

Project1_Unit4

By Yi (Elliot) Cao

Andrew: yc2

Overall Total - 33.5/40

-5 constants and socket interface not implemented

-1.5 total price should be displayed and calculated as per configuration

Changes made to reclaim points:

- Socket constants interface has been implemented as ScketConstans.java both in server and client side;
- Final total price as been calculated as test in page 10

Test cases have been presented from page 6-10

6.5 possible points could be added back;

Overall understanding of unit4:

As for this unit4, I strictly follow the requirements and give adequate test. The client can Exit, Upload, Get and Select. The Server side can access multiple clients' request and operated as requested. As for the test, we can open the server first and start several clients to take different different operations. We have 6 packages for client and server.

As for the server side:

Adaptor :

BuildAuto: a class implements all functions of proxyAutomobile, CreateAuto, UpdateAuto, mainly used for hiding all these function from users.

CreateAuto: an interface, used to build auto object and print auto object

FixAuto: an interface, used to fix the exceptions

proxyAutomobile: encapsulate all “CRUD” operations for automobile

UpdateAuto: an interface, used to update the OptionSet and Option

EditThreads: an interface, used to bridge the EditOptions and BuildAuto class

Exception:

AutoException: implements FixAuto used to fix exceptions:

ExceptionNum: to enumerate all exceptions

Helpers: include different fix methods for different exceptions

log: used to record the timestamp of exception and the err message of exception

Model:

Automobile: encapsulate all necessary operations and attributes for car

OptionSet: encapsulate all optionset and options’ operation and attributes

AutoList: encapsulate automobile operations and attributes

Util:

FileIO: used to build auto object and serialization and deserialization

Scale:

EditOptions: implement multithreads operations

OptinNum: to enumerate all edit options

Server:

AutoServer: the interface includes all responses for client request operations

BuildCarModelOptions: implements the AutoServer

DefaultSocketServer: access the client side requests

Server: start the server side;

SocketConstants: include the constants for socket

As for the client side:

Adaptor :

BuildAuto: a class implements all functions of proxyAutomobile, CreateAuto, UpdateAuto, mainly used for hiding all these function from users.

CreateAuto: an interface, used to build auto object and print auto object

FixAuto: an interface, used to fix the exceptions

proxyAutomobile: encapsulate all “CRUD” operations for automobile

UpdateAuto: an interface, used to update the OptionSet and Option

EditThreads: an interface, used to bridge the EditOptions and BuildAuto class

Exception:

AutoException: implements FixAuto used to fix exceptions:

ExceptionNum: to enumerate all exceptions

Helpers: include different fix methods for different exceptions

log: used to record the timestamp of exception and the err message of exception

Model:

Automobile: encapsulate all necessary operations and attributes for car

OptionSet: encapsulate all optionset and options’ operation and attributes

AutoList: encapsulate automobile operations and attributes

Util:

FileIO: used to build auto object and serialization and deserialization

Scale:

EditOptions: implement multithreads operations

OptinNum: to enumerate all edit options

Client:

