**Project Organization**

-(package) indi.yuanyuam.proj1.model : Hold the properties of the car

+ (class) Automobile: hold the car configuration

The methods in this class includes: setters and getters for name, make , model and base price, and print method to print the whole set.

+ (class) OptionSet: option set of car configuration

The class that can hold name of the model, base price and information about all the properties. The methods in this class includes: setters and getters for name and price, update method for name and price, and print method to print the whole set.

In addition, there is the inner class called Option.

+ (inner class) Option: options for each option set

The methods in this class includes: setters and getters for name, make , model and base price, and print method to print the whole set.

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- (package) indi.yuanyuam.proj1.util: package for Until

+ (class) FileIO: built the Automobile object, serialize and deserialize the object

The methods in this class includes the following methods:

+ “buildAutoObject” can built an Automobile object by reading in a txt file.

+ “readProperty” is used to create the properties object by the property file

+ “serializeAuto” is used for serializing Automobile object while + “derializeAuto” is used for deserializing Automobile object.

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- (package) indi.yuanyuam.proj1.adapter

+ (interface) CreateAuto:

+ “buildAuto “: create an Automobile object by txt file or Properties file

+ “printAuto” : searches and prints the properties of a given Automobile

+(interface) UpdateAuto:

Include two methods: update the option set name and price

+(interface) FixAuto

Include the method: fixAuto

+(class) BuildAuto

This class extends ProxyAutomobile, implement CreateAuto, FixAuto, and UpdateAutoi interfaces.

+(extract class) ProxyAutomobile

* This  class contains all the implementation of any method declared in the interface.

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- (package) indi.yuanyuam.project.exception

+ (class):ExceptionEnum

This is an enum class for enumeration all exceptions

+ (class): AutoException

+ (class): Helper

Includes the method fixing all exception listed in CustomExceptionEnum.

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- (package) indi.yuanyuam.project.scale

+ (class): EditOption

Includes the methods to update the option set name, option name and option price through threads.

+ (class): AutoException

This is an enum class for enumeration all objects need to edit

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- (package) indi.yuanyuam.project.server

+ (interface): AutoServer

Implemented by BuildAuto

Includes the methods to create Automobile Object :

+ “createAutoByProperty ” : Method to accept properties object from client socket over an and create an Automobile. Then add that created Automobile to the LinkedHashMap

+ “createAutoByTxt” : Method to accept txt file from client socket over an ObjectStream and create an Automobile. Then add that created Automobile to the LinkedHashMap

+ “getAllModelList” : return all available automobile in LinkedHashMap

+ “sendSelectedModel” : return selected model to client

+ (class):DefaultSocketServer

This class extends Thread implements SocketServerInterface, SocketServerConstants

This class mainly includes the methods that dealing with session (open, handle and close).

+ (class) : Server

This class interacts with client using DefaultSocketServer.

+ (class): SocketServetConstants

Define the port for this client and a boolean value indicating whether start debug model

+ (class): SocketServerInterface

Includes the methods that are used to deal with sessions

+ “openConnection”

+ “handleSession”

+ “closeSession”

Ps. All the methods in class “OptionSet” and “Option” are protected and variables in class “Automobile”, OptionSet” and “Option” are private. Other class can not access the optionset and option directly ( must access them by Automobile class).