PROJECT DOCUMENTATION

**TEST PLAN**

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| **Project:** | **Lanka Tools Employee Management System** |
| Release: | September 2022 |
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| **PRINCE2** |  |
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# 1 Project Test Plan History

## 1.1 Document Location

This document is only valid on the day it was printed.

The source of the document will be found on the project's PC in location

## 1.2 Revision History

**Date of this revision:** 08/22/2022

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| **Revision date** | **Previous revision date** | **Summary of Changes** | **Changes marked** |
| 08/12/2022 | 06/07/2022 | Recreate the Employee add button disable issue | update the status as achieve |
| 08/14/2022 | 08/11/2022 | Recreate the UI issues on dashboard and | update the status as achieve |

## 1.3 Approvals

This document requires the following approvals.

Signed approval forms are filed in the Management section of the project files.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name** | **Signature** | **Title** | **Date of Issue** | **Version** |
| Dr. Yasas Jayaweera |  | Project Executive | 08/27/2021 | 1.4 |
| H.F Athaf |  | Client | 08/27/2021 | 1.4 |
| Bhathiya Kannangara |  | Project Manager | 08/27/2021 | 1.4 |

## 1.4 Distribution

This document has been distributed to:

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| **Name** | **Title** | **Date of Issue** | **Version** |
| Layan Perera | Quality Manager | 08/27/2022 | 1.4 |
| Bhathiya Kannangara | Project Manager | 08/27/2022 | 1.4 |
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# 2 Table of Contents

[1 Project Test Plan History 2](#_Toc81171694)

[1.1 Document Location 2](#_Toc81171695)

[1.2 Revision History 2](#_Toc81171696)

[1.3 Approvals 2](#_Toc81171697)

[1.4 Distribution 2](#_Toc81171698)

[2 Table of Contents 3](#_Toc81171699)

[Project Test Plan 4](#_Toc81171700)

[3 Introduction about Project Plan 4](#_Toc81171701)

[4 Test Cases 4](#_Toc81171702)

[5 Approach 16](#_Toc81171703)

[6 Suspension Criteria and Resumption Requirements 16](#_Toc81171704)

[7 Item Pass/Fail Criteria 16](#_Toc81171705)

[8 Types of Testing 17](#_Toc81171706)

[9 Test Deliverables 17](#_Toc81171707)

[10 Testing Tasks 17](#_Toc81171708)

[11 Environment Needs (Test Environment) 17](#_Toc81171709)

[12 Responsibilities 17](#_Toc81171710)

[13 Schedule 18](#_Toc81171711)

[14 Risks and Contingencies 18](#_Toc81171712)

# Project Test Plan

## 3 Introduction about Project Test Plan

The document consists of techniques that are to be used in testing the developed artifact to assure that a quality product is produced as the end product to the user. The group quality engineer will take the aid of this document to carry out the testing related to the application, the test plan is made in such a way that it provides the initial approach to evaluating the artifact to check whether the client specifications and requirements are met at the end. Thus, by referring to this document, the project manager has the opportunity to forecast the cost and effort to carry out the testing process, understand the specifics of the tests, the test scope, and strategies related to testing.

## 4 Test Cases

**4.1 Interface Testing**

**4.1.1 Sign in Page**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test No | Task | Purpose of test | Expected result | Achieved |
| 01 | Company Logo | Checking the quality of interfaces and Identify the company. | Company Logo is correct. | Yes |
| 02 | Tex box sizes and validations. | Checking the quality of interfaces and validation. | Validation part and design part is correct. | Yes |
| 03 | Word Spellings | Check the correct in words. | Interface words are correct. | Yes |
| 04 | Sign in Button | Login in the system | Sign in to the system. | Yes |
| 05 | Same background colour is use in every page | Check the background colour. | Background colour is same | Yes |

**4.1.2 Dashboard**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test No | Task | Purpose of test | Expected result | Achieved |
| 01 | Same background colour is use in every page | Check the background colour. | Background colour is same | Yes |
| 02 | Available products,suppliers,tenders,sellers all boxes size | Checking the quality of interfaces. | All boxes are same size | Yes |
| 03 | Words Spellings | Check the correct in words. | Interface words are correct. | Yes |

