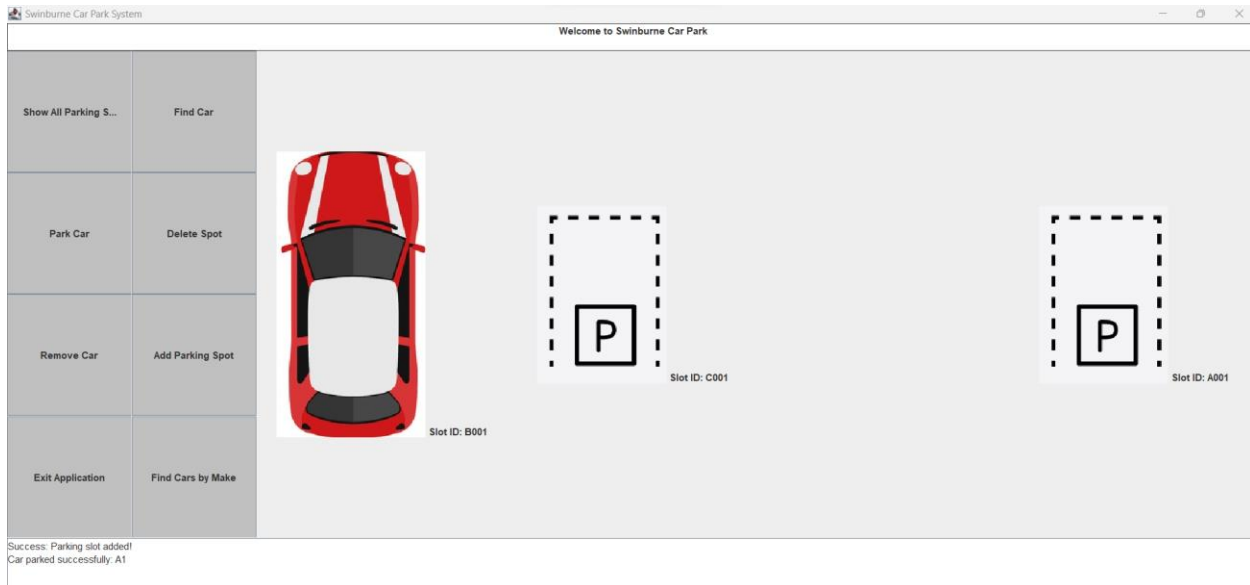# Swinburne Car Park System- GUI User Guide

Welcome to the Swinburne Car Park System! This graphical user interface (GUI) is designed to provide a user-friendly way to interact with the car park management system. This document will guide you through the basic functionalities of the GUI and how to use them effectively.

Getting Started

Launching the Application:

To start using the GUI, simply run the application. Upon launch, you will see the main window, which serves as the control center for managing car park operations.

Main Interface:

The main window consists of several key components:

- **Header Panel:** Displays the system title and an image.
- **Action Panel:** Contains action buttons for various system functions.
- **Slot Panel:** Displays parking slot buttons.
- **Output Area:** Shows system messages and output.

Using the GUI

Action Buttons

The Action Panel on the left side of the main window contains action buttons for different tasks:

- **Show All Parking Spots:** Click this button to view a list of all parking slots and their statuses.
- **Find Car:** Use this button to search for a car by its registration number.
- **Park Car:** Click this button to park a car in an available parking slot.
- **Delete Spot:** Remove a parking slot by clicking this button.
- **Remove Car:** Remove a car from a parking slot using this button.
- **Add Parking Spot:** Add a new parking slot by clicking this button.
- **Find Cars by Make:** Search for cars based on their make.
- **Exit Application:** Close the application using this button.

Parking Slot Buttons

The Slot Panel on the right side of the main window displays parking slot buttons.

- **Occupied Slots:** Slots with cars parked are displayed in red car image.
- **Available Slots:** Unoccupied slots are displayed in parking slot image.

Click on a parking slot button to either park a car in that slot or remove a car from it, depending on its status.

Output Area

The Output Area at the bottom of the main window displays system messages and output. It provides feedback on actions performed and information on car park operations.

Additional Information

- You can explore various features of the GUI by clicking the action buttons and interacting with parking slot buttons.
- The GUI is designed to simplify car park management tasks and provide real-time feedback on operations.
- For further assistance, refer to the comprehensive event-handling functions and GUI components described in the code documentation.