

# **ACO TP report**

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Course : M1 CSE

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## **I. User stories**

All of the User stories have a JUnit test associated. The tests are ordered and named accordingly.

### **1. As a user I can get the list of part categories (see table above) to select a category.**

The category « Engine » correctly gives the following parts :

EG100, EG133, EG210 ED110, ED180, EH120.

### **2. As a user I can select a part variant for a given part category to put that part in the configuration.**

The addition of a part to the configuration correctly adds it.

### **3. As a user I can see if my current configuration is valid or not, i.e. a configuration is invalid if and only it contains incompatible parts or does not contain all the parts required by part included in the configuration.**

#### **3.1) invalid configuration – Required Parts**

the function `verify()` returns false when the configuration has a requirement that is not met.

#### **3.2) invalid configuration – Incompatible Part**

the function `verify()` returns false when the configuration has an incompatibility with another selected part.

#### **3.2) valid configuration**

the function `verify()` returns true when the configuration is valid.

### **4. As a user I can remove any part from the current configuration.**

The removal of a part in the configuration correctly removes it.

### **5. As an application admin I can edit the set of incompatible parts and required part stored in the application.**

It is supposed the user cannot add multiple motors.

#### 5.1) Add incompatibility

The addition of an incompatibility correctly adds it to the list and is immediately taken into account.

#### 5.2) Add requirement

The addition of a requirement correctly adds it to the list and is immediately taken into account.

#### 5.3) Remove incompatibility

The removal of an incompatibility correctly adds it to the list and is immediately taken into account.

#### 5.4) Remove requirement

The addition of an incompatibility correctly adds it to the list and is immediately taken into account.

### **6. As a user I can get an HTML description of my configuration, if it is complete and valid.**

The content of the HTML is file is correct and readable by a browser.

### **7. As a user I can get the current price (in euros) of my configuration, even if it is incomplete (but it must be valid).**

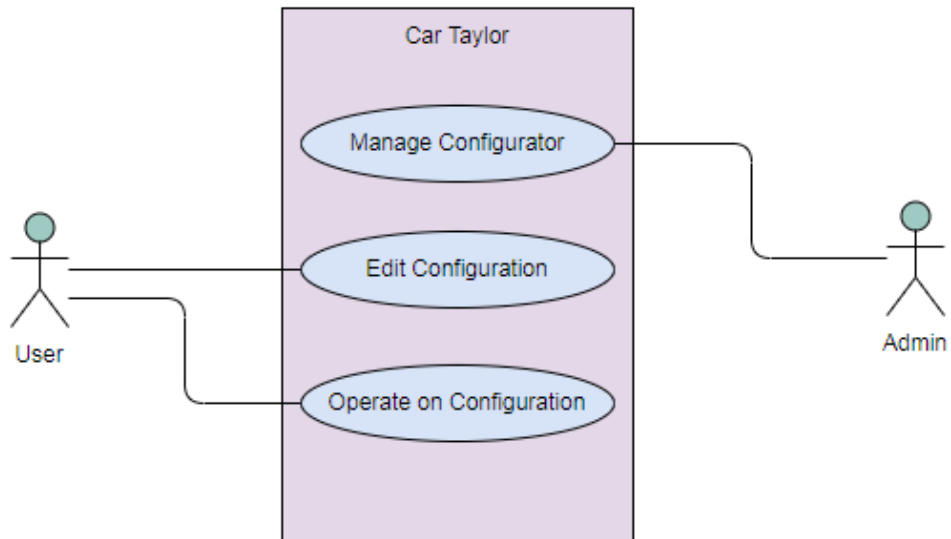
The price is correctly given even if the configuration is incomplete.

### **8. As a user I can select the colour of the exterior paint, from a limited subset provided by the application (the subset can depend on the exterior part type that I have selected).**

The colour can be changed and is taken into account by the system. It is supposed the user cannot enter a colour that is not being displayed by the interface,

## 2 Use Cases

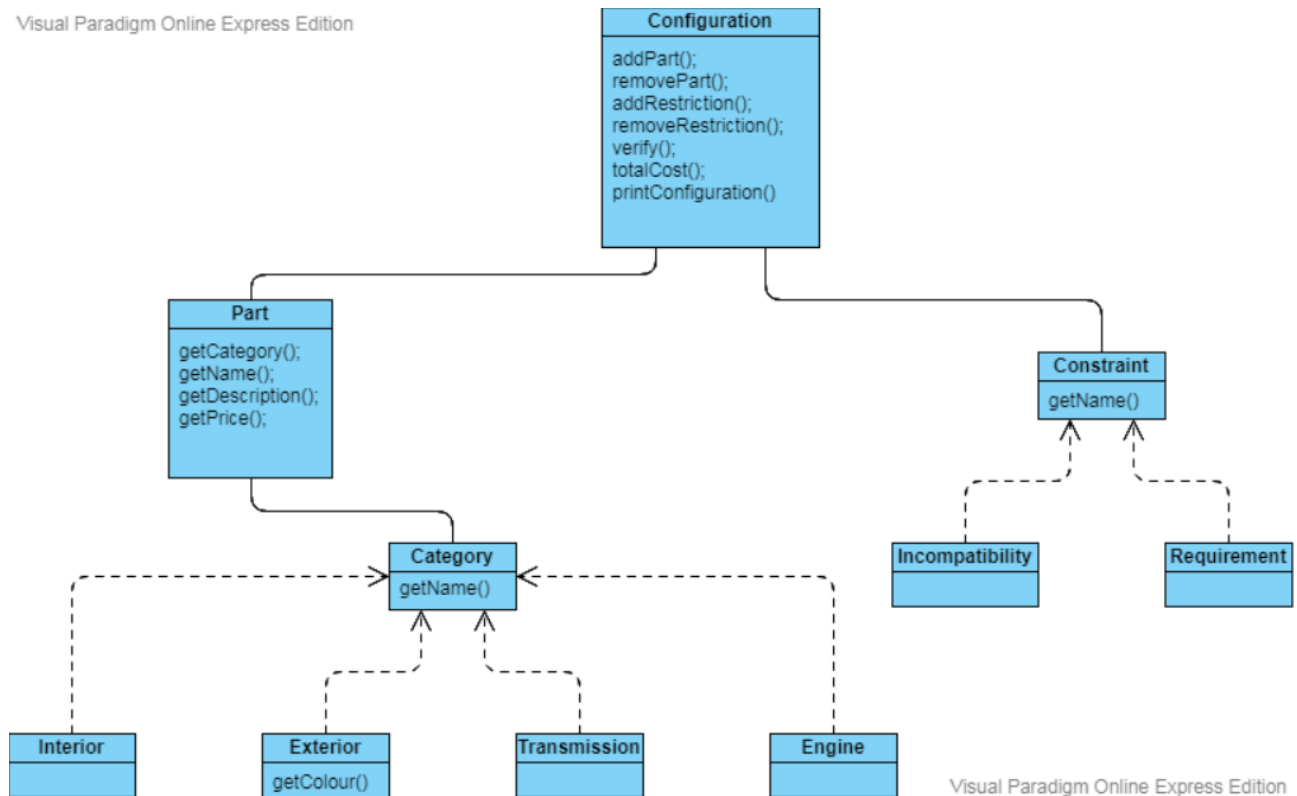
### Use case diagram



### 3 Schematics

#### 1. Class Diagram

Visual Paradigm Online Express Edition



Visual Paradigm Online Express Edition

## 2. Sequence Diagram for printDescription()