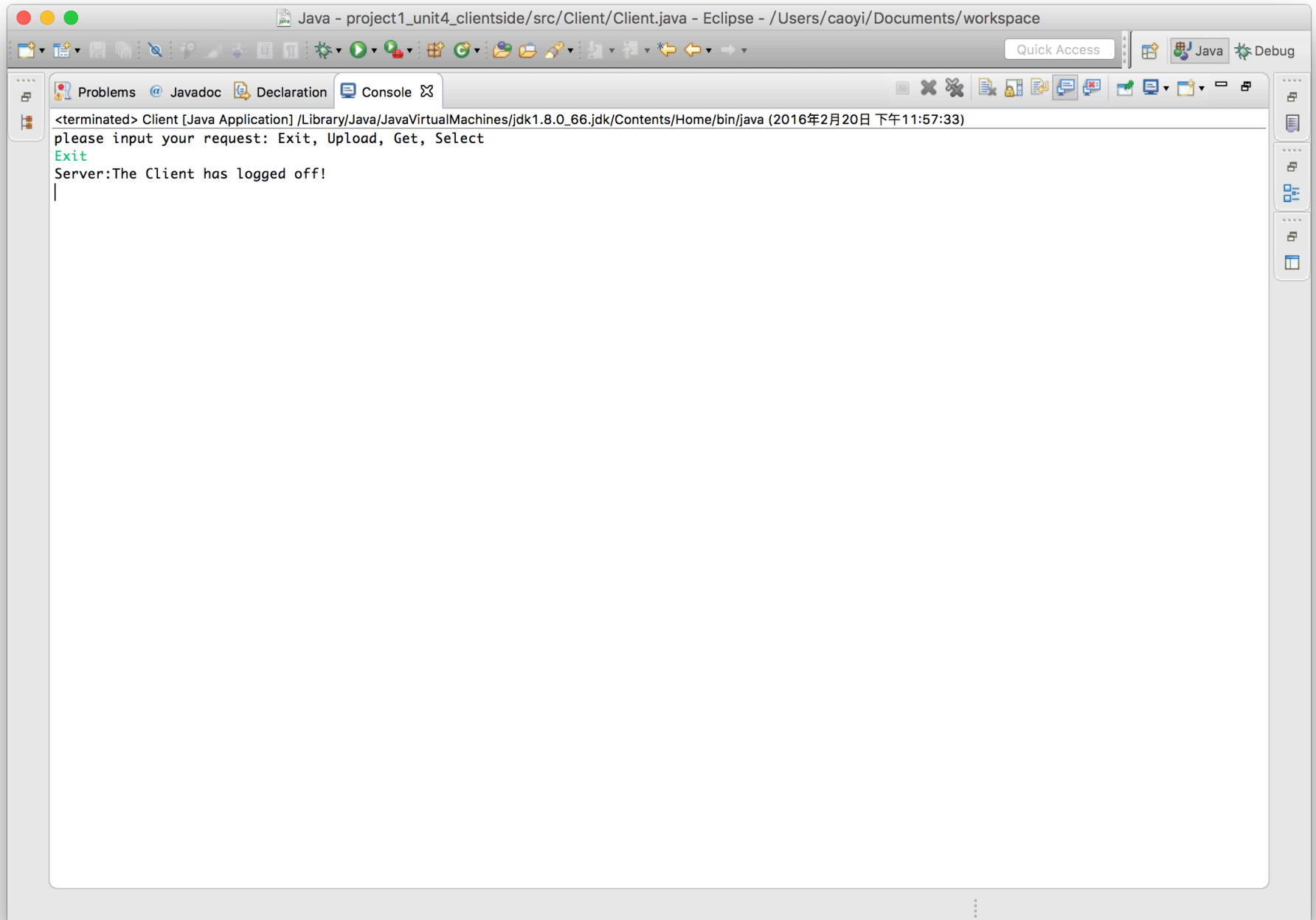
CarModelOptionsIO: bridge the communication to the server side

