## **Use Cases**

for

# **Lark Detect**

Version 1.0 approved

Prepared by

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

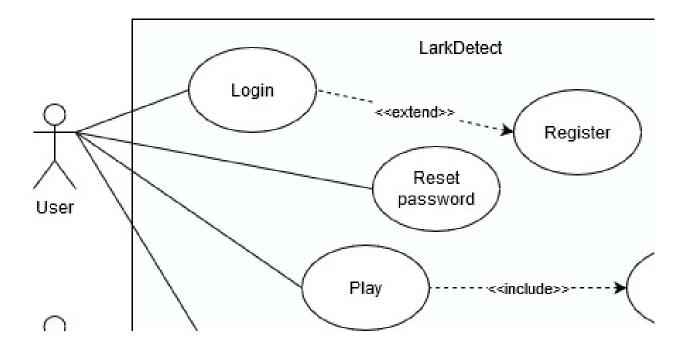
**Team CoronaSG** 

4 February 2020

#### **Table of Contents**

Use Case Diagram	iii
Use Case List	iv
Use Case Description	v - xi

## 1. Use Case Diagram



#### 2. Use Case List

Use Case ID	Primary Actor	Use Cases
1	User	Login
2	User	Register
3	User	Reset Password
4	User	Play
5	Database	Generate Report
6	User, Doctor	View Report

## 3. Use Case Description

Use Case ID:	1		
Use Case Name:	Login		
Created By:	Brenda Ng	Last Updated By:	Brenda Ng
Date Created:	4/2/20	Date Last Updated:	4/2/20

Actors:	User
Description:	The user logs into the application.
Trigger:	NIL
Preconditions:	<ol> <li>The user must have a pre-existing account in the database.</li> <li>The user must enter a valid NRIC number and the correct password.</li> </ol>
Postconditions:	<ol> <li>The user must be able to reset their password.</li> <li>The application shows the error message upon unsuccessful login.</li> <li>The application prompts user to register new account if NRIC number does not exist in the database.</li> </ol>
Normal Flow:	<ol> <li>The user opens the application.</li> <li>The application requests user to enter his NRIC number and password.</li> <li>The user enters his NRIC number and password.</li> <li>The database will verify if the user's account information are correct.</li> <li>If the account is verified, the application will display the home page.</li> </ol>
Alternative Flows:	<ul> <li>1.4: If the account password is invalid</li> <li>Application will display error message "Invalid Password!"</li> <li>Application returns to the login page.</li> <li>1.4: If the account NRIC does not exist</li> <li>Application will display error message "Account does not exist. Please enter a correct NRIC number or register an account."</li> <li>Application returns to the login page.</li> </ul>
Exceptions:	NIL
Includes:	NIL
Priority:	7
Frequency of Use:	Very High
Business Rules:	NIL
Special Requirements:	NIL
Assumptions:	NIL
Notes and Issues:	NIL

Use Case ID:	2		
Use Case Name:	Register		
Created By:	Emmanuelle Vania	Last Updated By:	Emmanuelle Vania
Date Created:	4/2/20	Date Last Updated:	4/2/20

Actors:	User		
Description:	Registration page for first time users		
Trigger:	Choosing 'Register'		
	from the Login page		
Preconditions:	User must not have a pre-existing database		
Postconditions:	A new user record is added to the database		
Normal Flow:	1. User enters the page		
	2. User types in their information such as NRIC, name, date of birth, password.		
	3. User choose to submit the information		
	4. System verifies that all required information has been		
	provided by the user and saves them to the database.		
	5. User is automatically logged in.		
Alternative Flows:	AF-S4: If system detects invalid or missing information		
	• System prompts user to enter the correct information.		
	System repeats Step 4.		
Exceptions:	NIL		
Includes:	NIL		
Priority:	7		
Frequency of Use:	Low		
Business Rules:	NIL		
Special Requirements:	NIL		
Assumptions:	NIL		
Notes and Issues:	NIL		

Use Case ID:	3		
Use Case Name:	Reset Password		
Created By:	How Mo Xuan	Last Updated By:	How Mo Xuan
Date Created:	4 February 2020	Date Last Updated:	4 February 2020

Actors:	User
Description:	User can reset the password if they forget the Lark Detect login's
1	password
Trigger:	
Preconditions:	
Postconditions:	1. User able to login into the game with his/her new password
Normal Flow:	1. User clicks the 'Forget password' button.
	2. User received a change password by verifying their
	personnel information
	3. User input the new password in 'New password' and 'Re-
	enter new password' columns.
	4. Database update the password.
Alternative Flows:	NIL
Exceptions:	NIL
Includes:	NIL
Priority:	3
Frequency of Use:	Low
Business Rules:	NIL
Special Requirements:	NIL
Assumptions:	NIL
Notes and Issues:	NIL

Use Case ID:	4		
Use Case Name:	Play		
Created By:	Sam Jian Shen	Last Updated By:	Sam Jian Shen
Date Created:	4 February 2020	Date Last Updated:	4 February 2020

