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# Assignment #1

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May 22, 2018

## 1 DESCRIPTION

For this portion of the assignment, your deliverable will consist of four things:

1. A software process model that you will be using for developing your product
2. A set of functional and non-functional requirements of your system
3. Use cases and a use case diagram **OR** user stories and a story map
4. Low fidelity prototypes for representing the UI and the behaviour of your product

You will do these things based on the initial description of your system that has been provided by your customer. In cases you need more details about the requirements of your system, contact your customers and document your collaboration in your report. **You are NOT to implement any of the system's functionality for this portion of the assignment!**

## 2 DELIVERABLES

✓ **Deliverable #1:** For this assignment you are to choose one of the following software process models:

- Opportunistic
- Waterfall
- Spiral
- Concurrent
- Scrum

justify why you chose this methodology for developing your system over the others in 1 to 3 paragraphs. *A successful submission will include a thoughtful comparison of the benefits of the selected method over the other methods.* Details about planning and implementing this process model are **NOT** required for this assignment.

✓ **Deliverable #2:** Five well-defined functional and non-functional requirements (5 FRs and 5 NFRs). *A successful submission will include specific and understandable descriptions of each requirement.*

### **Deliverable #3:**

✓ (3-1): To represent your system's requirements, you need to choose **one** of the following paths:

- Use cases and a use case diagram
- User stories and a story map

justify why you chose one method of defining what your system has to do over the other in 1 to 2 paragraphs. *A successful submission will include a thoughtful comparison of the benefits of the selected method over the other method.*

(3-2): Next, you are to provide three well-defined *use cases* or *user stories*. *A successful submission will include specific and understandable descriptions of what the user will be able to do following the format discussed in class for the chosen method.*

(3-3): The use case diagram or story map describing Deliverable 3-2. *A successful submission will be syntactically-correct and legible.*

### **Deliverable #4**

For this portion of the assignment, your deliverable will consist of three things:

1. Sketches of your system's interface

2. A storyboard of your system's behaviour

3. A Wizard of Oz prototype of your system

✓ (4-1): Sketches

Create 5 overview sketches showing individual snapshots of your system's interface. Each sketch should represent a different idea for the interface. Choose one of the overview sketches and create 5 more detailed sketches elaborating on it. Explain why you chose the overview sketch that you did (*Hint: this should be a considered design decision*). *A successful submission will include neat and readable hand-drawn sketches that are appropriately labeled and explained.*

✓ (4-2): Storyboard

Create a storyboard showing a user performing a task with your system. *A successful submission will include a sequence of neat and readable sketches that are annotated, show user behaviour as well as the system's response.*

✓ (4-3): Wizard of Oz

Create a video showing a user interacting with your system. Although your functionality will not be complete at the point, the system responses can be simulated using another person. Please ask your clients to think aloud when interacting with your system. After every task clients need to rate the subjective difficulty of the task on a ten-point scale and they need to be asked to make suggestions to change the system in order to make the task easier. During this phase, clients are encouraged to support their suggestions by hand-drawn sketches. *A successful submission will include a short brief video showing one of the use cases [a sequence of tasks] of the system, clients' rating for each task, their hand-drawn suggestions, and some notes about client's thoughts during the interaction with the system.*

✓ (4-4): Requirements Change

How each of these prototyping techniques helped you to revise/clarify the functional and non-functional requirements that you specified in deliverable #2 (with examples)?

✓ **Deliverable #5:** Details of your collaboration (e.g. meeting, email, stand-up meetings, etc) with your customer. How it helped you to do this assignment!

### 3 HOW TO SUBMIT?

Please submit your assignments via D2L as a single *.zip* file which contains all the needed deliverables by 11:59 PM on May 31<sup>st</sup>. Make sure to put the names of all group members on the first page of your assignment. Only submit **one** copy per group!

**Note:** This assignment is pretty free-form! This is intentional; projects you work on in industry will rarely be very specific. Please feel free to show early results to me or the TA as well as your customers to get a feedback you can use to ensure a successful submission!