Software Requirements Specifications

Campus Parking Management System

(CPMS)

Version: 1.0

Date: / /2025

Release By: Group \_\_

Document Control

|  |  |
| --- | --- |
| Document Name | Campus Parking Management System |
| Reference Number | CPMS\_SRS |
| Version | 1.0 |
| Project Code | CPMS\_V1 |
| Status | In-use |
| Date Released |  |

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| --- | --- | --- |
| Name | Position | Signature |
| Prepared By:  Mr. Analyst | \_\_\_\_\_\_ Analyst  Group \_\_ |  |
| Reviewed By:  Mr. Reviewer | Lead Developer  Group \_\_ |  |
| Approved By:  Mr. Client | Project Manager  Group \_\_ |  |

Version History

|  |  |  |  |
| --- | --- | --- | --- |
| Version | Release Date | Section | Amendments |
| 1.0 | / /2025 | All | Original Document |

Table of Contents

1. Introduction

1.1 Purpose

The purpose of this document is to specify the details at the specific requirements elicited by Group \_\_ Requirements Engineering Team from Group \_\_ Sdn. Bhd. It addresses the functionality, performance, interface, quality attributes and compliance requirements of Campus Parking Management System (CPMS).

This document is intended for system developer, project manager, configuration manager and client.

1.2 Scope

CPMS shall facilitate mainly the following operations:

i. Start up and shutdown of CPMS.

ii. Withdrawal, cash deposit, fund transfer and balance inquiry.

1.3 Definition & Acronyms

Definitions

Acronyms

1.4 References

This document is prepared in reference to the following documents:

i. IEEE Std 830-1998, Recommended Practice for Software Requirements Specifications.

ii. ADA Standards 2010 Clause 707

1.5 Overview

This document consists of 3 sections:

Section 1 contains the purpose, scope, definitions, acronyms and references made to other documents.

Section 2 contains the overall description of the system, including constraints and assumptions.

Section 3 contains specific requirements of CPMS to be implemented.

2.0 Overall Description

2.1 Product Perspective

This section describes the different perspectives of CPMS.

2.1.1 User Interfaces

The following table (Table 1.0) summarizes the list of graphical user interface requirements specified for CPMS:

|  |  |  |  |
| --- | --- | --- | --- |
| Requirement ID | Description | Priority | Author |
| REQ\_UI001 | CPMS GUI shall make use of only two colour, blue (RGB Hex code: #ADD8E6) for background and while (RGB Hex code: #FFFFFF) for text | Medium | Low Mun Kit |

Table 1.0 CPMS GUI Requirements

2.1.2 Hardware Interfaces

CPMS shall be compatible with the following operating system currently available on the market:

1. Android

2. IOS

3. Samsung

4. Windows

5. Linux

6. KaiOS

2.1.3 Communication Interfaces

CPMS shall connect to Group \_\_ server using Local Area Network with minimum speed of 1Mbps.

2.2 Product Feature

The following (Table 2.0) contains the list of features to be implemented in CPMS,

Separated by its accessible role.

|  |  |  |  |
| --- | --- | --- | --- |
| Feature ID | Feature | Description | Accessible Role |
| F001 | Session Verification | To allow user to start a session for transaction. | User |
| F002 | Carpool Menu | To allow user to check for available carpooling or offer carpooling. |
| F003 | Check Available Parking | To allow user to perform a check for available parking. |

Table 2.0 CPMS Features

Figure 1.0 shows the context of CPMS

\*\*insert a context diagram here\*\*

Figure 1.0 CPMS Context Diagram

An operator’s primary role on CPMS is to…….. . Users are the main target of CPMS where CPMS offers a list of features to them. Carpool etc etc………

2.3 Users Characteristics

There are mainly \_\_\_ roles targeted by CPMS, including \_\_\_\_\_\_\_\_ and user. The following table (Table 3.0) shows the expected level of knowledge for each role.

|  |  |  |
| --- | --- | --- |
| Role | Description | Required Knowledge |
|  |  |  |
| User | General individual in MMU community who uses the app. | Basic knowledge on navigating an application, offer carpool and transactions. This include how to perform \_\_\_\_\_\_ |

Table 3.0 Intended Users & Required Knowledge

3.0 Specific Requirements

3.1 External Interfaces

This section details the external interface requirements of CPMS, separated by features of the system.

