



LarkDetect

[Test Plan]
Version 1.0

By: Ang Zhan Phung, Ang Yong Xin, Brenda Ng Xin En, Emmanuelle Vania, Sam Jian Shen, How Mo Xuan

Test Plan Identifier

Revision	Description of Change	Approved by	Date
0.10	Initial Template	Emmanuelle Vania	16/03/2020
0.20	Add Introduction, Test Items, Features to Be Tested , Features Not To Be Tested, Approach	Emmanuelle Vania	18/03/2020
0.30	Add Item Pass/Fail Criteria, Suspension Criteria and Resumption, Requirements, Test Deliverables	Emmanuelle Vania	28/03/2020
0.40	Add Environmental Needs, Staffing and Training Needs, Responsibilities, Schedule, Risks and Contingencies, Approvals	Emmanuelle Vania	28/03/2020
1.00	Test Plan before first release	Ang Zhan Phung	28/03/2020

Test Plan Identifier Legend

Major Release	Minor Release	Patch
1.	3	4

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Introduction

The purpose of the test plan is to outline the different stages of the test that will be conducted on LarkDetect before it is officially release for public usage. There will be 2 stages for the test, (1) White Box Test, (2) Black Box Test.

For the White Box Test stage, we will be using the Control Flow Testing to perform the test cases. The test team will follow the test cases as closely as possible to ensure that any bugs or problems to be highlighted and fixed.

For the Black Box Test stage, we will gather 20 people who do not have any prior knowledge about LarkDetect to test out and obtain feedback from them. The feedback will include but not limited to product quality, user friendliness and bugs.

Test Items

Test items will be checked by the person supervising the testing from various users during the white box testing. As for black box testing no test cases will be provided but to collect user experience data.

High Level Test Items

- Registration
- Login
- Test A
- Test B
- Results
- View Report
- Doctor View

Low Level Test Items

- mySQL updates

The following is a list of items that will not be tested:

- Website running on browsers other than Google Chrome
- Website running on computers which do not have display scale of 100%
- Website running on browsers which do not have a zoom percentage of 100%
- About Us web page
- Settings web page

Software Risk Issues

There are several risk issues recognized which can have direct impact on the web application and need to be handled carefully.

1. Third Party Components

2. Database Security and Safety
3. Reliability of the Web Hosting Service
4. Delivery of the Website and Hosting
5. Poorly Documented Modules and Changes

Features to be Tested

Feature	Level of Risk
User Login & Registration	Medium
Forgot Password	Low
Report Generation	High
Test A	High
Test B	High

Features not to be Tested

Feature	Explanation
View About Us page	The importance of this feature is very low and it has been used before, thus the feature is stable.
Settings page	The importance of this feature is low.

Approach

We will be adopting a reactive testing approach, in which the testing will not take place until the overall coding are completed.

Item Pass/Fail Criteria

Features Tested	Pass Criteria	Fail Criteria
User Login & Registration	The user is able to register a new account and log into the system with the credentials used for registration successfully.	The user is unable to register a new account or log into the system with the credentials used for registration.
Forgot Password	The user is able to verify his/her account ownership by providing the NRIC number and Date of Birth of the registered account, and change the password successfully.	The user is unable to verify his/her account by providing the NRIC number and Date of Birth of the registered account, or unable to change the password.
Report Generation	The system is able to generate the correct report on demand within an acceptable timeframe.	The report is not generated at all, contain missing elements, or takes too long to generate.
Test A	The system updates the progress of the test according to user input. The system provides appropriate prompts when user makes an incorrect move.	The system is not responsive to the user input at all, or the system generates prompts at inappropriate timing.
Test B	The system updates the progress of the test according to user input. The system provides appropriate prompts when user makes an incorrect move.	The system is not responsive to the user input at all, or the system generates prompts at inappropriate timing.

Suspension Criteria and Resumption Requirements

The suspension criteria for the testing process includes:

1. The user is unable to create an account or login into the system
2. The web page for Test A and Test B is unresponsive after user inputs
3. The report is not generated after successful completion of both tests
4. The website somehow becomes unavailable

The reason for this suspension criteria is without successfully logging into the system, the user will be unable to undergo the tests at all. Similarly, when any of the test pages becomes unresponsive, the user will not be able to proceed the test into completion. As a result, data could not be obtained and without the required data, any report generated will not carry much meaning.

The resumption of the testing will occur when:

1. Access to the website is reestablished

Test Deliverables

The items to be delivered as part of the test plan include:

1. Test plan document
2. Test cases
3. Error logs and Revision logs
4. Problem reports and corrective actions

Environmental Needs

The environmental needs required is a PC supporting 1920x1080 display resolution, with Google Chrome web browser installed. For optimum viewing of the system's user interface layout, the display's scaling setting and browser layout needs to be set to a 100%, and the web browser must be opened in full screen mode.

Staffing and Training Needs

In this project, the testing team consists of three members. Staffing is fixed for the duration of this project. The training required would only take place after the final testing stage. During the initial testing as little guidance is provided as possible to improve on the user-friendliness of the program.

Responsibilities

Role	Responsibility	Candidate
Test Manager	<ul style="list-style-type: none"> • Create Test Plan • Identify test data • Prepare software error reports • Administrate error measurement system 	Emmanuelle Vania
Test Engineer	<ul style="list-style-type: none"> • Designing the tests • Creating the test procedures • Creating the test data • Executing tests • Preparing Bug reports 	Brenda Ng Xin En
Project Manager	<ul style="list-style-type: none"> • Ensure delivered schedule and quality of the project • Regularly review testing progress 	Ang Zhan Phung
Developer	<ul style="list-style-type: none"> • Ensure Unit Testing • Review each module before merging • Collecting the bug records and record raise it as an issue in GitHub 	Ang Yong Xin Sam Jian Shen How Mo Xuan

Schedule

For scheduling, we will be following the Gantt chart in the project plan as set by the Project Manager. We will still include buffer in the duration to deal with any slippage during the testing stage.

As we anticipated 10 days of testing and debugging, we will include buffer of 2 days to deal with unexpected obstacles that the team may encounter. i.e. medical issue, requirement to work from home due to on-going Coronavirus, technical errors or any possible reasons.

In the event of any unforeseen circumstances, individuals need to practice his/her diligence to report upwards. If he/she is unable to perform the duties, the personnel need to handover the things on hand to another team member at the earliest time possible. Thus, we will need to ensure buddy system where more than one person is working on a single situation, this will ensure the handover to be seamless.

Risks and Contingencies

Highlighted within this section are several key risks & contingencies relevant to testing activity. The Risk Management Plan document lists the full coverage of all Risks and Contingencies.

Possible Risks	Contingency plan
Lack of testing personnel	The developer team members could cover the shortage
Lack of hardware and software	The team may use their own PC to conduct the test or use company-issued PCs for test participants to use.
Late delivery of the software and hardware	Request estimation on the completion date and add a buffer time to avoid wasting the testers' time
Delays in training of the software usage	Ensure multiple experienced mentors are assigned at once to fill in the gap in case of emergency

Approvals

The project manager would be the person that approve the completion of the testing process when he views that the testing is satisfactory and fulfilled what he expected from the testing process. He will then bring this up to the stakeholders and the CEO to present the results before performing the official release for public usage.