

**Task 1:**

My primary role as the project's test manager of this project is to oversee every step of the testing process, from planning and developing tests to carrying them out and analyzing the findings. Certain major duties will be implemented to guarantee that our software complies with business requirements and performs as intended:

**1. Define test strategy:**

I will collaborate with our testing team, which consists of testers, an automated software test analyst, a database test analyst, and testers, to develop a thorough test plan that takes into account the environment, resources, scope, approach, timetable, and objectives for each test.

**2. Planning and organizing test activities:**

I will design and oversee the overall test strategy, which includes the test environment, test data, test cases, and test schedule. To determine test dependencies and make ensuring that tests are in line with development milestones, I will work with the 12-person development team.

**3. Manage the test team:**

I will manage our test team including an automation software test analyst, a database test analyst, and 3 testers. I will provide direction, guidance and support to the team and ensure that all team members have the necessary skills and resources to perform their roles.

**4. Define and execute test cases:**

I'll work with our test team to develop use cases based on test cases and business needs. I'll make sure the test cases are carried out in accordance with the testing plan and address both functional and non-functional criteria.

5. Identifying and managing defects:

I will track defects and communicate with the development team to ensure timely resolution, and ensure that all defects are properly documented and that the test team verifies that they have been fixed.

6. Ensuring Quality and Compliance:

To ensure prompt resolution of all issues, I will keep track of them, engage with the development team, and make sure that the test team verifies that they have been fixed.

7. Reporting and communicating test results:

To ensure that any concerns and risks are appropriately communicated and corrective actions are implemented promptly, I will share test results with the development team, project stakeholders, and senior management.

Overall, the project's success depends on my work as the test manager. I will collaborate closely with the development team to guarantee that the software is extensively tested, satisfies operational needs, and fulfils deadlines and quality standards.

## Use Case 1:

**Use Case Name:** Applying for a Home Loan Finance Package

**Actor:** Customers, Website System

**Description:** This use case describes how the customer uses the website system to apply for a finance package (home loan)

**Pre-condition:**

1. the website system is online
2. the customer has the internet-connected devices
3. the customer has accessed the website and selected the home loan finance package option

**Normal Workflow:**

1	The customer will enter the landing website page and select the home loan finance package option.
2	The website page will present advice inquiry web form with different types of home loan finance packages.
3	The customer will select the appropriate home loan finance package and click on the "Apply" button.
4	The website will prompt the customer to fill out the home loan finance package application form.
5	The customer will fill out the form and submit the application.
6	The website system will verify the information submitted and present the terms and conditions of the loan.

7	The customer will read and accept the loan terms and conditions and click on the "Confirm" button.
8	The website system will generate the loan agreement and send it to the customer's registered email address.
9	The customer will receive the loan agreement, carefully review it, and confirm its content through electronic signature.
10	The website system will confirm receipt of the customer's signature and process the loan application.
11	The system will notify the customer of the application result, whether it is approved or rejected.
12	If the application is approved, the system will disburse the loan amount to the customer's designated bank account.
13	The use case ends with the customer receiving the home loan amount in his bank account.

#### **Alternative Workflow:**

7a. If the customer does not meet the eligibility criteria for the selected loan

1	The website system will provide other suitable home loan finance packages.
2	The customer will read and accept the new loan terms and conditions, and fill out the suitable form, and click on the "Submit" button.

6a. If the customer omits any mandatory information in the application form

1	The website system will prompt the customer to complete these fields before submitting.
2	The customer will check and complete these fields and then submit

10a. If the customer is unable to electronically sign the loan agreement

1	The website system will provide alternative options for the customer to print the agreement and sign and return it via email or post
2	The customer will use handwritten signature and receive the agreement via email or post

### Test Cases:

Test Scenario ID		Test 1-Nomal Workflow		Test Case ID	1
Test Case Description		Successful Home Loan Application		Test Priority	High
Pre-Requisite		Internet connection + Chrome browser		Post-Requisite	N/A
Test Execution Steps:					
NO	Action	Inputs	Expected Output	Actual Output	Result
1	Go to the website	URL	Website will display	Website displays	pass
2	Select the option 'Home Loan'	Select the option	The Home Loan page will display	Home Loan page displays	pass
3	Click the "Apply" button	Click	Application form will display	Application form displays	pass
4	Fill out the form with the valid information	Valid information	No Error Message will be prompted	no Error Message is prompted	pass
5	Click the "Submit" button	Click	The loan terms and conditions will display	Loan terms and conditions display	pass
6	Click the "Confirm" button	Click	an email of the loan agreement will be sent	the email is sent	pass
7	Confirm the email content through electronic signature	Electronic signature	Approved application result will be notified on the web page	Application result is notified	pass
8	Access to the bank account	Account number, password	the bank account will receive the loan amount	the bank account receives the loan amount	pass