**4.1.3 Employee List page**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test No | Task | Purpose of test | Expected result | Achieved |
| 01 | Spelling Checking | Check the correct in words. | Interface words are correct. | Yes |
| 02 | Same font in grid | Check the quality of data grid. | All fonts and all font size are correct | Yes |
| 03 | Search button and add new suppliers button hint images | Check easy to use identify the buttons. | All buttons have hint images. | Yes |
| 04 | Same Background colour. | Check the background colour. | Background colour is correct | Yes |
| 05 | Add new Employee | Check the adding new Employee | Adding, Update, searching data. | Yes |

**4.1.4 Update Employee Details**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test No | Task | Purpose of test | Expected result | Achieved |
| 01 | Spelling Checking. | Check the correct in words. | Interface words are correct. | Yes |
| 02 | Same text box size | Check the quality of interfaces. | All boxes are same size. | Yes |
| 03 | Same Background colour. | Check the background colour. | Background colour is correct. | Yes |
| 04 | Update, Cancel buttons | Check the update details in the system | Update data and close the update detail page. | Yes |

**4.1.5 Time schedule page**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test No | Task | Purpose of test | Expected result | Achieved |
| 01 | Spelling Checking | Check the correct in words. | Interface words are correct. | Yes |
| 02 | Schedule list | Check easy to identify what are the available products and o | Display two grids’ data separately. | Yes |
| 03 | Same Background colour. | Check the background colour. | Background colour is correct | Yes |
| 04 | Available and Unavailable | Check easy identify available and unavailable items. | Two text field are design different colours. | Yes |
| 05 | Search, Add new products,Update,Add to invoice buttons | Check the update details in the system, search deials, Add new products and close the update supplier details page. | Update data, search data and add the data in product details page. | Yes |

**4.1.6 Add New Time schedule to the list**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test No | Task | Purpose of test | Expected result | Achieved |
| 01 | Spelling Checking | Check the correct in words. | Interface words are correct. | Yes |
| 02 | Text box sizes | Check the quality of form. | All text boxes are same size (Add new products page). | Yes |
| 03 | Same Background colour. | Check the background colour. | Background colour is correct | Yes |
| 04 | Save, Cancel buttons | Check the client can save data and close the form. | Save the data and close the form | Yes |

**4.1.7 Cash advance page**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test No | Task | Purpose of test | Expected result | Achieved |
| 01 | Spelling Checking | Check the correct in words. | Interface words are correct. | Yes |
| 02 | Text box sizes | Check the quality of form. | All text boxes are same size (Add new products page). | Yes |
| 03 | Same Background colour. | Check the background colour. | Background colour is correct | Yes |
| 04 | Update and cancel button | Check the client can update data and close the form. | Update data, Close the form | Yes |

**4.1.8 Update Cash advance**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test No | Task | Purpose of test | Expected result | Achieved |
| 01 | Spelling Checking | Check the correct in words. | Interface words are correct. | Yes |
| 02 | Text box sizes | Check the quality of form. | All text boxes are same size (Add new products page). | Yes |
| 03 | Same Background colour. | Check the background colour. | Background colour is correct | Yes |
| 04 | Submit,Cancel,Add Products Buttons are in the page | Check the client can submit details, Add products details | All buttons are in the page. | Yes |

**4.1.9 Positions page**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test No | Task | Purpose of test | Expected result | Achieved |
| 01 | Spelling Checking | Check the correct in words. | Interface words are correct. | Yes |
| 02 | Same Background colour. | Check the background colour. | Background colour is correct. | Yes |
| 03 | View button,Search,Create new invoices | Check the client can view the invoices details, Search and create the new invoices. | View the invoices, search, and create the new invoices. | Yes |

**4.1.10 Add new positions**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test No | Task | Purpose of test | Expected result | Achieved |
| 01 | Company Logo | Checking the quality of interfaces and Identify the company. | Company logo is in the invoice | Yes |
| 02 | Same Background colour. | Check the background colour. | Background colour is correct | Yes |
| 03 | Print and Back button | Check the Print or go back to home page. | Print the invoice and go back to home page. Buttons are in the interfaces | Yes |
| 04 | Spelling Checking | Check the correct in words. | Interface words are correct. | Yes |

