Online Purchase System

Group Members

Hussain Md Safwan, Roll 42
Raihan Dewon Eman, Roll 48

Languages

HTML/CSS for front end
Java for back end

Platform

Linux

Description

The idea is to develop an online purchase system, consisting of an online music CD store that can be visited by any users using any regular browsers. The system consists of a web page at the front end , and a store and bank at the back ends. The page is loaded entering the IP address, port number and the name of the requested file as follows – ip_address:port_no/file.ext, that issues a GET request to the ongoing Store process, the Store in return to the request, fetches the requested file and loads that on the browser. Information about available CDs are displayed at the web page. The user, willing to place an order, shall have to fill up the form at the bottom of the page consisting of fields for first name, family name, post code, credit card number, item number and quantity of the item. On hitting the submit button, a POST method is implemented that carries the data to the Store process. The Store than passes the first four inputs to the Bank process that consults the database to authenticate the user, user once authenticated – Bank delivers approval to the Store that in return delivers the price of the requested item – the Bank confirms whether the user has enough funds to perform the purchase and replies appropriately. Having the reply from the Bank, the Store displays 'Transaction Approved/Transaction Aborted' on the web page.

Procedure

The system works as follows, bank and the browser connect to the store via two different, user-defined ports. Once the transaction is over, bank disconnects from the store and listens for connection requests on a different port.

How To Run

1. The bank has to be run first typing chmod +x makefile_bank.sh and then ./makefile_bank.sh on the terminal
2. Then the store is run typing chmod +x makefile_store.sh and then ./makefile_store.sh on another terminal
3. The browser is then opened and on 127.0.0.1:5050/Index.html is entered on the search bar
Note: By default the store runs on the port 5050 and the bank on the port 5000

Limitations

In case the transaction has not been approved, the system doesn't show the exact reason of failure and rather shows transaction aborted due to 'invalid login credentials or insufficient funds'. No other limitations have yet been detected.