**BULK CLUB**

CS1C Project 2

**TEST PLAN**

Team: Code Miners

Version Num. : 1

Effective Date: 16 Nov 2019

Product Owner: Sami Hamad

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Developer: Po Jen Su

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**-TEST PLAN-**

**ID: #1**

**PURPOSE:** To verify that program requirements are met and the program is functioning as intended. Identify the main steps and goals of the testing process.

**SCOPE:** All features identified below. Note that this is distinct from unit testing. Emphasis will be placed on function interaction and integration across the program. Perform tests on the “master” branch from the github.

**DOCUMENTS:** Test log (maintained by Scrum Master). Trello project board.

**USER FEATURES TO BE TESTED:**

Black Box:

1) Adding/removing customers (Admin)

2) Database manipulation (Admin)

3) Adding/removing items (Admin)

4) Sorting and viewing database information (Store Manager)

5) Any additional agile stories or features as identified by the Product Owner.

White Box:

1) Adding/removing items (Admin)

2) Adding/removing customers (Admin)

**NON-TESTED USER FEATURES:** Account creation (Admin and Manager accounts are created by developers prior to launch). Database.

**STRATEGY:** Utilize black box testing. Tasks:

1) The Scrum Master will perform testing or delegate tests to other developers.

2) Record name of function to be tested.

3) Black Box: Attempt bad inputs (out of range and boundary values). Perform every action at least three times in a row (if possible).

4) White Box: Write functions that will execute every branch of the tested function.

5) Note the result of each test (pass or fail). Multiple test attempts are allowed, but more than three consecutive failures must be marked as a Test Fail.

6) Give results to Product Owner.

7) The Product Owner will notify the developer of the tested function/feature if there are failures. Developer attempts fixes to correct the error. All results, pass or fail, are passed on the Scrum Master to enter into the test log.

8) Once corrections are made, the Scrum Master will be notified to resume or assign testing.

**ENTRY CRITERIA:** Database and basic UI must be created. Functions must be nominally operational. Once an agile story is complete, the developer will perform unit tests on their functions for that story and notify the Scrum Master to schedule testing. White box tests should be integrated into Travis CI.

**EXIT CRITERIA:** When all features pass the test criteria. Outputs must match product requirements as defined by the Product Owner and the definition of done for agile stories.

**SUSPENSION CRITERIA:** Program crashes or otherwise becomes unstable (multiple errors). Suspension will also occur when a new branch is set for release.

**TEAM ROLES:** Product Owner - Collects and verifies test results

Scrum Master - Maintains test log and performs testing

Developers - Responsible for unit tests.

**SCHEDULE:** Testing will commence in Sprint 2. Testing will continue barring suspensions. Testing must conclude 2 business days prior to release. Unit testing will be conducted throughout the project. Once Travis CI has been updated with white box tests, those tests will be performed automatically on building.

**TRAINING:** CS1A + CS1B. Familiarity with Qt and Github.

**ENVIRONMENT:** A computer (Windows, Mac OS, or Linux) with Qt. Note the project has been predominantly developed on Mac OS and thus will need to be re-compiled on Windows/Linux.

**DELIVERABLES:** Results of completed tests (pass or fail). Scrum master will log results in the test log.

**APPROVAL PROCESS:** Product Owner reviews and validates all completed testing.

**GLOSSARY:** None.