

LARKDETECT ONLINE TRAIL MAKING TEST RISK MANAGEMENT PLAN

Version 1.1

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VERSION HISTORY

Version #	Implemented By	Revision Date	Reason
0.1	Emma	25/02/2020	Initial Risk Management Plan draft
0.2	Emma	01/03/2020	Added Introduction, Tools, Process
1.0	Emma	02/03/2020	Added References
1.1	Edmund	02/03/2020	Amended Key Terms, Risk Identification, and Risk Log

TABLE OF CONTENTS

1 INTRODUCTION.....	1
1.1 project description	1
1.2 Purpose Of The Risk Management Plan	1
2 RISK MANAGEMENT PROCEDURE	1
2.1 Process.....	1
2.2 Risk Identification	1
2.3 Risk Analysis.....	2
2.3.1 Qualitative Risk Analysis	2
2.3.2 Quantitative Risk Analysis	2
2.4 Risk Response Planning.....	2
2.5 Risk Monitoring, Controlling, And Reporting	3
3 TOOLS AND PRACTICES	3
<i>RISK MANAGEMENT PLAN APPROVAL</i>	<i>6</i>
APPENDIX A: REFERENCES.....	7
APPENDIX B: KEY TERMS.....	8

1 INTRODUCTION

1.1 PROJECT DESCRIPTION

The LarkDetect system is a web application platform facilitating online Trail Making Test targeted for Singaporeans 40 and above to help facilitate early detection of dementia. Results will be used for further analysis to generate reports on demand. Users are required to take the test annually to monitor any changes in their performance. Users will be able to monitor their test results while healthcare professionals will be given access rights to system-wide data.

1.2 PURPOSE OF THE RISK MANAGEMENT PLAN

A risk is an event or condition that, if it occurs, could have a positive or negative effect on a project's objectives. Risk Management is the process of identifying, assessing, responding to, monitoring, and reporting risks. This Risk Management Plan defines how risks associated with the LarkDetect project will be identified, analyzed, and managed. It outlines how risk management activities will be performed, recorded, and monitored throughout the lifecycle of the project and provides templates and practices for recording and prioritizing risks.

The Risk Management Plan is created by the project manager in the Planning Phase of the LarkDetect Development Process and is monitored and updated throughout the project to prevent any risks from getting out of control and cause substantial damage.

The intended audience of this document is the project team, project sponsor and management. It is important for all parties involved to keep themselves informed over any modifications made to the Risk Management Plan.

2 RISK MANAGEMENT PROCEDURE

2.1 PROCESS

The project manager working with the project team and project sponsors will ensure that risks are actively identified, analyzed, and managed throughout the life of the project. Risks will be identified as early as possible in the project as to minimize their impact. The steps for accomplishing this are outlined in the following sections. The QA Manager will serve as the Risk Manager for this project. The Risk Manager will work with the project manager in verifying that the steps to risk management are carried out as specified in this document.

2.2 RISK IDENTIFICATION

Risk identification will involve the project team, appropriate stakeholders, and will include an evaluation of environmental factors, organizational culture and the project management plan including the project scope. Careful attention will be given to the project deliverables, assumptions, constraints, WBS, cost/effort estimates, resource plan, and other key project documents.

A Risk Management Log will be generated and updated as needed and will be stored electronically in the project library located at OneDrive->CoronaSG->RiskManagementLog.docx.

2.3 RISK ANALYSIS

All risks identified will be assessed to identify the range of possible project outcomes. Qualification will be used to determine which risks are the top risks to pursue and respond to and which risks can be ignored.

2.3.1 Qualitative Risk Analysis

The probability and impact of occurrence for each identified risk will be assessed by the project manager, with input from the project team using the following approach:

Probability

- High – Greater than 70% probability of occurrence
- Medium – Between 30% and 70% probability of occurrence
- Low – Below 30% probability of occurrence

Impact

- High – Risk that has the potential to greatly impact project cost, project schedule or performance
- Medium – Risk that has the potential to slightly impact project cost, project schedule or performance
- Low – Risk that has relatively little impact on cost, schedule or performance

Impact	H			
	M			
	L			
		L	M	H
		Probability		

Risks that fall within the RED and YELLOW zones will have risk response planning which may include both a risk mitigation and a risk contingency plan.

2.3.2 Quantitative Risk Analysis

Analysis of risk events that have been prioritized using the qualitative risk analysis process and their affect on project activities will be estimated, a numerical rating applied to each risk based on this analysis, and then documented in this section of the risk management plan.

2.4 RISK RESPONSE PLANNING

Each major risk (those falling in the Red & Yellow zones) will be assigned to a project team member for monitoring purposes to ensure that the risk will not “fall through the cracks”.

For each major risk, one of the following approaches will be selected to address it:

- **Avoid** – eliminate the threat by eliminating the cause
- **Mitigate** – Identify ways to reduce the probability or the impact of the risk
- **Accept** – Nothing will be done
- **Transfer** – Make another party responsible for the risk (buy insurance, outsourcing, etc.)

