

GUI Components:

1. **MainFrame:** The main window of the Swinburne Car Park System, containing various panels and components.
2. **HeaderPanel:** A panel at the top of the main window, displaying the system title and an image.
3. **MainPanel:** A central panel containing action buttons and parking slot buttons.
4. **ActionPanel:** A panel on the left side of the MainPanel, housing action buttons for various system functions.
5. **SlotPanel:** A panel on the right side of the MainPanel, used for displaying parking slot buttons.
6. **OutputTextArea:** A text area at the bottom of the MainFrame, used to display system messages and output.

Event-Handling Functions:

1. **handleButtonClick(String buttonName):** Handles button clicks for action buttons such as "Show All Parking Spots," "Delete Spot," "Add Parking Spot," "Park Car," "Find Car," "Remove Car," "Find Cars by Make," and "Exit Application."
2. **parkCarInSlot(ParkingSlot parkingSlot):** Handles the process of parking a car in a selected parking slot, including user input for car details.
3. **removeCarFromSlot(ParkingSlot parkingSlot):** Handles the removal of a car from a selected parking slot.
4. **handleSlotButtonClick(ParkingSlot parkingSlot):** Handles button clicks on parking slot buttons, allowing users to park or remove cars from slots.
5. **refreshPanel():** Refreshes the entire panel, clearing and re-adding GUI components to reflect any changes.
6. **addMainPanel():** Initializes and adds the MainPanel, ActionPanel, and parking slot buttons to the interface.
7. **addHeaderPanel():** Initializes and adds the HeaderPanel, which displays the system title and an image.
8. **appendToOutput(String text):** Appends text to the OutputTextArea, displaying system messages and output.
9. **prepareGUI():** Sets up the entire graphical user interface, including the MainFrame, HeaderPanel, MainPanel, ActionPanel, and OutputTextArea.
10. **actionPerformed(ActionEvent e):** Handles action events, such as button clicks, and calls the appropriate event-handling functions based on the button clicked.