DefaultSocketClient: access the server side requests

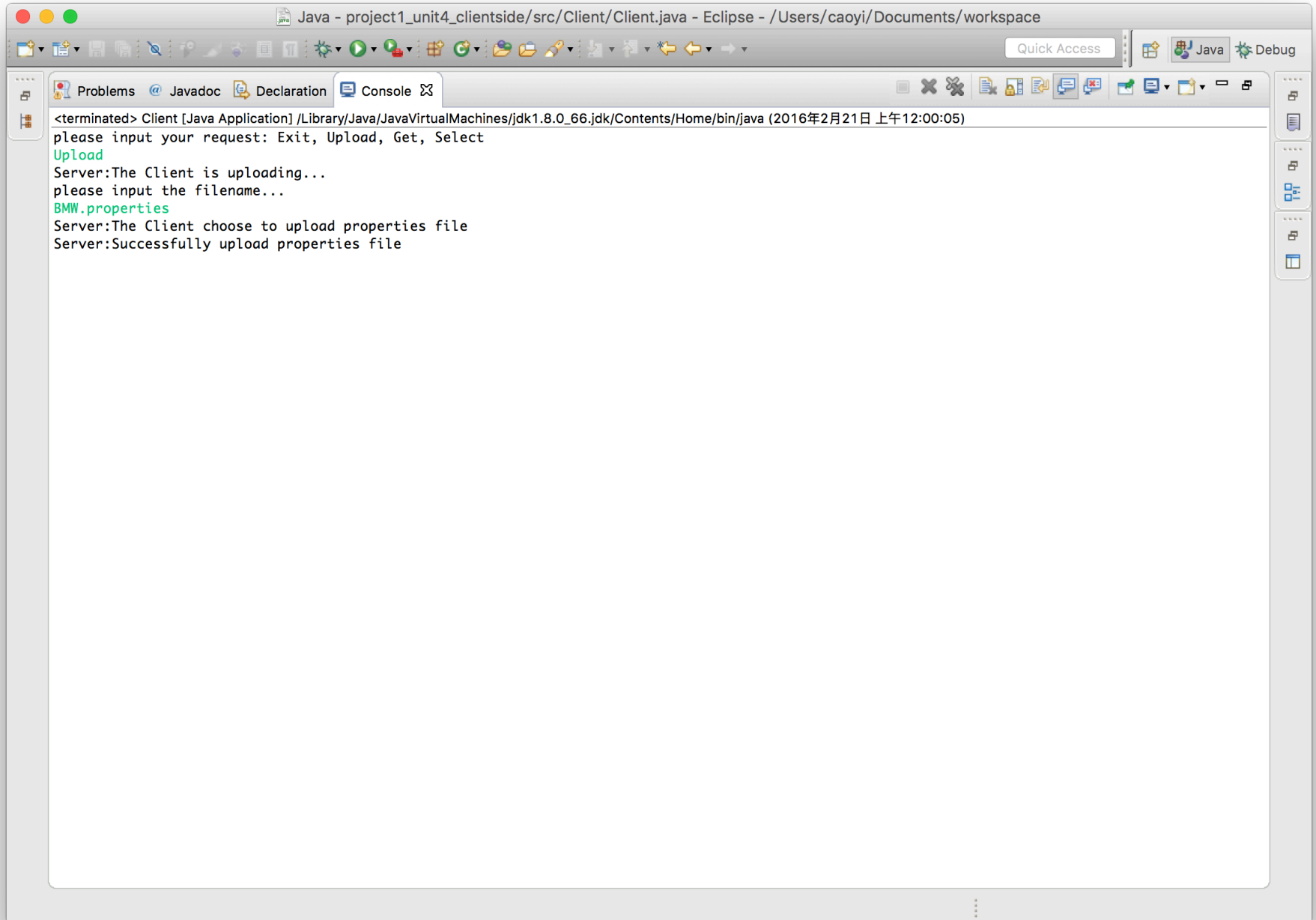
Client: start the client side;