Actors:	User
Description:	User must be able to successfully finish the Trail Making Test (TMT) which consist of 2 different tests; test A and test B
Triagan	
Trigger: Preconditions:	After user click "play icon" in main page,
Preconditions:	1. User must successfully login into the system
	2. User's previous attempt
	<ul><li>3. User's profile must specify a valid age.</li><li>4. User's must not failed more than 3 times</li></ul>
	4. Oser's must not failed more than 3 times
Postconditions:	1. User must be able to view the result from the test
	2. User result from the test must be saved into the external
	database system.
Normal Flow:	4.1 The "LarkDetect" system must display the honesty agreement
	instruction to the user.
	4.2 User's clicked "Agreed" icon.
	4.3 The "LarkDetect" system must display the 1st test instruction
	to the user.
	4.4 User's clicked "Next" icon.
	4.5 The "LarkDetect" system must populate with the environment
	(background/sound effect/assets) and elements
	(shapes/text/size/font) for the trail of the 1st test.
	4.6 The "LarkDetect" system must display a trail of the 1st test to
	UI.
	4.7 The "LarkDetect" system must display the link between the
	correct sequences of nodes in green colour.
	4.8 User's clicked "Start Game" icon.
	4.9 The "LarkDetect" system must populate with the environment
	(background/sound effect/assets) and elements
	(shapes/text/size/font) for the 1st test.
	4.10 The "LarkDetect" system must display the 1st test to UI
	4.11 The "LarkDetect" system must display the link between the
	correct sequences of nodes in green colour.
	4.12 The system must check if 25 sequences of nodes is complete.
	4.13 The "LarkDetect" system must display the 2nd test
	instruction to the user.
	4.14 User's clicked "Next" icon.
	4.15 The "LarkDetect" system must populate with the
	environment (background/sound effect/assets) and elements
	(shapes/text/size/font) for the trail of the 2nd test.
	4.16 The "LarkDetect" system must display a trail of the 2nd test
	to UI.
	4.17 The "LarkDetect" system must display the link between the
	correct sequences of nodes in green colour.
	4.18 User's clicked "Start Game" icon.

Alternative Flows:	4.19 The "LarkDetect" system must populate with the environment (background/sound effect/assets) and elements (shapes/text/size/font) for the 2nd test.  4.20 The "LarkDetect" system must display the 2nd test to UI  4.21 The "LarkDetect" system must display the link between the correct sequences of nodes in green colour.  4.22 The system must check if 25 sequences of nodes is complete.  4.23 The "LarkDetect" system will store the user's "performance" to the external system  4.24 The "LarkDetect" system will display the result to the user.  4.1 If User's click the wrong sequence of nodes.  4.1.1 The system must display the sequence of link in red color.  4.2 If User's click "disagreed" with honesty agreement.  4.2.1 The "LarkDetect" system will pop-up a message-box stating for confirmation "Are you sure?"  4.2.2 Move to UC-01  4.3 If User's time taken for the test is more than 3 minutes and failed more than or equal to 3 tries.  4.3.1 The system will sign-out the user  4.3.2 Move to UC-01  4.4 If User's time taken for the test is more than 3 minustes and failed less than 3 tries  4.4.1 The system will move to main page step 4.3 of normal flow
Exceptions:	NIL
Includes:	1
Priority:	10
Frequency of Use:	High
Business Rules:	NIL
Special Requirements:	NIL
Assumptions:	NIL
Notes and Issues:	NIL

Use Case ID:	5		
Use Case Name:	Generate Report		
Created By:	Edmund Ang	Last Updated By:	Edmund Ang
Date Created:	4/2/20	Date Last Updated:	4/2/20

Actors:	Database		
Description:			
Trigger:			
Preconditions:	1. User will need to play before generating the report		
Postconditions:	2. Report and information will be recorded in the database		
Normal Flow:	User		
	5.0 User click on generate the report		
	5.1 System display the report		
Alternative Flows:	NIL		
Exceptions:	NIL		
Includes:			
Priority:	7		
Frequency of Use:	Often		
Business Rules:	NIL		
Special Requirements:	NIL		
Assumptions:	Completion of Play case		
Notes and Issues:	NIL		

Use Case ID:	6		
Use Case Name:	View Report		
Created By:	Ang Yong Xin	Last Updated By:	Ang Yong Xin
Date Created:	4/2/20	Date Last Updated:	4/2/20

Actors:	Doctors		
1101015.	Users		
Description:	This use case allows both user and doctors to view their history record to		
Bescription.	make diagnosis on the dementia condition		
Trigger:	make diagnosis on the dementia condition		
Preconditions:	NIL		
	Users/Doctors able to view the history report		
Postconditions:	ř ·		
Normal Flow:	Users:		
	User click on "View Report" button     System retrieve user history report from database		
	System displays the history report.		
	Doctors:		
	6. Doctor click on "View Patient Report" button		
	7. Doctor enter the patient name into the system		
	System retrieve patient history reports from the database		
	System displays patient history reports.		
Alternative Flows:	J		
	9. System display "No game history" message.		
	10. Use case return to step 1		
	5.3: No patient history		
	11. System display "No game history" message		
	Use case return to step 1		
Exceptions:			
Includes:			
Priority:	5		
Frequency of Use:	Often		
Business Rules:	NIL		
Special Requirements:	NIL		
Assumptions:	NIL		
Notes and Issues:	NIL		