Prepared by:

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OBJECTIVES AND TASKS

Objectives

1. 80% code coverage
2. 1 scenario per user story minimum

SCOPE

General

* 80% of all code minimum
* Unit tests for each method
* Integration tests for each third party provider

Tactics

* Feature teams are responsible for writing tests for their own unit and integration
* End-to-end testing is performed by the end-to-end Testing Team

TESTING STRATEGY

* If you write a method, you are responsible for writing the associated tests.
  + JUnit 5 and Mockito for Unit/Integration tests
* End-to-end testing is performed by the end-to-end Testing Team
* Scenarios are tracked in the Test Plan spreadsheet
* Code coverage is implemented in Sonar(minimum is 80%)

Unit Testing

Definition:

* If you write a method, you are responsible for writing the associated tests.
* Code coverage is implemented in Sonar(minimum is 80%)

Participants:

Each feature team will do their own unit tests

Methodology:

* TDD using JUnit 5
* JUnit dependency

Integration Testing

Definition:

Testing the third party services as well as endpoints (MVC)

Participants:

Each feature team will do their own unit tests

Methodology:

* TDD using JUnit 5 with Mockito
* JUnit dependency

End-to-end Testing

Definition:

Testing the project as a whole.

Participants:

End-to-end testing team creates the tests

Methodology:

* BDD using Cucumber/Gherkin
* Cucumber dependencies (Java specific)
* Selenium dependency

HARDWARE REQUIREMENTS

* Typical computer should be sufficient.

ENVIRONMENT REQUIREMENTS

All the required environment variables:

* S3 credentials
* Database credentials
* Browser web driver variable for Cucumber testing
* Sonar token
* Frontend host url

Where will you acquire these resources? COE will provide S3 credentials

TEST SCHEDULE

* E2E milestones:
  + 1 scenario for each user story
* Integration
  + API endpoints (MVC)
  + S3 bucket
  + Repository
* Unit
  + 80% code coverage

CONTROL PROCEDURES

Problem Reporting

Which procedures will you follow when an incident is encountered during the testing process?

* Talk to feature team that developed, if not them.
* Talk to ScrumMasters
* Defect reporting on spreadsheet

FEATURES TO BE TESTED

Provide a comprehensive list of the features you will test.

* Login
* Register
* Display product
* Search for product
* Sales/Deals
* Cart
* Quantity Select
* Checkout
* Admin Pages
  + Create product
  + Edit product

FEATURES NOT TO BE TESTED

* Reset password email, too difficult to ensure that email is received
* Angular components, doing end to end testing
* Model getter/setter methods
* Multiple browsers (not Chrome)

RESOURCES/ROLES & RESPONSIBILITIES

* Feature teams will design and implement their own unit and integration tests.
* The end-to-end team will design and implement the end-to-end tests.
* Test environment is H2 on local machine
* Individual import.sql

SCHEDULES

Deliverables

Identify the deliverable documentation. Examples include:

* Test Plan document
* Test Case spreadsheet
* STARTUP.md section

DEPENDENCIES

What are some of the constraints or limitations on testing?

* Differences in browser solved by use of team agreement of testing browser (Chrome).

TOOLS

Which automation tools and bug tracking tools are you using?

* Selenium
* Jenkins
* Sonar Suite
* Trello
* Excel

APPROVALS

Who must approve this plan? Provide space for the signatures and dates below for your record.

* Kevin and COE