SocketConstants: include the constants for socket

Test Exit



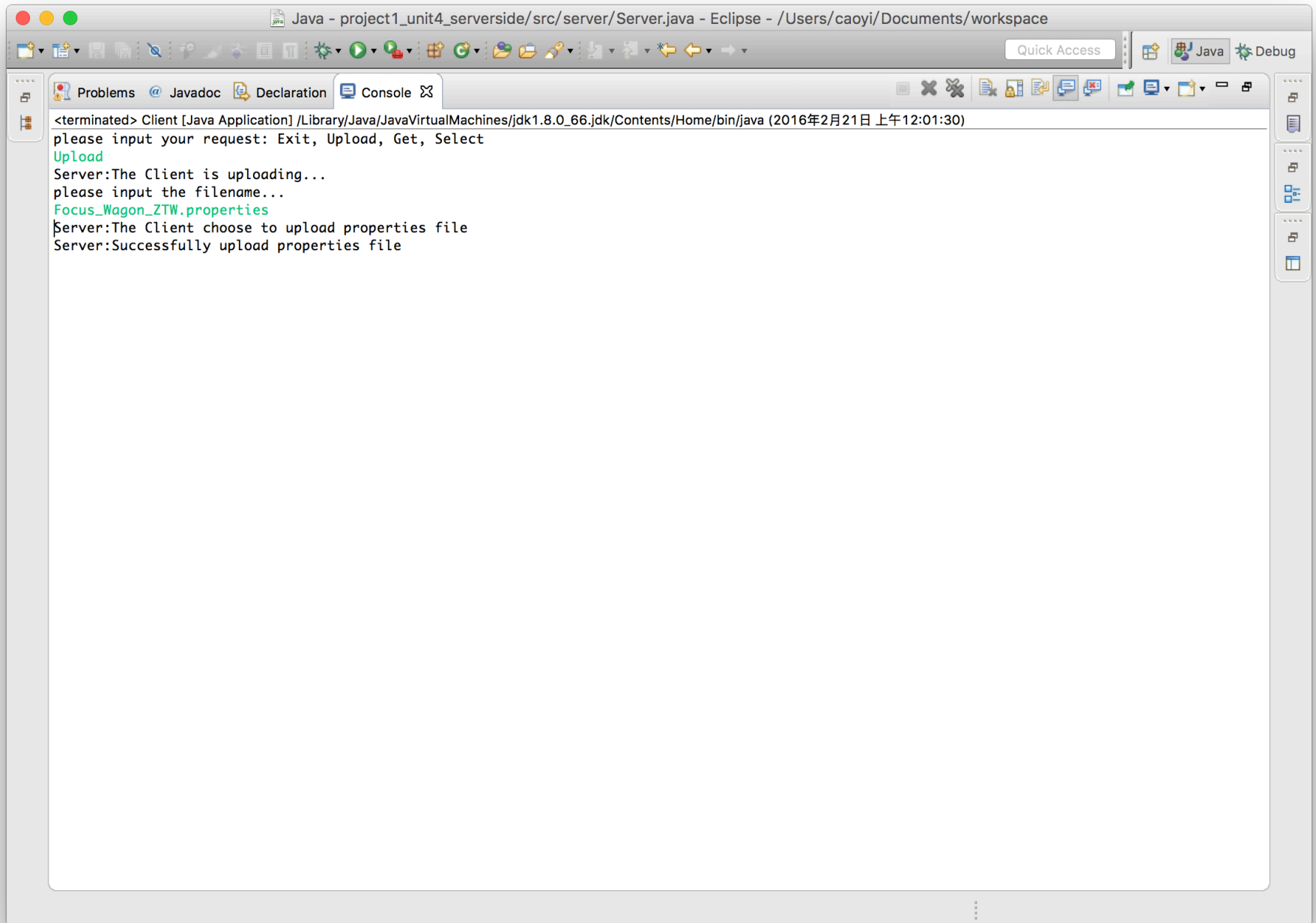
Text Upload



The screenshot shows the Eclipse IDE interface with the 'Console' tab selected. The title bar indicates the file path: 'Java - project1_unit4_clientside/src/Client/Client.java - Eclipse - /Users/caoyi/Documents/workspace'. The console output shows the following sequence of events:

```
<terminated> Client [Java Application] /Library/Java/JavaVirtualMachines/jdk1.8.0_66.jdk/Contents/Home/bin/java (2016年2月21日 上午12:00:05)
please input your request: Exit, Upload, Get, Select
Upload
Server:The Client is uploading...
please input the filename...
BMW.properties
Server:The Client choose to upload properties file
Server:Successfully upload properties file
```

