

# Module 7

## Behavior Driven Design, User Stories

CS W169A: Software Engineering

### 1 Overview

This discussion contains mostly open ended questions that are meant to get you thinking about the concepts behind Behavior Driven Design. The second half of questions are more application oriented, and you'll get some hands on practice writing different Cucumber scenarios. For some of these questions, there's no one right answer, so feel free to get creative!

### 2 Behavior Driven Design

- What is the difference between validation and verification? Provide an example of each. Which does BDD attempt to address
- User stories should be SMART. Develop an example of a SMART story for a website's FAQ page.
- Describe the relationship between Features, Scenarios, and Steps in Cucumber.
- Cucumber allows steps to begin with Given, When, Then, And, But, etc. Even though they are functionally identical, when should each be used?
- The Connextra Format is outlined before. Rewrite the same SMART user story you wrote for the previous question in the Connextra Format.
  - As a [kind of stakeholder]:
  - So that [I can achieve some goal]:
  - I want to [do some task]:
- Name the three advantages of using Lo-Fi mockups.

### 3 Cucumber Scenarios Analysis

The following user stories were converted to Cucumber scenarios. Name three things that could be improved about each user story and how this relates to the ease of implementation of the acceptance test the story represents. There are many right answers. The main idea is that they should center around SMART concepts.

#### 3.1

Scenario: user must pay for purchase upon buy now

```
Given I am logged in and visiting a product page on my e-commerce website,  
When I buy the product,  
Then I must pay for the product.
```

#### 3.2

Scenario: bad actor cannot edit other user's to-do lists

```
Given I am not logged in and on the to-do app home page,  
When I try to add an item to another user's to-do list,  
Then I should be shown a stern warning.
```

### 4 User Stories to Cucumber Scenarios

Turn the following user stories into Cucumber scenarios:

#### 4.1

As an e-commerce website user, so that I can aggregate all items I want to buy in one place to look at later, I can add items of interest to my cart.

#### 4.2

As an e-commerce website user that qualifies for the special checkout experience, so that I can experience a faster, simpler, and more contextual purchase experience, I use the special checkout experience whenever I click buy now.