

## Technical report

### CarSells

This is a technical report for the software platform to be able to see the catalog of vehicles in our company.

### User stories

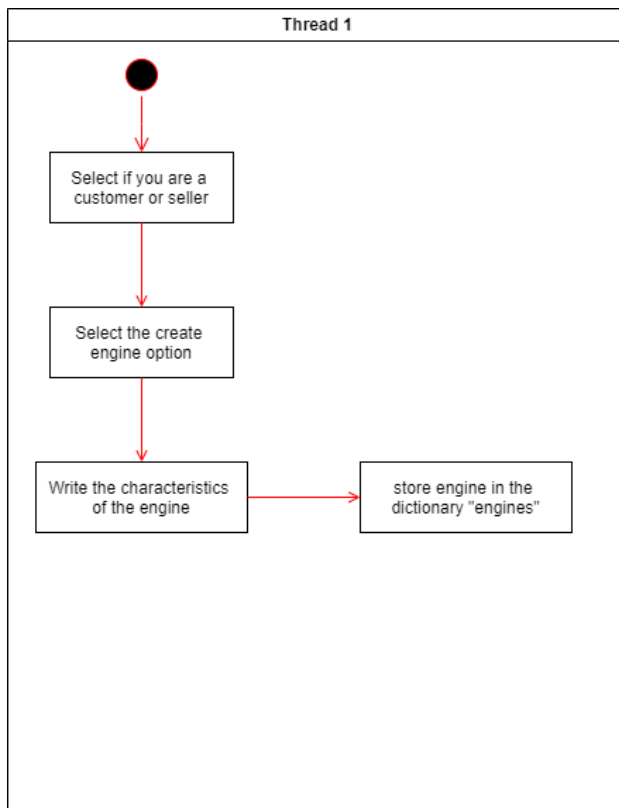
- As a seller, I want to be able to create new vehicles and engines with all their features, to keep the catalog updated and offer a wide variety of options to customers.
- As a customer, I want to be able to search for vehicles by type (car, motorcycle, yacht, truck) and specific characteristics, to quickly find vehicles that fit my needs and preferences.
- As a customer, I want to be able to save vehicles that I liked, so that it is easier to keep in mind the vehicles that I like

Some of the requirements for this software are:

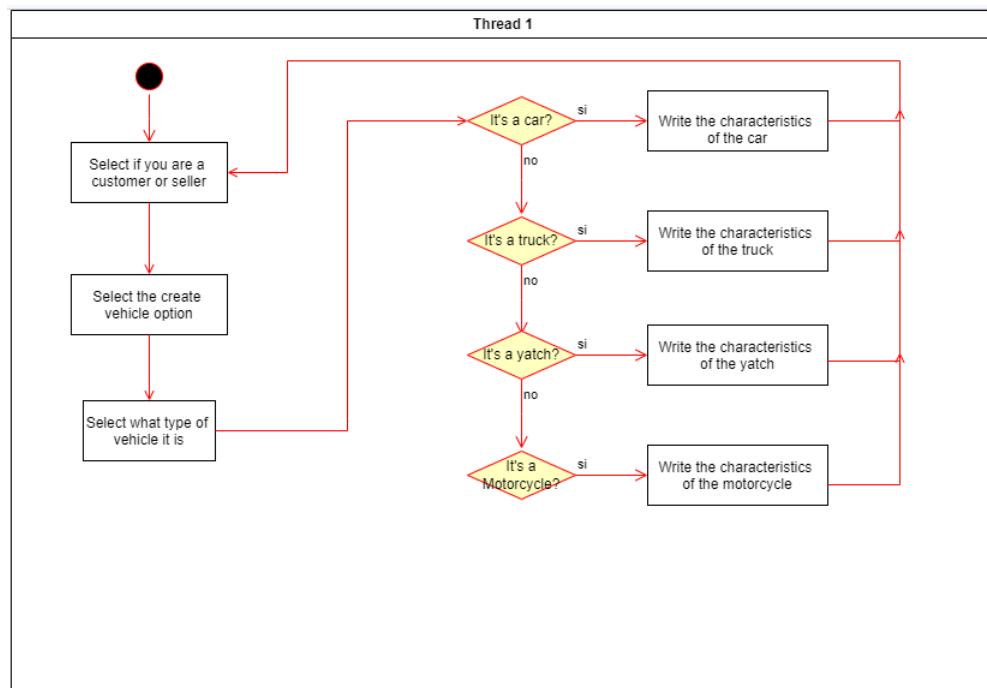
- Each vehicle has at least engine, chasis (\_A\_ or \_B\_), model, gas consumption, and year. Depending on the vehicle type, you should define additional properties.
- There are different vehicle types (for now): car, truck, yacht, and motorcycle.
- Each engine has at least a name, type of engine, potency, and weight.
- To calculate the vehicle gas consumption you could create a method based on:
- $1.1 * \text{engine.potency} + 0.2 * \text{engine.weight} - (0.3 \text{ if A or } 0.5 \text{ if B})$