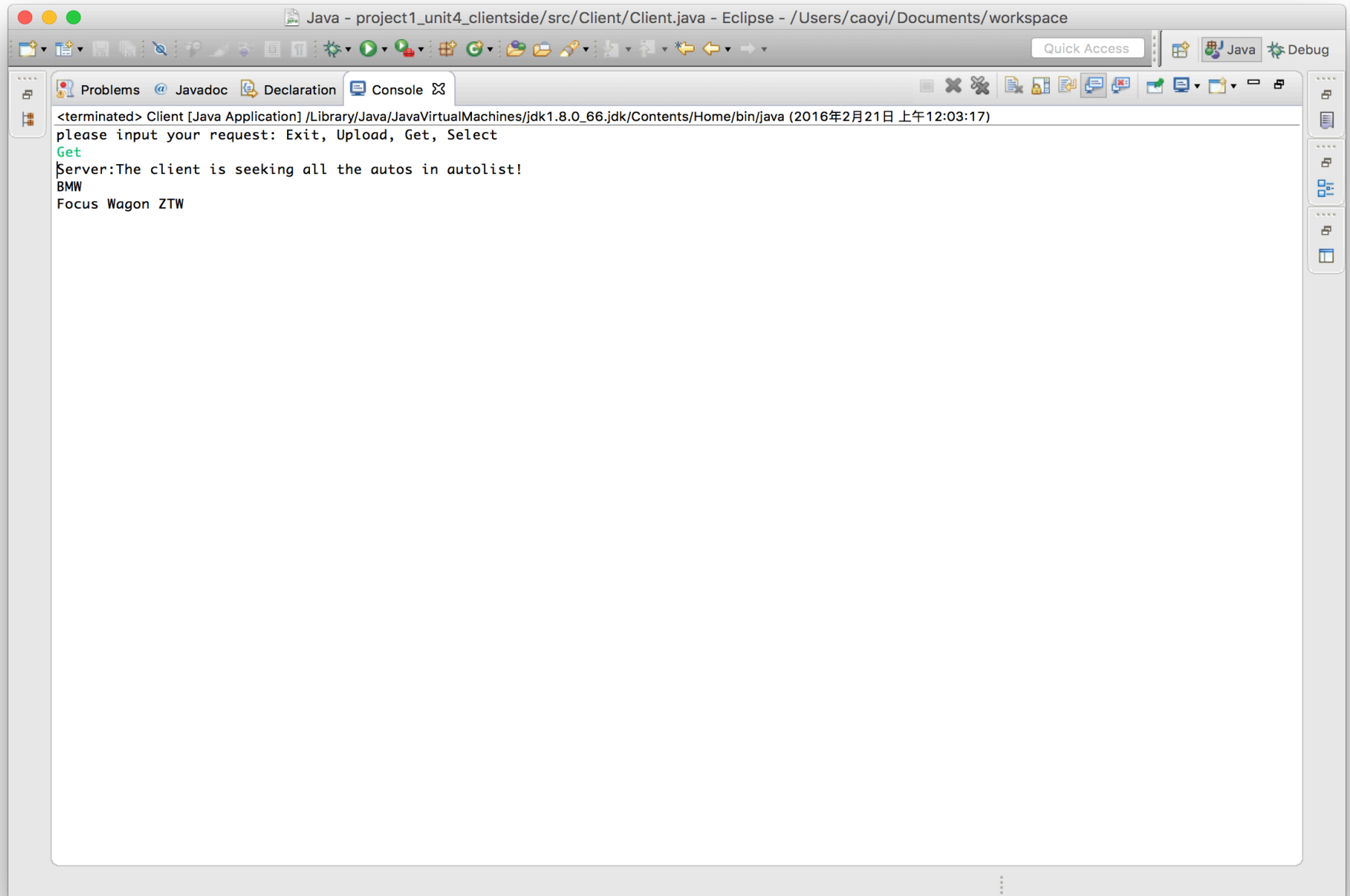
Text Upload



The screenshot shows the Eclipse IDE's console window. The title bar indicates the file is 'Server.java' in the 'project1_unit4_serverside/src/server' directory. The console output shows a client application running on a Java VM. The client prompts for a request and the user enters 'Upload'. The server responds with 'The Client is uploading...' and prompts for a filename. The user enters 'Focus_Wagon_ZTW.properties'. The server responds with 'The Client choose to upload properties file' and 'Successfully upload properties file'.

```
<terminated> Client [Java Application] /Library/Java/JavaVirtualMachines/jdk1.8.0_66.jdk/Contents/Home/bin/java (2016年2月21日 上午12:01:30)
please input your request: Exit, Upload, Get, Select
Upload
Server:The Client is uploading...
please input the filename...
Focus_Wagon_ZTW.properties
Server:The Client choose to upload properties file
Server:Successfully upload properties file
```


