

Computer Networking

Assignment 5

Project partners:

Name: Sakib Hasan --- Roll: **149**

Name: Md. Sakib Khan --- Roll: **45**

Introduction:

Main goal of the assignment was to implement an online Music CD store connecting with bank server to confirm purchase by credit card. The connection between shop server and bank server must be a TCP connection over a fixed port.

Store server will take input from user via html form and send the credentials to bank server to verify them. Bank will check information from their fixed database and send acknowledgment, either “approved” or “rejected”. After one query from store, bank will close their TCP connection. But Store will still be open for another user input. Every time store send a query to bank, bank server must be run individually.

Implementation Procedure:

We have two java classes Bank.java and Store.java for corresponding servers. To compile and run those servers we created a *makefile* that can be run directly from terminal.

To run Store server type command (while in the directory of Store.java) ***“make store”*** and press **Enter**.

Then to run Bank server type command: ***“make bank”*** on a different terminal and press Enter.

Then the user will open a link of in a browser (***localhost:5050***). This will send a GET Request to the Store.java. Then in Response the store will send buySongs.html (The music CD web site page) to the browser. If there is no file named buySongs.html then it will show 404 not found. After opening webpage user will can browse to find Album list along with their ID and other info. To buy item he/she has to press ***“buy now”*** button and it will take it to purchase form page. He/she has to give input his/her credentials- name, credit card info, item ID, amount of items. Then by clicking submit button the HTML will send the information to store server given in the form by the user through POST method.

After that store server sends user input to bank server to verify. If verified, bank says ***“approved”*** and purchase success is shown in html. If user gives a wrong input, bank says ***“rejected”*** and error or failure page is shown on the browser.

The method is both are named flowing standard which reflects their functionality. Proper comments are also added for tricky cases.

Limitations:

There might be error if tester tries to add/delete any user info from **database.txt**. This bank server code handles exactly for 3 users. If any user is changed then change the value of ***“users”*** in Bank.java. (i.e.: If total number of user in database.txt is 4 then set value to 4.)