Test Scenario ID	Test 2-Alternative Workflow		Test Case ID	2	
Test Case Description	Successful Home Loan Application using a handwritten signature		Test Priority	High	
Pre-Requisite	Internet connection + Chrome browser		Post-Requisite	N/A	
Test Execution Steps:					
NO	Action	Inputs	Expected Output	Actual Output	Result
1	Repeat Step 1 to 6 of Test 1		an email of the loan agreement will be sent	the email is sent	pass
2	Confirm the email content through handwritten signature	Handwritten signature	Approved application result will be notified on the web page	Application result is notified	pass
3	Access to the bank account	Account number, password	the bank account will receive the loan amount	the bank account receives the loan amount	pass

Test Scenario ID	Test 3-Alternative Workflow		Test Case ID	3	
Test Case Description	Failed Home Loan Application as does not meet the eligibility criteria		Test Priority	High	
Pre-Requisite	Internet connection + Chrome browser		Post-Requisite	N/A	
Test Execution Steps:					
NO	Action	Inputs	Expected Output	Actual Output	Result
1	Repeat Step 1 to 3 of Test 1		Application form will display	Application form displays	pass
2	Upload an invalid document for the eligibility criteria	An expired NZ driver's licence	Details of the failed application result will prompt; A link will display	Details of the failed application result prompts, the link displays	pass
3	Click the link	Click	Requirements list of eligibility criteria will display; A button of “Back to application” will display;	Requirements list of eligibility criteria displays; The button displays	pass
4	Click the link	Click	Application form will display	Application form displays	pass

Test Scenario ID		Test 4-Alternative Workflow		Test Case ID		4	
Test Case Description		Failed Home Loan Application using empty information		Test Priority		High	
Pre-Requisite		Internet connection + Chrome browser		Post-Requisite		N/A	
Test Execution Steps:							
NO	Action	Inputs	Expected Output	Actual Output		Result	
1	Repeat Step 1 to 3 of Test 1		Application form will display	Application form displays		pass	
2	Fill out the form with the blank information	An empty input for the First name, and Last name	An error message will prompt	An error message prompts		pass	
3	Click the "Submit" button	Click	A message of fields missing information will prompt	The message prompts		pass	

Test Scenario ID		Test 5-Alternative Workflow		Test Case ID		5	
Test Case Description		Failed Home Loan Application using invalid information		Test Priority		High	
Pre-Requisite		Internet connection + Chrome browser		Post-Requisite		N/A	
Test Execution Steps:							
NO	Action	Inputs	Expected Output	Actual Output		Result	
1	Repeat Step 1 to 3 of Test 1		Application form will display	Application form displays		pass	
2	Fill out the form with the invalid information	"123456" for the First name, and "\$\$\$\$\$\$" for the Last name	An error message will prompt	An error message prompts		pass	
3	Click the "Submit" button	Click	A message of fields invalid information will prompt	The message prompts		pass	

## Use Case 2:

**Use Case Name:** Mortgage Calculator

**Actor:** Customers, Website System

**Description:** This use case describes how the customer will use the Mortgage Calculator on the website system to evaluate the house cost which he wants to buy

**Pre-condition:**

1. the website system is online
2. the customer has the internet-connected devices
3. the customer has accessed the website and selected the home loan finance package option

**Normal Workflow:**

1	the customer will visit the landing website page
2	the website system will display the landing page and the "Mortgage Calculator" option.
3	the customer will select the "Mortgage Calculator" option.
4	the website system will display the "Mortgage Calculator", and prompt the customer to input information about the home he wants to purchase.



5	the customer will input the necessary information and select the 'Calculate' button.
6	the website system will calculate the estimated monthly mortgage payment and the total cost of the loan over its life, and display the calculated result.
7	the customer will review the calculated information to decide whether to proceed with the home purchase, and click on the confirm button
8	the use case ends with the website system rendering to the home loan page.

