

## Acceptance Criteria

- As a student, I want to browse available cars, so that I can find a suitable option.
  - When I select the "Browse Cars" option, I can see a list of all cars currently available for rent.
  - When I select a car from the list, I can view detailed information including car type (e.g., sedan, SUV), price per day, availability dates, and pickup location.
  - When another user books a car I am viewing, the system updates the availability status in real time, removing unavailable cars from my list or marking them as "reserved."
  - When I browse available cars from a mobile device or desktop, the interface is user-friendly, readable, and fully functional on both platforms.
  - When no cars are available matching my criteria, the system displays a clear message (e.g., "No cars available for your selection") instead of an empty list.
- As a student, I want to filter rental cars by price, type, fuel, and location, so that I can choose a car within my budget
  - When I set a price range filter (e.g., \$20–\$50 per day), the system updates the list to show only cars within my specified budget.
  - When I select a car type filter (e.g., sedan, SUV, hatchback), the system updates the list to display only cars matching the chosen type.
  - When I choose a fuel type filter (e.g., gasoline, electric, hybrid), the system updates the list to show only cars with the selected fuel type.
  - When I specify a location filter (e.g., city or rental branch), the system updates the list to show only cars available at that location.
  - When I apply multiple filters together (e.g., price under \$30, sedan, electric, at a specific branch), the system combines them and displays only cars meeting all selected criteria.
  - When I adjust or remove any filter, the system immediately updates the car list to reflect my new preferences.
  - When there are cars matching my filter criteria, the updated list includes at least one option I can choose within my budget.
- As a student, I want to check car availability, so that I can plan my rental accordingly
  - When I access the car rental system and select the "Browse Cars" or "Check Availability" option, I can see a list of cars with their current availability status (e.g., "Available," "Reserved," "In Maintenance").
  - When I view a car's details, the system displays its availability for specific dates or time periods (e.g., "Available from March 5 to March 10").

## **User Story 1: "As a student, I want to browse available cars, so that I can find a suitable option"**

### **Main Scenario**

1. The student accesses the Car Rental System through a website or app.
2. The student selects the "Browse Cars" option from the main menu.
3. The system displays a list of all cars currently available for rent, showing basic details like car type and price per day.
4. The student reviews the details and finds the car suitable for their needs.
5. The student decides to proceed with booking or continues browsing other options.

## **User Story 2: "As a student, I want to filter rental cars by price, type, fuel, and location, so that I can choose a car within my budget"**

### **Main Scenario**

1. The student opens the Car Rental System on their phone or computer.
2. The student sets the price filter to "\$20–\$30 per day," selects "sedan" as the car type, chooses "electric" as the fuel type, and picks "Downtown Branch" as the location.
3. The system processes the filters and updates the list within 3 seconds, displaying only electric sedans available at the Downtown Branch for \$20–\$30 per day.
4. The student sees a car in the list that matches their criteria (e.g., an electric sedan for \$28/day).
5. The student selects the car to view its details, confirming it fits their budget and preferences.
6. The student decides they have found a suitable car within their budget and proceeds to the next step (e.g., booking or saving the option).

## **User Story 3: "As a student, I want to check car availability, so that I can plan my rental accordingly"**

### **Main Scenario**

1. The student visits the Car Rental System via a browser or app.
2. The student selects the "Check Availability" or "Browse Cars" option from the interface.
3. The system shows a list of cars with their current availability status (e.g., "Available," "Reserved").
4. The student enters a desired rental period (e.g., March 5 to March 7) and selects a pickup location (e.g., "Campus Branch").
5. The student selects a car from the list (e.g., a hatchback marked "Available").
6. The system displays the car's availability details, confirming it is free for the entire requested period and showing the pickup location.

7. The student verifies the availability aligns with their plans and chooses to proceed with booking or notes the details for later.