PROJECT DOCUMENTATION

**PROJECT QUALITY PLAN**

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| **Project:** | **Lanka Tools Employee & Payroll Management system (Phase 01)** |
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| **PRINCE2** |  |
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| Author: | Layan Perera (Developer) |
| Owner: | Dr. Yasas Jayaweera (Project Executive) |
| Client: | Lanka Tools (PVT) Ltd. |
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# 1 Project Quality 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:**

**Date of Next revision:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Revision date** | **Previous revision date** | **Summary of Changes** | **Changes marked** |
|  |  | First issue |  |

## 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 | 15/07/2022 | 1.0 |

## 1.4 Distribution

This document has been distributed to:

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Title** | **Date of Issue** | **Version** |
| Bhathiya Kannangara | Project Manager (Developer) | 15/07/2022 | 1.0 |
| Imanka Jayasiriwardana | Start-up Manager (Developer) | 15/07/2022 | 1.0 |
| Uthpala Rajapaksha | Risk Manager (TR) | 15/07/2022 | 1.0 |
| Ruwanthi Naramperuma | Scheduling Manager (QA) | 15/07/2022 | 1.0 |
| Layan Perera | Quality Manager (Developer) | 15/07/2022 | 1.0 |

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# Project Quality Plan

## 3 Purpose

High quality software meets the needs of users while being reliable, well supported, maintainable, portable, and easily integrated with other tools. We will look at how to achieve quality, the trade-offs involved, modelling quality improvement, and standards designed to ensure quality.

## 4 Customer’s Quality Expectations

* A responsive web application.
* The web application should be generated reports.
* The web application should be accessible 24/7.
* The web application should be simple and faster.
* The web application should be able to provide easy and better service.
* The web application should be able to manage supplier details, product details,

quotation details, and product delivery details.

* The web application should be able to take back up from the database.
* Only the admin can access the web application.

## 5 Acceptance Criteria

* The web application should be delivered within 8 weeks.
* The web application should be attractive Interfaces
* The web application should be able to provide services according to the client’s

requirements.

## 6 Quality Responsibilities

Following people are the responsibilities for a better-quality product.

* **Bhathiya Kannangara (Project Manager)**Responsible for an overall working product.
* **Layan Perera (Quality Manager)**Responsible for testing the complete product and assure the quality which

fulfils the client’s expectations and criteria.

The quality of the product will be tested in some manners and the following are some of the methods which will be used to check the bugs in the system.

• Checking whether the entire application is user-friendly.

• Checking whether the hyperlinks work correctly.  
• Checking for grammatical corrections in the content.  
• Checking whether correct messages are passed.

## 7 Applicable Standards

Quality is all about guaranteeing the exact version of the client’s requirements which should be developed efficiently and professionally which also means targeting to prepare the right product which is satisfied by the client's requirement. By preparing Quality products, clients will be eager to give future projects, as well as they, know that they will get the desired outcome at the end of the project.

Quality standards can be defined as documents that provide requirements, specifications, rules, or characteristics that can be used in every instance to ensure that materials, products, processes, and services are fit according to the purpose.  
Ultimately, achieving the highest quality gives the chance to for high demand in the market and to keep up more expensive rates than competitors.

## 8 Quality Control and Audit Processes

* **Unit Testing** – This is a testing method where individual units/components are tested. It is helpful to validate that each component or unit of the web application performs as designed according to the project executive’s requirements.
* **Integration Testing** – This is a method where individual units are tested as a group which is combined with individual units. This is helpful to expose the faults that interact with combined units.
* **System Testing** – This is a testing method where the complete and integrated web application is tested. This is helpful to evaluate the compliance of the web application.
* **Acceptance Testing** – This is a testing method done by the client to ensure that the web application meets their expected requirements and works as they expected.

## 9 Specialist Work Quality Control and Audit Processes

1. **Quality control** 
   * Project deliverables will be tested for the expected quality.
   * Opinions and further changes will be considered according to the expected

quality.

**Audit Processes**

• All the project reports and designs will be reviewed.  
• All the inputs of the audit will be finalized with the project manager.

## 10 Change Management Procedures

Change Management will include expenses, advantages or risks of any improvements, controlling, tracking improvements, and surveying the impact of any adjustments. Any improvements to be modified should be registered, and they should be reviewed by the proper specialist, especially by comparing with the Project Executive. Each of the related improvements supervisory procedures adopt the PRINCE2 method of progress control.

## 11 Configuration Management Plan

The document of the Configuration Management Plan is used to determine how and by whom the project artifact will be managed and secured, as well as to indicate where the information is stored and what protection will be placed in the appropriate location and who has the authority to look at or process information.

Git Repositories will be used to maintain the version control of the source code and for and its releases and will be able to rollback if necessary and it will be deployed using Firebase Services.

The Configuration Management Procedure can be changing but it contains mainly five core activities. Such as Planning, Identification, Control status accounting and Verification, Auditing, and Configuration management strategy. First, it is important to arrange the mechanism for dealing with the design and then to identify the possible threats.

Finally, the execution of the control procedure mechanisms.

## 12 Quality Tools

* **SonarQube**

SonarQube is an open-source platform developed by Sonar Source for continuous inspection of code quality to perform automatic reviews with static analysis of code to detect bugs

SonarQube gives you the tools you need to write clean and safe code:

* [**Sonar Lint**](https://www.sonarlint.org/) – Sonar Lint is a companion product that works in your editor giving immediate feedback so you can catch and fix issues before they get to the repository.
* [**Quality Gate**](https://docs.sonarqube.org/latest/user-guide/quality-gates/)**–** The Quality Gate lets you know if your project is ready for production.
* **[Clean as You Code](https://docs.sonarqube.org/latest/user-guide/clean-as-you-code/)** – Clean as You Code is an approach to code quality that eliminates a lot of the challenges that come with traditional approaches. As a developer, you focus on maintaining high standards and taking responsibility specifically in the New Code you're working on.
* **[Issues](https://docs.sonarqube.org/latest/user-guide/issues/)** – SonarQube raises issues whenever a piece of your code breaks a coding rule, whether it's an error that will break your code (bug), a point in your code open to attack (vulnerability), or a maintainability issue (code smell).
* [**Security Hotspots**](https://docs.sonarqube.org/latest/user-guide/security-hotspots/) – SonarQube highlights security-sensitive pieces of code that need to be reviewed. Upon review, you'll either find there is no threat or you need to apply a fix to secure the code.