3.1.1

|  |  |  |  |
| --- | --- | --- | --- |
| **Requirement ID** | REQ\_IO | **Version** |  |
| **Item** |  | | |
| **Description** |  | | |
| **Purpose** |  | | |
| **Format** |  | **Valid Range** |  |
| **Related I/O** |  | | |
| **Author** |  | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **Requirement ID** | REQ\_IO | **Version** |  |
| **Item** |  | | |
| **Description** |  | | |
| **Purpose** |  | | |
| **Format** |  | **Valid Range** |  |
| **Related I/O** |  | | |
| **Author** |  | | |

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| --- | --- | --- | --- |
| **Requirement ID** | REQ\_IO | **Version** |  |
| **Item** |  | | |
| **Description** |  | | |
| **Purpose** |  | | |
| **Format** |  | **Valid Range** |  |
| **Related I/O** |  | | |
| **Author** |  | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **Requirement ID** | REQ\_IO | **Version** |  |
| **Item** |  | | |
| **Description** |  | | |
| **Purpose** |  | | |
| **Format** |  | **Valid Range** |  |
| **Related I/O** |  | | |
| **Author** |  | | |

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| --- | --- | --- | --- |
| **Requirement ID** | REQ\_IO | **Version** |  |
| **Item** |  | | |
| **Description** |  | | |
| **Purpose** |  | | |
| **Format** |  | **Valid Range** |  |
| **Related I/O** |  | | |
| **Author** |  | | |

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| --- | --- | --- | --- |
| **Requirement ID** | REQ\_IO | **Version** |  |
| **Item** |  | | |
| **Description** |  | | |
| **Purpose** |  | | |
| **Format** |  | **Valid Range** |  |
| **Related I/O** |  | | |
| **Author** |  | | |

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| --- | --- | --- | --- |
| **Requirement ID** | REQ\_IO | **Version** |  |
| **Item** |  | | |
| **Description** |  | | |
| **Purpose** |  | | |
| **Format** |  | **Valid Range** |  |
| **Related I/O** |  | | |
| **Author** |  | | |

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| --- | --- | --- | --- |
| **Requirement ID** | REQ\_IO | **Version** |  |
| **Item** |  | | |
| **Description** |  | | |
| **Purpose** |  | | |
| **Format** |  | **Valid Range** |  |
| **Related I/O** |  | | |
| **Author** |  | | |

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| --- | --- | --- | --- |
| **Requirement ID** | REQ\_IO | **Version** |  |
| **Item** |  | | |
| **Description** |  | | |
| **Purpose** |  | | |
| **Format** |  | **Valid Range** |  |
| **Related I/O** |  | | |
| **Author** |  | | |

3.2 Functional Requirement

This section details the functional requirements of CPMS, starting with overall requirement, followed by requirements of each feature of the system. Figure 2.0 shows the overall use case of CPMS.

\*\*Insert CPM System Use Case Diagram\*\*

Figure 2.0 CPMS Overall Use Case Diagram

|  |  |  |  |
| --- | --- | --- | --- |
| **Requirement ID** | REQ\_F001 | **Version** | 1.0 |
| **Description** |  | | |
| **Author** |  | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **Requirement ID** | REQ\_F001 | **Version** | 1.0 |
| **Description** |  | | |
| **Author** |  | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **Requirement ID** | REQ\_F001 | **Version** | 1.0 |
| **Description** |  | | |
| **Author** |  | | |

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| --- | --- | --- | --- |
| **Requirement ID** | REQ\_F001 | **Version** | 1.0 |
| **Description** |  | | |
| **Author** |  | | |

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| --- | --- | --- | --- |
| **Requirement ID** | REQ\_F001 | **Version** | 1.0 |
| **Description** |  | | |
| **Author** |  | | |

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| --- | --- | --- | --- |
| **Requirement ID** | REQ\_F001 | **Version** | 1.0 |
| **Description** |  | | |
| **Author** |  | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **Requirement ID** | REQ\_F001 | **Version** | 1.0 |
| **Description** |  | | |
| **Author** |  | | |

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| --- | --- | --- | --- |
| **Requirement ID** | REQ\_F001 | **Version** | 1.0 |
| **Description** |  | | |
| **Author** |  | | |

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| --- | --- | --- | --- |
| **Requirement ID** | REQ\_F001 | **Version** | 1.0 |
| **Description** |  | | |
| **Author** |  | | |

