San José State University Department of Computer Engineering

CMPE/SE 131

Section 3

Software Engineering I

Spring 2017 Instructor: Ron Mak

Assignment #3

Assigned: Thursday, February 16

Due: Friday, February 24 at 11:59 pm

Team assignment, 100 points max

Functional specification

Write the first draft of your team project's **functional specification**. For this assignment, your functional specification should include functional requirements, nonfunctional requirements, and use cases for your web application.

Your functional specification must have the following sections:

- 1. Product name
- 2. Problem statement
- 3. Product objectives
- 4. Functional requirements
- 5. Nonfunctional requirements
- 6. Use cases

For this assignment, include at least six functional requirements and four nonfunctional requirements. Include a UML use case diagram that contains six use cases and at least two actors. Pick three of the use cases and write a use case description for each one. You may use this Microsoft Word template to write your use case descriptions:

http://www.cs.sjsu.edu/~mak/CMPE131/assignments/3/UseCaseForm.docx

In subsequent assignments, you'll add a conceptual design model and screen mockups.

Writing quality

A functional specification must be understandable by users, clients, developers, project managers, and others. It's part of the informal contract between the product stakeholders and the developers. It should not contain implementation details. Here are some formal rubrics for writing a report to a high standard: http://www.cs.sjsu.edu/~mak/CMPE131/assignments/3/FormalReportRubrics.pdf

What to turn in

There should be one submission per team. Your functional specification can be a single file or multiple files. If there are multiple files, create a single zip file containing the files, and name the zip file after your team. Example: **SuperCoders.zip**

Submit to Canvas: Assignment #3

Rubric

Your functional specification will be graded according to these criteria:

Criteria	Maximum points
Product name	• 5
Problem statement	• 5
Product objectives	• 5
Six functional requirements	• 6 x 3 = 18
Four nonfunctional requirements	• 4 x 3 = 12
Use case diagram with six use cases and two actors	• 10
Three use case descriptions	• 3 x 15 = 45