PROJECT DOCUMENTATION

**PROJECT QUALITY PLAN**

| **Project:** | **E-Commerce Website for Skanda** |
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| **PRINCE2** |  |
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| Client: | SKANDA by Sarasi Samarasundara |
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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:** 03 March 2022

**Date of Next revision:**

| **Revision date** | **Previous revision date** | **Summary of Changes** | **Changes marked** |
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| 23/02/2022 | - | First issue |  |
| 03/03/2022 |  | Specialist work quality control and audit processes, and Configuration Management Plan was updated |  |

## 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 Board | 03/03/2022 | 1.0 |
| Adithya Narasinghe |  | Project Manager | 03/03/2022 | 1.0 |
| Mrs. Sarasi Samarasundara |  | Client | 03/03/2022 | 1.0 |

## 1.4 Distribution

This document has been distributed to:

| **Name** | **Title** | **Date of Issue** | **Version** |
| --- | --- | --- | --- |
| Adithya Narasinghe | Project Manager | 1/3/2022 | 1.1 |
| M. Sonali Silva | Start-up Manager | 1/3/2022 | 1.1 |
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# Project Quality Plan

## 3 Purpose

This project is for the design, development of a new online shopping website for an existing clothing store. The primary objective of this Quality Management Plan is to ensure that project delivery is of adequate quality and purposeful according to user requirements. And to define how quality is managed throughout the life cycle. This document will be a part of the Project initiation document (PID).

## 4 Customer’s Quality Expectations

As the client's main expectation, a fully functional online shopping website for a clothing store will be the main outcome of the project. There are several ways to ensure the quality of a website. The following measures will be used to determine the quality of the final outcome of this project.

* **Usability** – The E-commerce website should be designed and developed to meet the standards and limitations defined during the design phase. All functionalities should be tested in various scenarios, including the unexpected ones. Check if the website can continue to deliver the desired results.
* **Reliability** – Website credibility comes from the ability to use the website as mentioned above.
* **Responsiveness** – The system must be viewable on any modern web browser on any modern device, such as computers, smartphones, and tablets.
* **Learnability** – Even a user with a minimum of IT literacy should be able to use the website.
* **Maintainability** – The ability to troubleshoot issues and modify and extend functionality.
* **Functionality** – Ensuring the functionalities of payment processes, editing related content from the admin panel, updating any announcements regarding sales, promotions and festivals, admin-customer interactions, AI chatbots.
* **Appearance** – The proposed site should be visual, professional and well-polished. It should reflect the image of the business.

## 5 Acceptance Criteria

According to user requirements this proposed website needs to obtain following conditionsto fulfil customer satisfaction and to develop the fully functional E-Commerce website.

**Functional Criteria**

* Adding items to the cart by the customer to purchase products.
* Viewing products/ items on the website.
* Managing the customer profile by using create/edit/delete functions.
* The random offer or discount won by a user on the spinning wheel will be emailed to the customer.
* Ability to process online payments through a payment gateway.
* Ability to view and manage orders on the website.
* Managing items by using add/edit/delete product functionalities.
* Managing product categories and the ability to add/edit/delete product categories.
* Artificial Intelligence based chatbot function for assisting users.

**Non-functional Criteria**

* The site must be reliable, accessible at any time and easily maintained.
* Protectively store all the data.
* Security is one of the critical, non-functional acceptance requirements for customer and company management.
* Perform well under large traffic and able to handle large numbers of orders at once.
* Maintaining and securing the website database is essential.

## 6 Quality Responsibilities

In the project team the quality manager role is handled by J.M.P Lawantha Bandara. He will ensure and improve the quality of the overall project as it is essential to check whether the project has been implemented in accordance with the relevant standards and requirements.

The project can be tested in several ways to ensure product quality. The following are some of the methods used to check for any bugs or errors in the system and also documents and the developing process.

* Evaluate website for errors and modifications by,
  + Checking all the contents of the website to see if they are grammatically correct and if it sends the correct message to the user.
  + Checking that all hyperlinks and buttons are directing users to relevant web pages.
  + Checking if all the forms can be filled in properly and if there is any error in entering the invalid data it will be detected and displayed.
  + Checking that all the data entered via forums will be stored properly in relevant databases.
  + Checking that all the data stored in the database are functioning properly.
  + Checking that all the interfaces are user-friendly and used styles fits to the theme to attract more customers.
  + Checking the responsiveness of websites by using different devices such as desktops, smartphones and tablets.
* Review and ensure the format of all project-related documents by,
  + Checking all the document are using the same theme (Fonts, Colour theme)
  + Checking all page titles and headings are meaningful, use correct heading level and in sentence case.
  + Checking all Images and tables that have alt text aligned correctly looks appropriate for standard manners.

## 7 Applicable Standards

Quality means building what you mention. As developers you ensure that you do it in a more efficient and professional way, which means always aiming to create the right product that satisfies the client's requirements. By developing quality products, clients are motivated to assign future projects, and they know that the project will ultimately have the desired outcome for them.

Quality standards can be defined as documents that provide requirements, specifications, rules, or features that can be used at all times to ensure that goods, products, processes, and services are consistent with the purpose.

Finally, obtaining the highest quality allows to create higher demand in the market and maintain the best price rates than competitors.

## 8 Quality Control and Audit Processes

Because it is important to ensure the desired quality of the product, test cases will be used for every aspect of the product that must be present at the time of use.

Selenium will be used as an interface testing framework to improve user functionality. This will help developers to identify issues, if there are any.

The project board will conduct a weekly audit of the project management and project progress, and the clientwill be provided with a prototype to test whether the system meets their requirements.

## 9 Specialist Work Quality Control and Audit Processes

During the quality control and audit process, the Quality Manager will inspect all the quality components required for the project to be successful. The quality manager will maintain a quality log and a quality checklist to make this process successful.

Using the Quality Log, the Quality Manager will maintain quality checks to be done and assign members responsibility for making any necessary changes. Using the Quality Checklist, the Quality Manager inspects finalised documents and all components to ensure they meet the required quality.

As an external tool Selenium will be used as an interface testing framework.

## 10 Change Management Procedures

When the client or project board decides that a safety aspect of the project needs to be changed or a new component should be added, they should make a change proposal and submit it to the project board to change the component. The change proposal should identify the work process in question, describe the component of the work process they wish to modify, and include a description of the security impact of the proposed modification.

Any changes that need to be made will be reported and then tended to be reviewed and controlled by an appropriate specialist, comparing with what the project board originally determined. Relevant change management procedures follow the PRINCE2 modification control system.

Change management would include an adjustments recording log including, analysis of the impact of any change, the cost, benefits or threat to each change, the tracking and use of preparation shifts, and so on.

## 11 Configuration Management Plan

“Configuration Management Plan version 01” document is uploaded to the project's GitHub repository for documents (https://github.com/nmasnadithya/sppm) and it should be located in week 4 folder.

## 12 Quality Tools

Selenium will be used to do the automated UI testing of the project. The automated tests for Selenium will be created by the Quality Manager.

Other penetration testing tools such as SonarQube and WPScan will be used to evealuvate the security of the website and the hosting platform.