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| --- | --- | --- | --- |
| **Requirement ID** | REQ\_F001 | **Version** | 1.0 |
| **Description** |  | | |
| **Author** |  | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **Use Case ID** | UC00 | **Version** | 1.0 |
| **Feature** |  | | |
| **Purpose** |  | | |
| **Actor** |  | | |
| **Trigger** |  | | |
| **Precondition** |  | | |
| **Scenario Name** | **Step** | **Action** | |
| **Main Flow** |  |  | |
| **Alternate Flow -** |  |  | |
| **Rules** |  | | |
| **Author** |  | | |

\*\* Insert State Diagram for every User case\*\*

|  |  |  |  |
| --- | --- | --- | --- |
| **Use Case ID** | UC00 | **Version** | 1.0 |
| **Feature** |  | | |
| **Purpose** |  | | |
| **Actor** |  | | |
| **Trigger** |  | | |
| **Precondition** |  | | |
| **Scenario Name** | **Step** | **Action** | |
| **Main Flow** |  |  | |
| **Alternate Flow -** |  |  | |
| **Rules** |  | | |
| **Author** |  | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **Use Case ID** | UC00 | **Version** | 1.0 |
| **Feature** |  | | |
| **Purpose** |  | | |
| **Actor** |  | | |
| **Trigger** |  | | |
| **Precondition** |  | | |
| **Scenario Name** | **Step** | **Action** | |
| **Main Flow** |  |  | |
| **Alternate Flow -** |  |  | |
| **Rules** |  | | |
| **Author** |  | | |

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| --- | --- | --- | --- |
| **Use Case ID** | UC00 | **Version** | 1.0 |
| **Feature** |  | | |
| **Purpose** |  | | |
| **Actor** |  | | |
| **Trigger** |  | | |
| **Precondition** |  | | |
| **Scenario Name** | **Step** | **Action** | |
| **Main Flow** |  |  | |
| **Alternate Flow -** |  |  | |
| **Rules** |  | | |
| **Author** |  | | |

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| --- | --- | --- | --- |
| **Use Case ID** | UC00 | **Version** | 1.0 |
| **Feature** |  | | |
| **Purpose** |  | | |
| **Actor** |  | | |
| **Trigger** |  | | |
| **Precondition** |  | | |
| **Scenario Name** | **Step** | **Action** | |
| **Main Flow** |  |  | |
| **Alternate Flow -** |  |  | |
| **Rules** |  | | |
| **Author** |  | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **Use Case ID** | UC00 | **Version** | 1.0 |
| **Feature** |  | | |
| **Purpose** |  | | |
| **Actor** |  | | |
| **Trigger** |  | | |
| **Precondition** |  | | |
| **Scenario Name** | **Step** | **Action** | |
| **Main Flow** |  |  | |
| **Alternate Flow -** |  |  | |
| **Rules** |  | | |
| **Author** |  | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **Use Case ID** | UC00 | **Version** | 1.0 |
| **Feature** |  | | |
| **Purpose** |  | | |
| **Actor** |  | | |
| **Trigger** |  | | |
| **Precondition** |  | | |
| **Scenario Name** | **Step** | **Action** | |
| **Main Flow** |  |  | |
| **Alternate Flow -** |  |  | |
| **Rules** |  | | |
| **Author** |  | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **Use Case ID** | UC00 | **Version** | 1.0 |
| **Feature** |  | | |
| **Purpose** |  | | |
| **Actor** |  | | |
| **Trigger** |  | | |
| **Precondition** |  | | |
| **Scenario Name** | **Step** | **Action** | |
| **Main Flow** |  |  | |
| **Alternate Flow -** |  |  | |
| **Rules** |  | | |
| **Author** |  | | |

3.4 Design Constraints

This section outlines the standard compliances that are related to CPMS.

3.4.1 ???

Tbd

3.5 Software System Attributes

This section specifies the attributes that are expected from CPMS and their implementations.

3.5.1 Accuracy

The accuracy requirements for CPMS are as follows:

|  |  |  |  |
| --- | --- | --- | --- |
| Requirement ID | Description | Priority | Author |
| REQ\_Q001 |  |  |  |

3.5.2 Security

The security requirements for CPMS are as follow:

|  |  |  |  |
| --- | --- | --- | --- |
| Requirement ID | Description | Priority | Author |
| REQ\_Q00X | CPMS shall keep log for every transaction both on the application and in the database. | High | Low Mun Kit |