



**Critical  
Techworks**

# Car Pool Management Tool

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**Joy in Motion**

# Description

At Critical TechWorks we have a set of cars that are available for anyone in the company to try out the products that we are developing.

The number of cars in the pool is considerably lower than the number of employees that usually would like to take a car for a ride. We need a platform to manage the resources usage in the best way possible.

The car management tool is that platform.

# User Story – Add new car

As a car management tool user, I want to add new cars to the pool so that they are available in the carpool list.

The car should have the parameters defined in the entity relation model at the end of this document.

# User Story – List all cars

As a car management tool user, I want to list all cars so that I am able check what cars are available in the carpool.

The car should have the parameters defined in the entity relation model at the end of this document.

# User Story – Consult car detail

As a car management tool user, I want to consult all the details of a car so that I can see the current status of a car.

The car should have the parameters defined in the entity relation model at the end of this document.

# User Story – Remove car

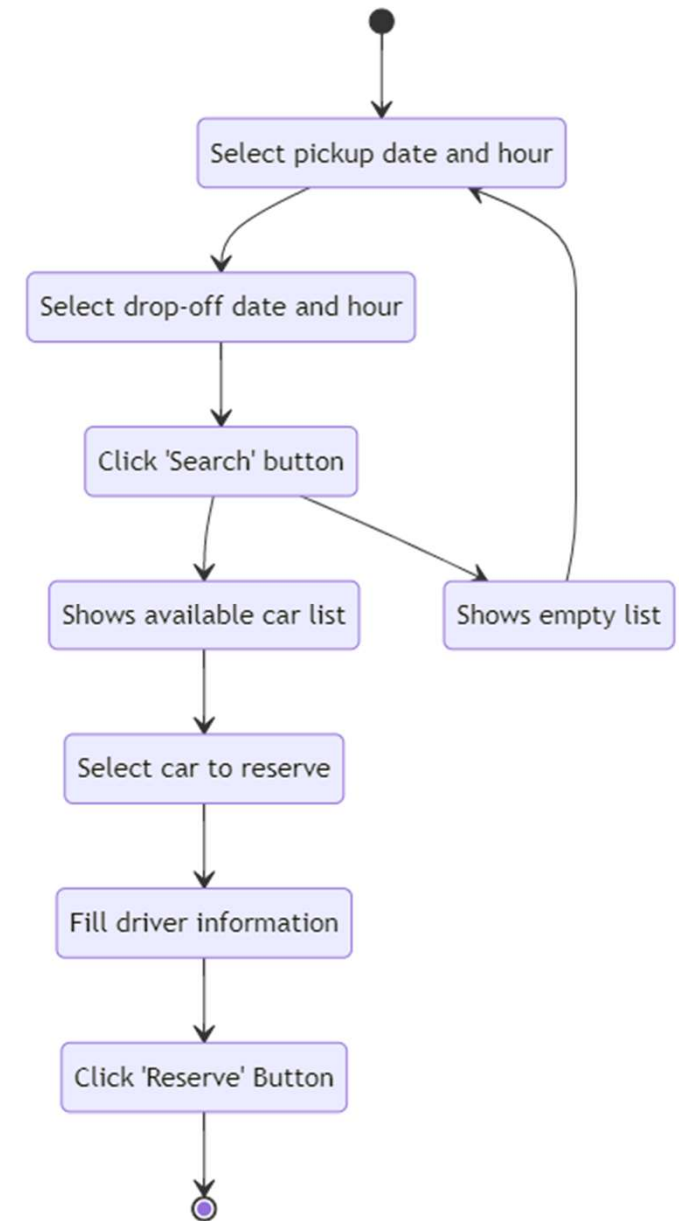
As a car management tool user, I want to remove a car from the pool so that I can no longer see the car in the list.

# User Story – Reserve a car

As a car management tool user, I want to reserve a car from the carpool so that the car is no longer available to reserve in an overlapping period.

The reservation should have the parameters defined in the entity relation model at the end of this document.

Follow the diagram to define the user experience.

