**Software Requirements Specification**

**Asset Management System**

**Version 1.0**

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# Revision History

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| --- | --- | --- | --- |
| Name | Date | Reasons for Change | Version |
|  |  |  |  |
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|  |  |  |  |

# Introduction

## Purpose

The purpose of this document is to present a detailed description of the Asset Management Web Application. It will explain the purpose and features of the application, the interfaces of the application, what the system will do, the constraints under which it must operate and how the application will react to external stimuli. This document is intended for both the stakeholders and the developers of the application and will be proposed to the computer science department of the USJP for its approval.

## Product Scope

This asset management web application for the technical officers of the computer science department of the University of Sri Jayewardenepura. This web application will be designed to centralize the assets in the computer science department of USJP and to manage them easily. This application will be maximizing the efficiency and the productivity of the technical officers who are managing the assets in the computer science department of the USJP.

## References

<The following documents must be attached along with this document>

<User Interface Style Guide Document/ User Interface Design Standards for web application/ Story Card Documents / Task Card Documents />

# Overall Description

## Product Perspective

This Asset Management Web Application is a new self-contained application that is not a replacement for any existing systems. The application is designed to manage and track the assets of the whole computer science department, including their physical location and quantity.

The asset management application will be used by technical officers of the computer science department in USJ and undergraduates of the computer science department in USJ, Mr. Ravindra De Silva and Mr. Dilum Perera will interact with the application. Technical Officers will interact with the application to manage the assets in the computer science department. The undergraduates of the computer science department have the ability to reserve the assets from the RIS Branch and Embedded Branch. When reserving the assets, undergraduates must request the asset they need and while doing so relevant emails containing the request must be send to the relevant authorities in the department. As a detailed description, when a student requests an asset from the RIS, a request email must be sent to the Mr. Ravindra De Silva and he will be accepting the request based on the student request and the availability of the asset. As same, for the assets in the embedded branch, the request will be sent to Mr. Dilum Perera.

<Diagrams / System Architecture must be decided in here>

The major component of the system are as follows.

* The asset database stores information about all of the assets in the organization.
* The database module handles the database connection and database operations of the all-overall application.
* The email module handles the relevant emails of the application.
* The asset handling module handles the assets and all the business logics related to the managing of the assets.
* The user interface module provides a way for users to interact with the system.
* The business logic module implements the business rules of the system.
* The reporting module generates reports on the asset data.
* The Barcode generator generates relevant barcodes for the assets

## Product Functions

<Data Flow Diagram / Object-Diagram goes here>

The high-level major functionalities of the AMA can be described as follows. Low-Level view be provided in the section 4. System features.

* Only the administrators have the ability to log in to the system.
* From the students view, students (or undergraduates of the computer science department) have only the ability to request the assets in the RIS and the Embedded branch without creating or log in to the application user account.
* Administrators are able to do the basic CRUD operations (add assets, edit assets, search assets and delete assets)
* Administrators are able to generate relevant reports from the application.
* Assets can be easily filtered from the system for both administrators and undergraduates.
* The application must generate barcodes for the assets and store them in the database.

## User Classes and Characteristics

The following user classes have been identified for the asset management application:

* Technical Officer: This user is one of the administrators type of this application and can be done the basic CRUD operations and relevant report generations from the application.
* Lecturer: This user is another administrator in the application and has the ability to review the assets of the RIS and Embedded Branch of the computer science department.
* Undergraduate users: These users are less technical and will use the application less frequently. They will only have the ability to request an asset or assets from the RIS, and Embedded Branch

The following are the pertinent characteristics of each user class identified above.

## 2.4 Operating Environment

## 2.5 Design and Implementation Constraints

## 2.6 User Documentation

## 2.7 Assumptions and Dependencies

# External Interface Requirements

## User Interfaces

## 3.2 Hardware Interfaces

## 3.3 Software Interfaces

## 3.4 Communication Interfaces

# System Features

# Other Non-Functional Requirements

# Other Requirements

# Appendix A: Glossary

# Appendix B: Analysis Models

# Appendix C: To be Determined List