

## Entities

- Users
- Catalog
- Vehicle
- Engines

## CRC cards

Vehicles	
- provide vehicle information	Engine Catalog

Truck	
- provide truck information - calculate gas consumption	Vehicle

Catalog	
- show a list of vehicles - add new vehicle (just manager) - let user apply filters to find vehicles	Vehicles Engines User Proxy

Engines	
- provide engine information	Vehicles Catalog

FactoryLowEngines	
- create low price engines	Vehicles

FactoryHighEngines	
- create high price engines	Vehicles

User	
- show menu - handle user interaction options	Catalog Decorator

FactoryHighEngines	
- create high price engines	Vehicles

Proxy	
- Get data and authentic the login	User Catalog

Decorator	
- Monitor the process of the user	User

## Conclusions

The diagram class is better for the goal of the requirements, trying to reduce memory and add new functionalities. But the problem is the development, I took a lot of time programming and that bring consequences such as not complete all the menu with requirements.

The structural patterns help us to think in a better way for know how to solve the problem and the goods things will have in the code and what we can to improve the code, making a code scability, low coupling

Code before coding is a terrible idea, I did it the last workshop and now I make the correct way and I see how I got all the ideas more clear, well , but this workshop is heavy and it affected me

Between more workshops like this, I will improve my logic coding, I still have errors that took me one hour to find the error and the error are like identation, cycles and more.