For each risk that will be mitigated, the project team will identify ways to prevent the risk from occurring or reduce its impact or probability of occurring. This may include prototyping, adding tasks to the project schedule, adding resources, etc.

For each major risk that is to be mitigated or that is accepted, a course of action will be outlined for the event that the risk does materialize in order to minimize its impact.

2.5 RISK MONITORING, CONTROLLING, AND REPORTING

The level of risk on a project will be tracked, monitored and reported throughout the project lifecycle.

A “Top 10 Risk List” will be maintained by the project team and will be reported as a component of the project status reporting process for this project.

All project change requests will be analyzed for their possible impact to the project risks.

Management will be notified of important changes to risk status as a component to the Executive Project Status Report.

3 TOOLS AND PRACTICES

A Risk Register (Risk Log) will be maintained by the project manager. This Log shall be updated on a weekly basis and will be reviewed as a standing agenda item for project team meetings.

ID	Risk Type	Description of Risk	Probability	Impact	Grade	Potential Indicators	Strategies
1	Estimation	Inadequate funding to complete the project due to inaccurate/changing cost estimates.	Medium	High	High	- Failure to meet the agreed schedule	- Request for additional funds to ensure high quality product developed. - Find an alternative option to replace the high cost items while ensuring high quality product is produced.
2	People	Staff illness at critical times	Medium	High	High	- Long working hours and heavy workload	- Each work assignment is handled by 2-3 people. - maintain a good documentation or log activities to allow others keep up with the change / pick up where you left off.
3	Estimation	Time and cost required to develop the software is underestimated	Medium	High	High	- Constantly missing on each task deadline	- Create a priority list of work to be completed and its

						<ul style="list-style-type: none"> - original price of predecessors - Depending on the type of cost changes, we could consider seeking an alternative options or seek additional funding from the investors.
4	System	System Performance issue	Low	High	Medium	<ul style="list-style-type: none"> - Clients complained that the response time is slow and the system feedback takes a long time. - Create a progressive benchmark to ensure that the performance is consistent with the user/customer's' expectations.
5	Development	Development error	Low	Medium	Medium	<ul style="list-style-type: none"> - Error constantly encountered whenever one bug is fixed. - Multiple testing is performed consistently before the release date or presentation to the clients. - Development Log Documentation need to be consistently updated.
6	Organisational	Staff Turnover	Low	Medium	Medium	<ul style="list-style-type: none"> - Poor staff morale and poor relationships amongst team member. - More than one member is assigned to each work assignment therefore, each member could take over the work easily. - By working closely with other members, each member would be familiar with the development work and thus could take over when there is Staff Turnover.
7	Requirements	User interface uncertainties	Low	Medium	Medium	<ul style="list-style-type: none"> - Clients are unable to use the software with ease. - Create a guidebook for the user to understand better the system UI - During black

						box test, the tester unable to navigate the UI properly	- We would conduct a quick training for the users to familiarize themselves with the system.
8	Requirements	Client changes requirements	Medium	Medium	Medium	- Clients constantly make changes to their requirement and unsure on what they want out of the software created.	- Depending on the requirement changes, make the changes accordingly. - If it's unchangeable or difficult to change, the development team will provide the cost for changes for the client to consider.
10	People	Teamwork and coordination problems	Low	High	High	- Lack of Cohesiveness as a team. - Few communication between members of the team	- By maintaining a consistently updated development log, everyone would be able to keep up with what other members are doing and would be able to take over if necessary.

RISK MANAGEMENT PLAN APPROVAL

The undersigned acknowledge they have reviewed the **Risk Management Plan** for the LarkDetect project. Changes to this Risk Management Plan will be coordinated with and approved by the undersigned or their designated representatives.

Signature: _____ Date: _____

Print Name: _____ Dr Shen Zhiqi

Title: _____

Role: _____ Lecturer

Signature: _____ Date: _____

Print Name: _____ Dr Althea Liang

Title: _____

Role: _____ Lecturer

Signature: _____ Date: _____

Print Name: _____ Ang Zhan Phung

Title: _____

Role: _____ Project Manager

APPENDIX A: REFERENCES

The following table summarizes the documents referenced in this document.

Document Name and Version	Description	Location
LarkDetect Project Plan Version 1.0	Document stating the complete guidelines over the execution of the LarkDetect Project	(OneDrive) Project CoronaSG > LarkDetect_project_plan.docx

APPENDIX B: KEY TERMS

The following table provides definitions for terms relevant to the Risk Management Plan.

Term	Definition
<i>Trail Making Test</i>	<i>A test that requires the user to connect 25 point in a continuous and increment manner</i>
<i>WBS</i>	<i>Work Breakdown Structure</i>
<i>PM</i>	<i>Project Manager</i>
<i>QA</i>	<i>Quality Assurance</i>
<i>QMP</i>	<i>Quality Management Plan</i>