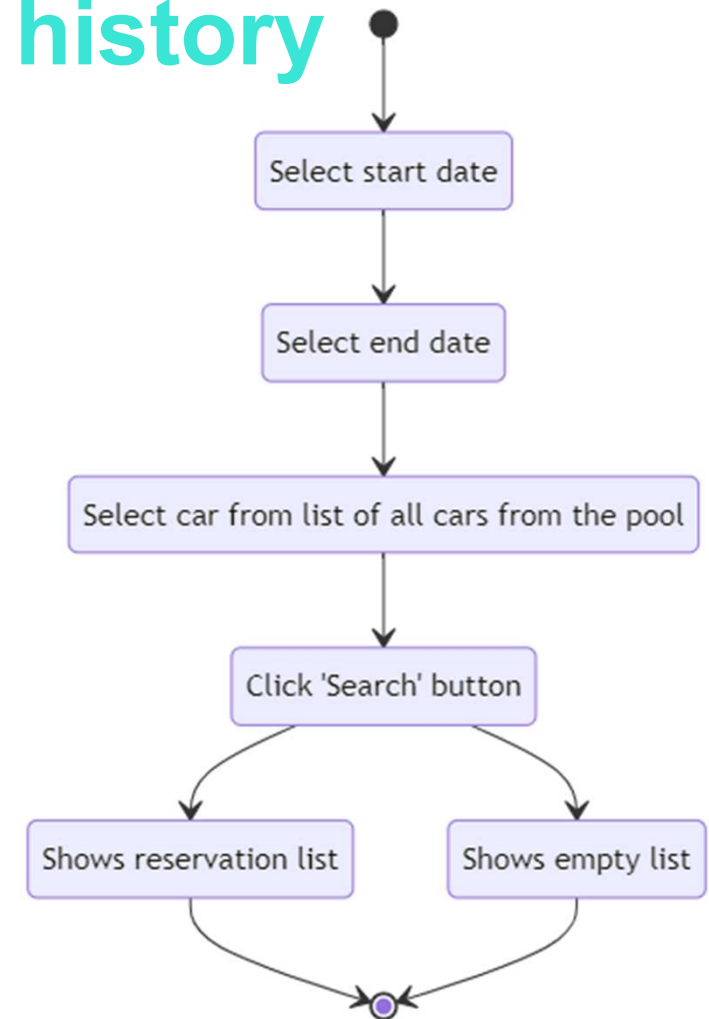


# User Story – Consult reserve history

As a car management tool user, I want to consult the reserve history for a specific car in order to check what reserves were made during a defined time slot.

To consult the reservations, I should select a car from the pool, define a time period (start date and end date) and I should get a list of all reservations for that period with the information about the car (brand and model), pickup date, drop-off date and driver name.

Follow the diagram to define the user experience.

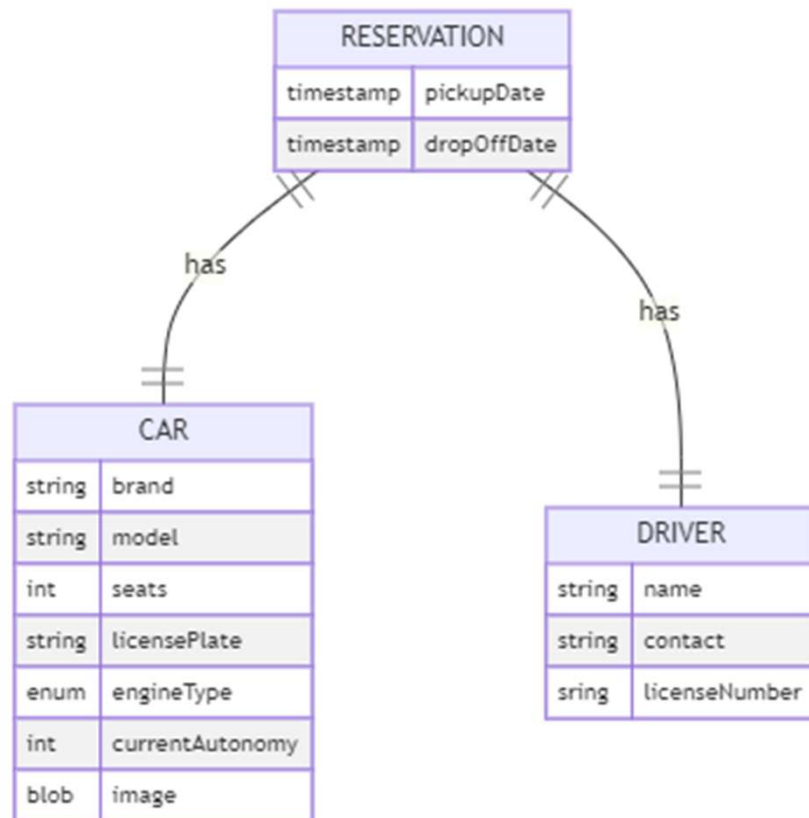




# Beyond the MVP. Extended requirements

- Reservation restrictions.
  - A car cannot be reserved for more than 4 days.
  - There should be at least one hour interval between reservation:
    - The pickup date should be at least one hour after the previous reservation.
    - The drop-off date should be at least one hour before the next reservation.
  - Weekend reservation only from Friday 20:00 till Monday 08:00.

# Entity Relation Model



- A reservation has one car and one driver
- The engineType parameter for a car can have the following values:
  - COMBUSTION
  - ELECTRIC
  - HYBRID



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