

## P1U2 Documentation

In this documentation, I will elaborate some design thinking for this P1U2 Project.

First of all, in the model package, a Fleet class is added compared with P1U1 which use the LinkedHashMap data structure to store several Automobile objects. The model name of these Automobile objects will be used as the key in the HashMap. Also, some methods related with "User choices" are added to the Automobile compared with last time.

Secondly, in the exception package, the AutoException class implements the FixAuto interface and handles five different exceptions which may be encountered in this project. The "FileNotFoundException" exception is handled by asking the user to input the correct filename. If the filename cannot be found, a new message will be prompted to ask for another valid filename. The "MissingBasePrice" and "MissingModelName" are handled in a similar with the former one that will keep asking the user for valid input. The other two exceptions are handled by giving the default value if certain values are missing.

Thirdly, in the adapter package, the BuildAuto class extends the ProxyAutomobile abstract class and implements the four methods defined in the two interfaces. The BuildAuto class will be used finally as a class that is visible to the user(Not the classes in model package as P1U1).

Finally, in the Driver class, I create one BuildAuto object and after typing two test text filename, two Automotive objects are added to the fleet object in the BuildAuto object. For the first text file, some parts are missing so that I can test the five exceptions. The second text file is complete and related information will be printed directly. The rest codes in the Driver class are from the P1U1 project and the newly added methods related with "choices" required in this project.

To conclude, in this project, the most difficult thing is how to handle the self-defined exceptions. After going through the document and code given by our professor, I finally write the exceptions and handle them.