Project Organization

-(package) indi.yuanyuam.proj1.driver

+ (class) Driver :Create Automobile by BuildAuto , then test the update method and methods relative to "choice".

+ (class) DriverException: load in a file with missing several information. Test the whether the program can fix the exception properly.

+ (class) DriverMultiThreadEdit:

When multiple threads try to edit the information (including option set name, option name and option price), the program uses the "synchronize" to make sure the correct results. Thread1, thread 2 are used to edit the option set name. Thread3, thread 4 are used to edit the option name while thread 5, thread 6 are used to edit the option price.

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

+ (class) AutoList: A linkedHashMap of Automobile

The methods in this class includes: set Automobile object from file, get Automobile, update the option set and option name;

+ (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.test: all the test classes

   + (class) TestAutomobileOption: test the methods defined in Automobile class which are relative to option operation.

   + (class) TestAutomobileOptionSet: test the methods defined in Automobile class which are relative to option set operation.

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

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

      The methods in this class includes the method readFile to built the Automobile object. Method serializeAuto is used for serializing Automobile object while method derializeAuto is used for deserializing Automobile object.

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- (package) indi.yuanyuam.proj1.adapter

   + (interface) CreateAuto:

         Include two methods: buildAuto and printAuto;

   +(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

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).