



Homework 2

Due: 10/26/2013

15 points

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Servlet and JDBC Programming

Create a Web browser-based application that calculates the price of a given number of shares (stock) of up to 4 companies listed on the Dow Industrial Index. The companies should be given by their DOW ticker symbols. You must use the unit stock price values from the MySQL database called `stocks`, available on `um1.cs.uga.edu`. The user name and password are given on `um1` in the directory `~kochut/csx050/Stocks.txt`.

Your application must have an HTML form where the user should be able to enter up to 4 companies (by their ticker symbols) and specify the number of requested shares for each company. You may use lists, text fields, and buttons as form elements. The lists of ticker symbols may facilitate the selection of the companies. After a form has been submitted by the user, the application should retrieve the information about the selected companies from the `stocks` database, calculate the total cost of the shares, and return the response HTML page with a listing of all information about the selected companies and the total cost of the purchase.

In case a user enters no ticker symbols, an unknown ticker symbol, an illegal number of shares (different than a positive integer), or if one of the ticker symbols entered does not have the corresponding number of shares (or vice versa), the application should return an

error page with a suitable error message.

It is your responsibility to discover the column names and create a suitable SQL query to retrieve the required data. For example, you may use the `mysql` command to connect to the `stocks` database and then discover the table names, as well the defined columns and their types.

Your application *must* utilize a Java servlet and an HTML form. The application's WAR archive must have a name of the form `firstname_lastname_invest.war` and it must be deployed to our JBoss Application Server on `uml` by copying the WAR file to the directory `/opt/jboss/standalone/deployments/homework2`. Remember to set the read permissions of the WAR file to world-readable. The easiest way to do this is to use the `install` Unix command (use the `-m 644` option to set the permissions) to deploy the WAR file and set its permissions at the same time.

Your application must be accessible at the following URL:

```
http://uml.cs.uga.edu:8080
/firstname_lastname_invest
/stocks.html
```

(of course, substitute your name in the URL above).

Submit a directory with your complete application to the user `csx050` on `nike.cs.uga.edu`. Include the Java sources, the Web application directory structure, and the final (deployed) WAR archive file. You must also provide a `README.txt` file describing how to compile your program and

create the WAR archive, as well as providing the complete URL to use when invoking your application. The `submit` command is only available on `nike`, therefore you will have to copy the directory with your application from `uml` to `nike` before submitting it.