SP22 15W CSCI5531.01 Advanced Operating Systems

Project-2 [KSH]



Instruction Manual and architecture

of

Project on distributed Shopping System

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Hosted on: https://github.com/swap1210/java-project

Table of Contents

[Architecture 2](#_Toc100186038)

[Server Side: 2](#_Toc100186039)

[Server Initial Setup: 2](#_Toc100186040)

[Client RMI action (Buying/Selling) 3](#_Toc100186041)

[Client RMI action (Buying/Selling) continued 4](#_Toc100186042)

[Client 5](#_Toc100186043)

[Client Initial Step: 5](#_Toc100186044)

[Check Wallet: 6](#_Toc100186045)

[Check Coins: 6](#_Toc100186046)

[Buy Coin: 7](#_Toc100186047)

[Sell Coin: 7](#_Toc100186048)

[How to Run 7](#_Toc100186049)

[Server will ask you for port no. to start registry in 8](#_Toc100186050)

[In Client: 9](#_Toc100186051)

# Architecture

## Server Side:

### Server Initial Setup:

Diagram

Description automatically generated

The main Server thread takes input from user to initialize new RMI registry (port number).

Initialize Server binds the RMI details (bind Server object) to registry.

Initialize ClientMenuManager loads client record from the obj file and deserialize them.

Initialize CoinMenuManager loads coin record from the obj file and deserialize them and bind each coin to the RMI registry.

### Client RMI action (Buying/Selling)

Diagram

Description automatically generated

### Client RMI action (Buying/Selling) continued

Diagram

Description automatically generated

## Client

### Client Initial Step:

Diagram

Description automatically generated

### Check Wallet:

Diagram

Description automatically generated

### Check Coins:

Diagram

Description automatically generated

### Buy Coin:

Diagram

Description automatically generated

### Sell Coin:

Diagram

Description automatically generated

## How to Run

Go in the project folder (AOS Proj2) directly so you can see the bin folder and open command prompt there

Graphical user interface, application

Description automatically generated

Open terminal here for both client and server and run this command for Server



And run this for Client



In Server:

### Server will ask you for port no. to start registry in

Menu actions:

|  |  |  |  |
| --- | --- | --- | --- |
| Text  Description automatically generated  Main |  |  | You can choose any operation and can always come back from it by choosing the appropriate action. |
| In client you can perform client creation and edit of client remove a client and these operations are persistent hence all the actions are saved in a file. | In coin menu you can list all coins and can also create and edit coin. Each coin object is maintained as a separate stub and can be accessed by client to check current stat. All operations are again file persistent. | |

Sample user account:

Text

Description automatically generated

Sample Coin:

Text

Description automatically generated

### In Client:

Client needs to provide the server ip and port number and also his username(id) and password separated with “:”

|  |  |
| --- | --- |
| Text  Description automatically generated  Client Main Menu | Buy operation |
| Client Wallet | |