**4.1.11 Update positions**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test No | Task | Purpose of test | Expected result | Achieved |
| 01 | Spelling Checking | Check the correct in words. | Interface words are correct. | Yes |
| 02 | Text box sizes | Check the quality of form. | All text boxes are same size (Add new products page). | Yes |
| 03 | Same Background colour. | Check the background colour. | Background colour is correct | Yes |
| 04 | Submit,Cancel,Add Products Buttons are in the page | Check the sumit deials, Add products details using this buttons. | All buttons are in the page. | Yes |

**4.1.12 Payroll and payslips page**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test No | Task | Purpose of test | Expected result | Achieved |
| 01 | Spelling Checking | Check the correct in words. | Interface words are correct. | Yes |
| 02 | Same Background colour. | Check the background colour. | Background colour is correct | Yes |
| 03 | View button ,Search Button, add new tenders buttons in the system | Check the view, quotation, search details, Add new tenders. | View the quotation,Search,Add new tender details | Yes |

**4.1.13 Generate payroll report**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test No | Task | Purpose of test | Expected result | Achieved |
| 01 | Company Logo | Checking the quality of interfaces and Identify the company. | Company logo is in the quotation. | Yes |
| 02 | Same Background colour. | Check the background colour. | Background colour is correct | Yes |
| 03 | Print and Back button | Check the Print or go back to home page. | Print the invoice and go back to home page. Buttons are in the interfaces | Yes |
| 04 | Spelling Checking | Check the correct in words. | Interface words are correct. | Yes |

**4.1.14 Get Print of payroll report**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test No | Task | Purpose of test | Expected result | Achieved |
| 01 | Company Logo | Checking the quality of interfaces and Identify the company. | Company logo in this page (Change Password). | Yes |
| 02 | Same Background colour. | Check the background colour. | Background colour is correct | Yes |
| 03 | Text box sizes. | Check the quality of the interface design. | All text boxes are same size (Add new products page). | Yes |
| 04 | Change button | Check the change the password. | Change button is in change password page. | Yes |

**4.2. Function and Methods Test Cases**

**4.2.1 Sign in**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test No | Task | Purpose of test | Expected result | Achieved |
| 01 | Type on “Username” | To enter username properly and to check validations if the inputs are invalid | Username properly typed in the relevant field | Yes |
| 02 | Type on “Password’ | To check whether the password field hide characters and checking validations | Enter the password properly in the relevant field | Yes |
| 03 | Click on “Sign in” | To check whether it navigates to the dashboard | Directs to the Dashboard | Yes |

**4.2.2 Navigation among Pages**

**Attendance Page**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test No | Task | Purpose of test | Expected result | Achieved |
| 01 | Click on “Dashboard” | To check whether it’s navigating properly | Directs to Dashboard | Yes |
| 02 | Click on “Attendance” | To check whether properly navigating to Attendance | Directs to Attendance page | Yes |
| 03 | Click on “Add New” | To check whether properly navigating to  Add New tab | Directs to adding Add New attendance | Yes |
| 04 | Click on “Edit Attendance” | To check whether properly Edit tab pop-up | Edit attendance tab Pops-up | Yes |
| 05 | Click On “Delete Attendance” | To check whether properly Delete tab pop-up | Delete attendance tab Pops-up |  |

**Employee Page**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test No | Task | Purpose of test | Expected result | Achieved |
| 01 | Click on “Employee” | To check whether properly navigating to  Employee List | Directs to Employee List | Yes |
| 02 | Click on “Add New Employee” | To check whether properly navigating to Add new Employee | Direct to Add | Yes |
| 03 | Click on “Schedules” | To check whether properly navigating to Schedules | Direct to schedules | Yes |
| 04 | Click on “positions” | To check whether properly navigating to Positions | Direct to Positions | Yes |

**4.2.3 Dashboard Functions**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test No | Task | Purpose of Test | Expected Result | Achieved |
| 01 | Checking the Stock by graph | To check whether the graph properly show the details | Valid details in the graph | Yes |
| 02 | Total Employee information tab | To check whether the boxes properly show the details | Valid details in the boxes | Yes |
| 03 | Checking the graph | To check the save and print functions | Save and print success | Yes |

