Customer Requirements Preparation

Goals

* Apply various tools and agile principles utilizing concepts (user stories, behavior-driven development) to build quality software.
* Prepare to gather, critically analyze and evaluate qualitative information to produce a SaaS app.

Effort: Individual [CS3300 Academic Integrity](https://docs.google.com/document/d/1cORsFi1YrqW5ChfJu0G67Fjm8HwEMse47DVqXfEn2n4/edit#heading=h.w1yj4lpdz8sh)

Points: 20 pts

Deliverables: As separate Word or pdf files (NOT ZIP FILE) include the following documents

* Document containing answers to questions
* Interview Worksheet

[Description](#_heading=h.30j0zll)

[1 Problem Statement and Qualitative Research](#_heading=h.3znysh7)

[2 User Stories](#_heading=h.2et92p0)

[3 BDD Scenarios](#_heading=h.3dy6vkm)

[4 Lo-Fi UI Mockup](#_heading=h.tyjcwt)

# Description

Explore how to do qualitative research to define a problem statement and gather information from stakeholders to develop requirements and acceptance criteria using Agile approaches.

**Base Requirements for App Project**

You will come up with an idea of an app but **your app should have at least two different stakeholders and must**

1. One stakeholder: Requires a login with a username and password to
   * Create a new item
   * Edit item
   * Remove item
   * Think about what the first item is that will be created.
2. Another stakeholder: Should be able to view items without logging in
   * Display condensed list of items created on one page
   * Display detailed information about each item individually
   * Should have at least three attributes associated with the item. **For example** in portfolio user can add a project that includes required title and description and optional image
3. **You can not make your project the portfolio app.**

## 1 Problem Statement and Qualitative Research

You are going to make an app that solves a need and conduct qualitative research to understand the users and their needs. You should interview 2 to 3 people. You only need to interview them one time.

[What is a Problem Statement in UX? (And How to Write One)](https://careerfoundry.com/en/blog/ux-design/problem-statement-ux/)

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| 2.1 Describe the components of a problem statement. How do you go about defining your problem statement and understanding the needs of the users? Who should you include when gathering information?  A problem statement should include the 4 W’s, of who, what, where, and why. Each one of these W’s covers a section of the problem statement: The person/people of WHOM the problem impacts, WHAT the problem is exactly, WHERE this problem occurs/WHERE the person will use your product, and WHY the problem is important/WHY solving the problem is a priority.  It should also be understood that needs are what a problem statement cover. A problem statement should cover what is needed from the user, not any solutions to the problem as these will be covered later.  Any of your stakeholders should be included in your problem statement and when gathering information. |
| 2.2 Describe an idea for the app you will develop this semester.  A scheduling app that allows for a logged in user to add, edit, and delete events to a type of planner. As for users who are not logged in, they may view the schedule of the user who sent them a link. This app strives to cover the issue of not having/ being able to remember or provide a tentative schedule for others to view and reference. |
| 2.3 Create your worksheet to interview users to develop your problem statement, users stories and acceptance criteria in another document.  Done! |
| 2.4 How could surveys be used to gather information? Give an example of some survey questions you could ask?  Surveys can be used to gather information that pertains to frequently asked questions and used to gain details on wants and needs. For example, you could ask whether a person prefers one feature over another, or if a person would like to use an app for certain reasons over another. |
| 2.5 Include at least 3 resources you used. You must have at least one resource not in the lectures.  <https://careerfoundry.com/en/blog/ux-design/problem-statement-ux/>  Lecture 7  Lecture 8 |

## 2 User Stories

User stories for our class will be

* Written in “Connextra” format
* SMART

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| 3.1 Describe the components of a user story and summarize what user stories should and shouldn’t be. Give examples.  User stories should have four main components.A feature name that goes over a need of the customer for an app. An “As a stakeholder…”, where the user story goes over who the current customer is. A “So that…”, that goes over what the customer would like to achieve with this feature. Lastly, an “I want to…”, where the customer states what feature they wish for.  A user story should be an overview of features, what those features will help achieve, and who will be using those features. A user story should not a list of wants and needs with no context as to who they pertain to, what they do/ achieve in terms of goals, etc.  An example of a good user story is “As a customer, I want to be able to be able to search for products online with filters, so that I can find what I need quickly, and efficiently, AND without having other people bother me. ” |
| 3.2 Explain the value in using the user stories methodology with a customer.  The value of using user story methodology is that it plainly lays out ideas, needs, and wants, with context. It ties the bridge between customer and developer in a way that allows for less frustration and extensive questioning. |
| 3.3 Include at least 3 resources you used. You must have at least one resource not in the lectures.  <https://www.pmworld360.com/5-key-elements-of-an-agile-user-story/>  Lecture 7  <https://www.visual-paradigm.com/scrum/write-user-story-smart-goals/> |

## 3 BDD Scenarios

For this class we will follow

* User story should include “happy” and “sad” scenarios.
* Scenarios should have 3 to 8 steps written in the BDD form describing the process
* Scenario: Title of the condition
* Given: Represent state of world before event (preconditions)
* When: Something happens
* Then: This is the result (postcondition)
* Optionally And, But

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| 4.1 Explain Behavior Driven Development methodology and include the benefits.    Behavior Driven Development is a type of Agile development that requires questions to be asked about how a program behaves in order to reduce miscommunication and capture what a customer wants from development. This process is beneficial because it highlights the customer as the main focus. |
| 4.2 Describe the components of BDD scenarios and include examples.  BDD uses three components for its scenarios: given, when, then. Given is when you describe where a user is in a process, for example, “given that a student is on the UCCS login page”. Next, when describes the next action the user takes, for example, “when the students enters their username and password correctly…”. Lastly, then describes what happens in the ‘when’. For example, “…then the website should take you to the UCCS student portal”. |
| 4.3 Include at least 3 resources you used. You must have at least one resource not in the lectures.  Lecture 7  <https://cucumber.io/docs/bdd/>  <https://www.departmentofproduct.com/blog/writing-bdd-test-scenarios/> |

## 4 Lo-Fi UI Mockup

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| 5.1 Explain the benefits in using Lo-Fi Mockups of the web page with the customer.  Lo-Fi Mockups are beneficial because they show how a website works and allow for customers to adjust what options do what. Since lofi mockups show direct paths from page to page, customers are allowed to completely express how they wish for a site to look and adjust anything not up to standards before implementation. |
| 5.2 Describe what the Lo-Fi storyboard should contain.  A Lo-Fi storyboard should include what a user would see if they went on a certain path on a site. It should show what a majority of the button should do, where links go, and what options a user has access to. |
| 5.3 Include at least 1 resource showing a lo-fi mockup for an app.  <https://www.lucidchart.com/blog/value-of-low-fidelity-mockups> |