Technical report: Second workshop advanced programming

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User stories

-As a customer I want to have access to a menu to be able to give the specifications of the vehicle I want to buy.

-As a customer I want to have an option in the menu called engine type, to define the type of engine I want in my vehicle.

-As a customer I want to have options in the menu to choose each available vehicle, to create the vehicle I want to buy.

-As a customer I want to have the option in the menu to review the vehicle I have designed, to verify the complete characteristics of the vehicle.

-As an administrator, I would like to have the option to review the vehicles created so far, to determine which vehicles the company offers.

-As an administrator, I want to have the option to review the engines created so far, to determine which engines the company offers.

-As a user I want to have a way to log in, to identify myself in a unique way in the system.

CRC Cards:

Engine	
Responsability	Collaboration
-Have the attributes of the engine. -Have a method that allows you to create an engine.	Vehicle Client Administrator

Vehicle	
Responsability	Collaboration
-Create a vehicle. -Calculate gas consumption. -Obtain the model of the vehicle. -Get the type of chassis, - Obtain the year of creation of the vehicle. -Get the engine created by the user.	Engine Client Administrator

-Obtain the gas consumption of the vehicle.	

User	
Responsability	Collaboration
-Have the user's attributes. - Register the user with an identifier and a password. -Sign in. -Have an access dictionary to determine the user's role.	Engine Vehicle Client Admin

Client	
Responsability	Collaboration
-Have the attributes of the customer. - Register the customer with an identifier and a password. -Obtain the customer's vehicles. -Sign in	Engine Vehicle User

Admin	
Responsability	Collaboration
-Have the attributes of the admin. -Register the admin with an identifier and password. - Get the vehicles created in the system. -Get the engines created in the system. -Sign in	Engine Vehicle User

To do: moto, car, yate …..
Class diagram

User

+ name: str
+ dict: Access
+ Register()
+ Login()

Extends — Extends

Admin

+ name: str
+ dict: Access
+get_system_engines()
+get_system_vehicles()

Client

+ name: str
+ get_user_vehicles()

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Engine

+Name: String
+Type:String
+Weight: Float
+Potency. int
+Engine()

Vehicle

-Chassis
-Model
-Year
-Gas_consumption
-Engine
+Vehicle()
+calculate_consumption()
+get_model()
+get_chassis()
+get_year()
+get_gas_consumption()
+get_engine()

Motocycle

Extends

Extends — *Car*

Extends — *Yacht*

Extends — *Truck*