**4.2.4 Supplier Details**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test No | Task | Purpose of test | Expected result | Achieved |
| 01 | Click on “Add New Supplier” | To check if the add new supplier form is open. | Direct to Add New Supplier | Yes |
| 02 | Click on “Search” | To check if search suppliers using supplier Company name. | Valid details load in the grid. | Yes |
| 03 | Click on “View” | To check if the Suppliers details page is open. | Direct to Supplier Details | Yes |
| 04 | Click on “Update” | To check if the Update Supplier Details page is open. | Direct to Update Supplier Details | Yes |

**4.2.4.1 Add New Supplier**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test No | Task | Purpose of test | Expected results | Achieved |
| 01 | Save | Enter valid details and to check whether it creates a new Suppliers | Creation of new Suppliers | Yes |
| 02 | Cancel | Close Add new Supplier Form | Close the form and open the Supplier Detail Page. | Yes |

**4.2.4.2 Update Supplier Details**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test No | Task | Purpose of test | Expected results | Achieved |
| 01 | Update | Update details and to check whether it auto update a grid. | Update supplier data grid. | Yes |
| 02 | Cancel | Close Add new Supplier Form | Close the form and open the Supplier Detail Page. | Yes |

**4.2.5 Product Details**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test No | Task | Purpose of test | Expected results | Achieved |
| 01 | Click on “Add New Products” | To check if the add new products form is open. | Direct to Add New Products. | Yes |
| 02 | Click on “Search” | To check if search products using supplier product name. | Valid details load in the grid. | Yes |
| 03 | Click on “Add to invoice” | To check if the add new invoice form is open. | Direct to Create New invoice. | Yes |
| 04 | Click on “Update” | To check if the Update product details page is open. | Direct to Update Product Details. | Yes |

**4.2.5.1 Add New Product (Product Details)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test No | Task | Purpose of test | Expected results | Achieved |
| 01 | Save | Enter valid details and to check whether it creates new products | Creation of new products | No  (Form data correctly submit to the database but one invalid selection case submit to the database it’s taken as error.) |
| 02 | Cancel | Close Add new Product Detail Form. | Close the form and open the Supplier Detail Page. | Yes |

**4.2.5.2 Add to Invoices**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test No | Task | Purpose of test | Expected results | Achieved |
| 01 | Save | Enter valid details and to check whether it creates add new invoices. | Creation of new invoices. | Yes |
| 02 | Cancel | Close Add new invoices Form | Close the form and open the Supplier Detail Page. | Yes |

**4.2.5.3 Update Product Details.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test No | Task | Purpose of test | Expected results | Achieved |
| 01 | Update | Update details and to check whether it auto update a grid. | Update product data in the grid. | Yes |
| 02 | Cancel | Close Update product details form. | Close the form and open the Product details Page. | Yes |

**4.2.6 Print new payroll report**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test No | Task | Purpose of test | Expected results | Achieved |
| 01 | Click on “Payroll button” | To check report generated without any error. | Print the payroll report | Yes |
| 02 | Click on “Search” | To check if search sales using invoice number, Customer name. | Valid details load in the grid. | Yes |
| 03 | Click on “View” | To check if the invoice is open. | Direct to invoice. | Yes |

**4.2.6.1 Print new pay slip**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test No | Task | Purpose of test | Expected results | Achieved |
| 01 | Submit | Enter valid details and to check whether it creates add new invoices. | Creation of new invoices. | Yes |
| 02 | Cancel | Close Create new invoices Form | Close the form and open the Sales Detail Page. | Yes |
| 03 | Add Products | Open to product detail | Close new invoice Form and open product details. | Yes |

**4.2.7 Employee search bar**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test No | Task | Purpose of test | Expected results | Achieved |
| 01 | Click on “Add new Tenders” | To check if the create new Quotation form is open. | Direct to Create New Quotation. | Yes |
| 02 | Click on “Search” | To check if search sales using quotation number, company name, company address. | Valid details load in the grid. | Yes |
| 03 | Click on “View” | To check if the quotation is open. | Direct to quotation. | Yes |

