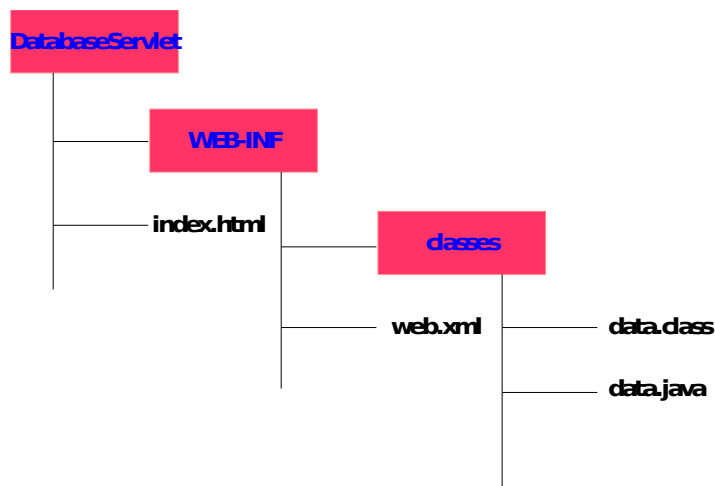# UCS 2611 Internet Programming Lab
Exercise 3: DatabaseServlet Application using Tomcat Server

Date of Exercise: 14.02.2024

Write index.html to display form with a submit button. Set the method attribute of the form to "get" to generate GET request to the server. Write a java servlet to   display the records of the table when the button is clicked. Write also the configuration file, namely, web.xml which maps the url mapped to the servlet class file.

Follow the directory structure for creating DatabaseServlet Web application and follow the guidelines below to configure and deploy web application.

To install mysql server in ubuntu 16.04 environment
To install mysql server
      sudo apt-get update
      sudo apt-get install mysql-server
      mysql_secure_installation
To check the mysql service
      systemctl status mysql.service
To start and stop the service
      service mysql start
      service mysql stop
To get into the mysql prompt
      mysql –u root –p
To clear the screen in mysql prompt
      system clear
To exit from the mysql prompt
      Exit
In /usr/share/java, there won't be any mysql connector files available. In order to run the servlet code with the database, we need to have connector files in tomcat/lib folder

Execute the following statement to get the connector files

        apt-get install Libmysql-java
        You will have mysql.jar, mysql-connector-java.jar, mysql-connector-java-5.1.38.jar in /usr/share/java folder. Copy them and put it in tomcat/lib folder.

Start the server using $CATALINA_HOME/bin/startup.sh
To run DatabaseServlet navigate to the url :
http://localhost:8080/DatabaseServlet
Stop the server using $CATALINA_HOME/bin/shutdown.sh

To install mysql server in windows environment
Use **mysql-5.5.30-win32** to install mysql
Set the path of mysql in environment variables
 While installing, provide user name and password
 Copy the **mysql-connector-java-3.1.14-bin** jar file to "C:\Program Files\Apache Software Foundation\Tomcat 7.0\lib"
To run mysql go to Start→All Program→ MySqL→MySql5.5 Command Line Client and double
click it
mysql> use test;
mysql> create table Employess (id int, age int, first varchar(20), last varchar(20));
mysql> insert into Employess (101, 20, "Zara","Ali");
mysql> select * from Employees;
How to run the Web application?
1. Copy the DatabaseServlet application in webapps folder
2. Navigate to tomcat directory, go to bin
3. Execute startup.bat
4. Wait for the server to start
5. Open browser and navigate to the url : localhost:8080
6. A tomcat demo page will be displayed.
7. To run firstservlet navigate to the url :
http://localhost:8080/DatabaseServlet