

6COSC006W – Final Year Project Report

“Planter”

**A solution to replace manual data elicitation &
analysis in the rubber plantation fields**

Name: Andrew Shehan Dissanayake

Student Number: 2017346

Supervisor:

Namal Malalasena

This report is submitted in partial fulfillment of the requirements for the BSc (Hons) in Business Information Systems degree at the University of Westminster

School of Computing & Engineering
University of Westminster

03-05-2021

Abstract

Sri Lanka being the cradle of the rubber and celebrating 150+ years in the industry, it has made a strong influence on the economy of the country as a main economic plantation crop. Despite advancements in the rubber industry, management fails to distinguish between good and bad practices for making the business more successful and profitable. At the moment, all analysis is done manually, and it takes a long time for them to identify the business's opportunities, strengths, weaknesses, and threats. The management team is always reliant on the staff for reports and updates on the various stages of the business. The goal of this project is to analyze the current problems with the management of the rubber fields in Pambegama Estate and come up with a solution by designing, developing, and evaluating that reduces the inefficiency of the current activities. It also advocates for saving them time and money in the rubber industry and paving the way for them to reap the greatest benefit.

The chapter one explains the mentioned above and the chapter two explains the literature review section to supports the research with previous findings and identifications. In chapter three, the software requirement specification for the proposed web-based application is examined. Methodologies for gathering the necessary data and using it for functional and non-functional requirements to classify the required elements of the proposed web-based application for prototyping have been identified. Explaining and justifying why and how the design methodology, design tools, and development tools were chosen. Later, it describes the proposed solution's design. The architectural aspects of the design system, the aspects of the system and the high-level design of the system has been mentioned in the chapter four.

The fifth chapter delves into the specifics of the proposed system's design decisions. It describes the proposed solution's design. It also includes a description of the architectural aspects of the design system, the system's aspects, and the system's high-level design. This chapter describes the prototype's implementation process, considering the design aspects mentioned in the previous chapter. The sixth chapter contains in-depth descriptions of the prototype's tools and technology, as well as information on how the prototype's core functionalities were implemented.