**4.2.7.1 Add new Positions**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test No | Task | Purpose of test | Expected results | Achieved |
| 01 | Click on add new pr | Enter valid details and to check whether it creates add new quotations. | Creation of new quotations. | Yes |
| 02 | Cancel | Close Create new quotation Form | Close the form and open the Tenders details Page. | Yes |

**4.2.8 Change Password**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test No | Task | Purpose of test | Expected result | Achieved |
| 01 | Type on “Current Password” | To enter current password properly and to check validations if the inputs are invalid | Current password properly typed in the relevant field | Yes |
| 02 | Type on “New Password’ | To enter New password properly and to check validations if the inputs are invalid | Enter the New password properly in the relevant field | Yes |
| 03 | Type on “Confirm Password’’ | To enter Confirm password properly and to check validations if the inputs are invalid | Enter the Confirm password properly in the relevant field | Yes |
| 04 | Click on “Change Password’’ | To check the change password. | Password is change. | Yes |

## 5 Approach

This is used as a general test strategy for the test plan. The "Selenium" tool is used in the testing process. Selenium is used to test the framework for making web applications using different browsers. It helps to analyze various programming languages. When designing software for different platforms, the device options are unlimited. In web applications, some new versions of the most commonly used browsers are always available. In web applications, the user interface may not display correctly, and some web browsers versions may not support them. Then, finally, manual testing will be carried out on the full artifact to ensure whether the automation test has not missed anything. The database part testing was done manually. Check all data insert the database and check the auto-generate numbers, etc.

## 6 Suspension Criteria and Resumption Requirements

Under suspension criteria, the causes to suspend any testing for the moment are listed and under the resumption requirements, the causes which will allow the testing to resume after a block has passed are listed.

* Delays in development due to lack of clarification from client. (Company logo, Background color)
* Delays in development due to any other considerable reason
* The testing tool does not work properly.
* Some interfaces are not clear idea about development.

The testing can be resumed after a lock when the following conditions are met

 • The QA engineer was informed to continue with the testing upon fixing the block causing the testing to stop.

• The required clarification received from the client and the required changes are made.

## 7 Item Pass/Fail Criteria

Upon the completion of testing the required modules, the criteria specifications will be used in order to measure the success of the final product. The testing criteria from things to be tested from the earlier chapter will be classified as passes or failures.

## 8 Types of Testing

Unit testing done by manually. All the functions, methods are done by automation testing and manual testing. Automation testing tool is Selenium. Interfaces testing are done by manual testing using test cases.

## 9 Test Deliverables

• Project Quality plan

• Test Plan

• Test cases and results.

## 10 Testing Tasks

The project's development life cycle is divided into four sprints based on the amount of work to be completed during each one. The unit testing will be carried out at the end of each of these sprints to find whether there are any defects in the system, if so, the side defects will be added to the next sprint as bug fixes. After the completion of unit testing, the integration will be done where all the components are integrated. Here, the integration testing will be carried out to check whether the system as a whole is working as expected. Finally, the client will carry out the acceptance testing to make sure the artifact meets his expectations.

## 11 Environment Needs (Test Environment)

* Special testing tools.
* Specific versions of the supported software need to be tested.

## 12 Responsibilities

* Identify how the project should be introduced to the client.
* Choose features which should be checked and not reviewed.
* Ensure that the elements needed for the testing are in order.
* Identify and manage risks.
* Making the right decisions for test cases.

## 13 Schedule

The test time plan should be comfortable and reasonable for the entire team. The QA engineer should consider the views of peer group members when initiating the schedule for testing. In addition, good communication between group members and the client should be maintained to avoid any confusion. If the planned schedule has any defects, the testing plan would end up in failure. Thus, the schedule should be planned by contacting the developers of the project and the project manager**.** I**n addition,** **as** the test plan**progresses,**milestones **will be established to avoid** any slippage in the schedule **during** testing. The QA engineer should be able to start and finish the testing within the set time frame.

## 14 Risks and Contingencies

* Limited time and resources allocated for testing
* Delays due to unexpected blocks
* Client proposals while ongoing development causing issues
* Communication issues within the team.

If any requirements are changed in the set modules, the following steps are to be followed as contingencies.

* All the team members should be notified about the changes
* Maintain a proper record of changes
* Testing steps are to be adjusted based on the changes made
* QA engineer will put extra effort into the completion of testing before the deadline