#### **Alternative Workflow:**

5a. If the customer does not input the valid information for the  
"Mortgage Calculator"

1	the website system will prompt the messages to the customer to input valid information.
2	the customer will input valid information
3	the use case resumes at step 5.

7a. If the monthly payment amount is too high

1	the customer will select the 'recalculate' option.
2	the system will return to Mortgage Calculator page, and display more payment options
3	the customer will adjust the details, select other suitable payment option, and click the "Calculate" button.
4	the use case resumes at step 7.

**Test Cases:**

Test Scenario ID		Test 1-Nomal Workflow		Test Case ID	1
Test Case Description		Monthly Mortgage Payment Calculation		Test Priority	High
Pre-Requisite		Internet connection + Chrome browser		Post-Requisite	N/A
Test Execution Steps:					
NO	Action	Inputs	Expected Output	Actual Output	Result
1	Go to the website	URL	Website will display	Website displays	pass
2	Select the option "Mortgage Calculator"	Select the option	The page "Mortgage Calculator" will display	"Mortgage Calculator" displays	pass
3	Enter the necessary information	Loan amount: \$1.2 million, Loan term: 2040, Interest rate: 6%' Frequency: monthly	Monthly repayment will display, Total payment will display	Monthly repayment displays, Total payment displays	pass
4	Click the "Confirm" button	Click	The home loan page will display	The home loan page displays	pass

Test Scenario ID		Test 2- Alternative Workflow		Test Case ID		2	
Test Case Description		Recalculating the Mortgage Payment		Test Priority		High	
Pre-Requisite		Internet connection + Chrome browser		Post-Requisite		N/A	
Test Execution Steps:							
NO	Action	Inputs	Expected Output	Actual Output	Result		
1	Repeat Step 1 to 3 of Test 1		Monthly repayment will display, Total payment will display	Monthly repayment displays, Total payment displays	pass		
4	Click "Recalculate" button	Click	The new page of "Mortgage Calculator" will display	"Mortgage Calculator" displays	pass		

Test Scenario ID	Test 3-Alternative Workflow		Test Case ID	3	
Test Case Description	Calculating the Mortgage Payment with empty fields		Test Priority	High	
Pre-Requisite	Internet connection + Chrome browser		Post-Requisite	N/A	
Test Execution Steps:					
NO	Action	Inputs	Expected Output	Actual Output	Result
1	Repeat Step 1 to 2 of Test 1		"Mortgage Calculator" will display	"Mortgage Calculator" displays	pass
2	Enter the empty fields	empty field for Loan amount, Loan term, Interest rate	An error message will prompt	An error message prompts	pass
3	Click on the "Calculate" button	Click	A message of fields missing information will prompt	The message prompts	pass

Test Scenario ID	Test 4-Alternative Workflow		Test Case ID	4	
Test Case Description	Calculating the Mortgage Payment with invalid fields		Test Priority	High	
Pre-Requisite	Internet connection + Chrome browser		Post-Requisite	N/A	
Test Execution Steps:					
NO	Action	Inputs	Expected Output	Actual Output	Result
1	Repeat Step 1 to 2 of Test 1		"Mortgage Calculator" will display	"Mortgage Calculator" displays	pass
2	Enter the invalid fields	Loan amount: \$0, Loan term: 2045, Interest rate: 999,	An error message will prompt	An error message prompts	pass
3	Click on the "Calculate" button	Click	A message of fields invalid information will prompt	The message prompts	pass

Test Scenario ID	Test 5-Alternative Workflow			Test Case ID	5
Test Case Description	Calculating the Mortgage Payment with invalid fields			Test Priority	High
Pre-Requisite	Internet connection + Chrome browser			Post-Requisite	N/A
Test Execution Steps:					
NO	Action	Inputs	Expected Output	Actual Output	Result
1	Repeat Step 1 to 2 of Test 1		"Mortgage Calculator" will display	"Mortgage Calculator" displays	pass
2	Enter the invalid fields	Loan amount: \$\$, Loan term: **, Interest rate: \$\$,	An error message will prompt	An error message prompts	pass
3	Click on the "Calculate" button	Click	A message of fields invalid information will prompt	The message prompts	pass