groups of two members. Depending on the number of members on your team, there will be a certain number of service request components created by the groups:

* 8 or 9 members on your team, there will be 4 different service request components
* 10 or 11 members on your team, there will be 5 different service request components
* 12 members on your team, there will be 6 different service request components

The service request components that you are to select from are sanitation services, floral delivery, medicine delivery, internal patient transportation (within a hospital), external patient transportation (ambulance, helicopter, plane). Each service request system will specify a location for the service to be done, a category list of types of requests, a detailed description of the request, and three additional pieces of information that is relevant to your assigned service request system.

Create the following:

Part 1 – User Story

1. (2 point) A single epic that groups the 4 user stories described at the beginning of this assignment.
2. (6 points) User story cards – four of them.
3. (2 point) Using either Figma or Adobe XD, create a UI mockup for your service request component. Do not submit a hand-drawn UI mockup.
4. (6 points) Scenarios – three of them
5. (4 points) Create a storyboard for how the user might use the service request component.

Part 2 – Use Case

1. (3 points) Create a single use case diagram for the service request component described above.  
   Hint: the diagram should include two extend use cases. Do NOT create a flowchart out of your use cases. If you are doing that, you need to review the video lecture and PowerPoint slides where I give advice on what NOT to do and how to do it properly.
2. (7 points) Write the textual use case for the diagram above. Pay careful attention to the flow of events. Keep in mind a single textual use case maps to single use case bubble, except where each alternate flow also maps to a use case <<extends>> bubble.

The following article will also help you avoid common mistakes in creating use cases:

<https://knowhow.visual-paradigm.com/uml/10-use-case-diagram-tips/>

For more information see the following:

Class PowerPoint slides

Rubin Chapter 5: Epics, user stories

Bruegge 2.4.1, 4.4.3-5 Use cases

Bruegge 4.4.2 Scenarios