## Activities Diagrams:

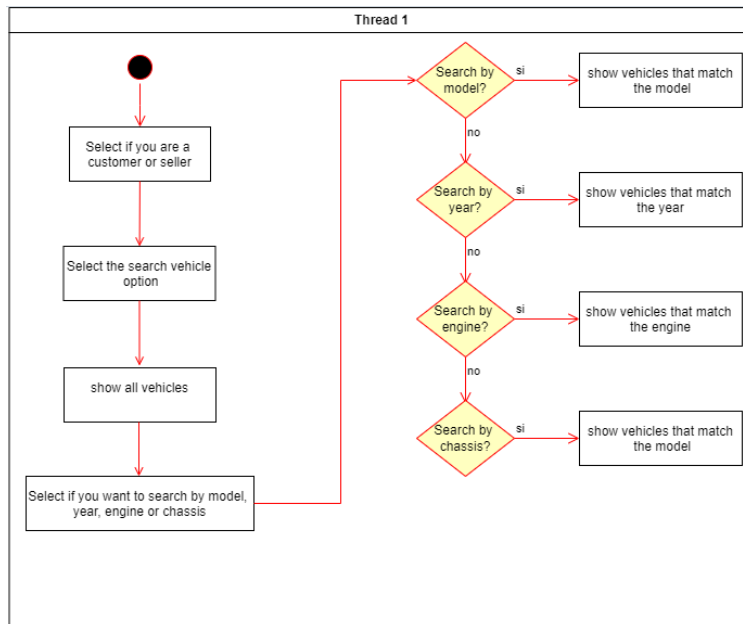
- Create engines:



- Create vehicles:



- Search Vehicles:




UI prototypes

- add engine form

The UI prototype is divided into two main sections. On the left, there is a blue background with a stylized illustration of a red and silver V-engine. On the right, there is a white background with the title 'Add engine' in bold black text. Below the title, there are four rectangular input fields with rounded corners, each containing a placeholder text: 'Name', 'Type of engine', 'Potency', and 'Weight'. At the bottom of the form, there is a blue rounded rectangular button with the text 'Add' in white.

- add vehicle form



### Add vehicle

Engine

Model

Year

Chasis

☐ A

☐ B

Add

- Show engines

Engines			
Name	Type of engine	Potency	Weigth

- Show Vehicles

Vehicles			
Model	Engine	Year	Chassis

communication data structure (JSON)

- create engine:

```
{  
  "name": "V8 Turbo",  
  "type_motor": "Internal Combustion",  
  "potency": 450,  
  "weight": 320.5  
}
```

- create vehicle:

```
{  
  "vehicle_type": "car",  
  "model": "Model S",  
  "year": 2023,  
  "chassis": "A",  
  "engine": {  
    "name": "V8 Turbo",  
    "type_motor": "Internal Combustion",  
    "potency": 450,  
    "weight": 320.5  
  }  
}
```