Test Get

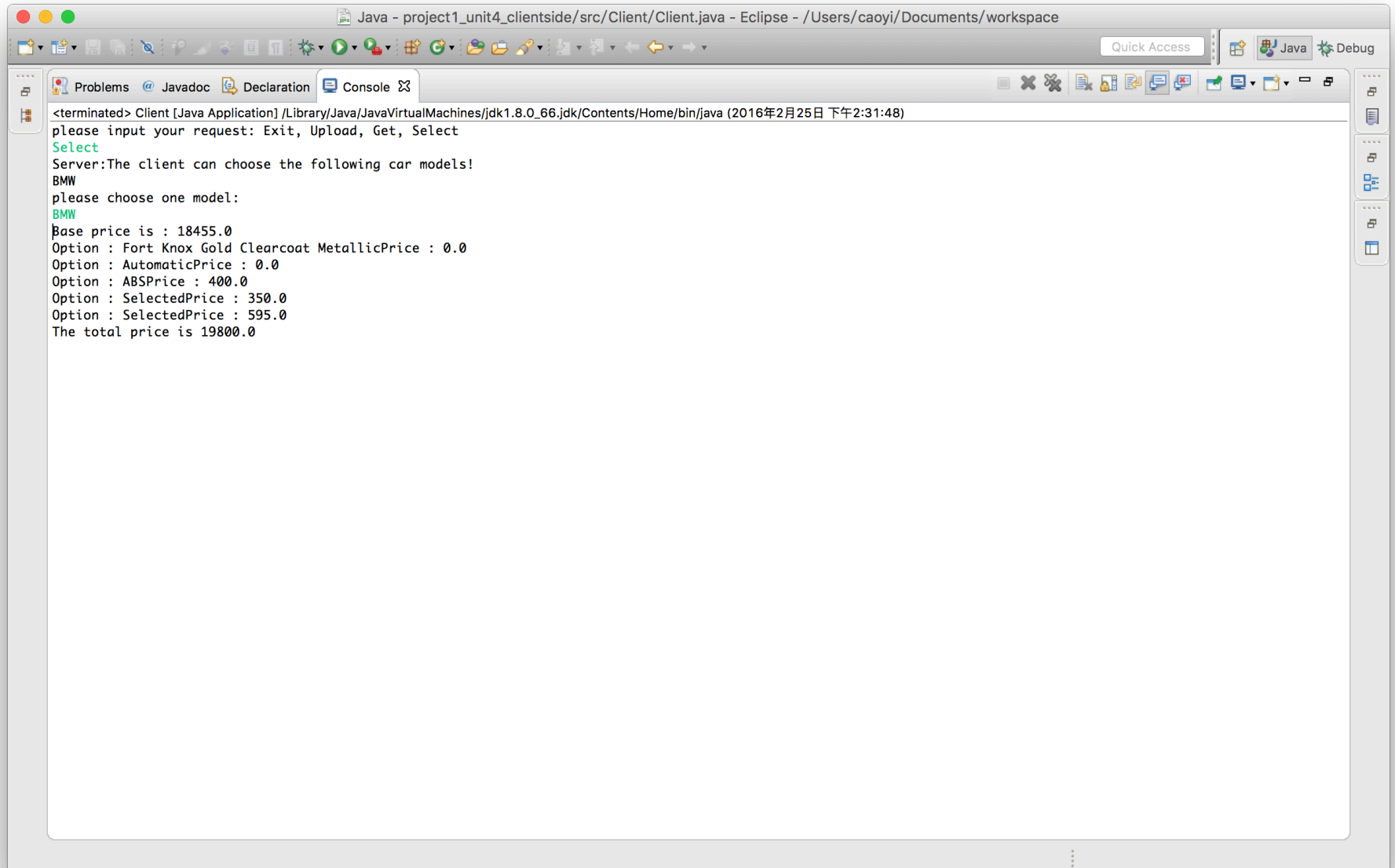


The screenshot shows the Eclipse IDE's console window. The title bar indicates the file path: `Java - project1_unit4_clientside/src/Client/Client.java - Eclipse - /Users/caoyi/Documents/workspace`. The console has tabs for `Problems`, `Javadoc`, `Declaration`, and `Console`. The `Console` tab is active, displaying the following text:

```
<terminated> Client [Java Application] /Library/Java/JavaVirtualMachines/jdk1.8.0_66.jdk/Contents/Home/bin/java (2016年2月21日 上午12:03:17)
please input your request: Exit, Upload, Get, Select
Get
Server:The client is seeking all the autos in autolist!
BMW
Focus Wagon ZTW
```

The output shows a client application that has terminated. It prompts the user for a request, and the user has entered 'Get'. The server responds with the message 'The client is seeking all the autos in autolist!' and lists two car models: 'BMW' and 'Focus Wagon ZTW'.

Test Select



The screenshot shows the Eclipse IDE's console window. The title bar indicates the file path: `Java - project1_unit4_clientside/src/Client/Client.java - Eclipse - /Users/caoyi/Documents/workspace`. The console tab is active, showing the following output:

```
<terminated> Client [Java Application] /Library/Java/JavaVirtualMachines/jdk1.8.0_66.jdk/Contents/Home/bin/java (2016年2月25日 下午2:31:48)
please input your request: Exit, Upload, Get, Select
Select
Server:The client can choose the following car models!
BMW
please choose one model:
BMW
Base price is : 18455.0
Option : Fort Knox Gold Clearcoat MetallicPrice : 0.0
Option : AutomaticPrice : 0.0
Option : ABSPrice : 400.0
Option : SelectedPrice : 350.0
Option : SelectedPrice : 595.0
The total price is 19800.0
```