Using **MVC2 Model with Servlet as Controller,**or***Filter as Controller*** to build the web application following requirement.

The database name is **PracticalTest** that contains many Weapons instance of Avenger Team. They are stored in a table named **tbl**\_**Weapon**. The structure of the **tbl**\_**Weapon** has been specified below:

|  |  |
| --- | --- |
| **Field Name** | **Type** |
| **amourId** | varchar(5) – **Primary Key** |
| description | nvarchar (50) – Not null |
| classification | nvarchar (250) – Not null - |
| defense | date time – Not null |
| timeOfCreate | nvarchar (250) – Not null |
| status | bit - 1 as available |

The Application must be authenticated (using userId and password) to identity the member that can be accessed the application in tbl\_User describing below

|  |  |
| --- | --- |
| **Field Name** | **Type** |
| userId | varchar (20) – **Primary Key** |
| password | int – Not null |
| fullName | varchar (50) – Not null |
| boss | bit – 1 as boss |

***The distributed application should allow to user to do the following activities***

    - Show all amour function to show all amour in DB. The show all function **must be typed following signature**  
     **public int showAll()** with **int** return type **as number row of search result**

- Delete amour function to delete specific amour in DB. The delete function **must be typed following signature**  
 **public boolean deleteAmour(String amourId)**

***Functional requirements***

     - The Application must **be authenticated to identity** (**using userId, password, and boss field in tbl\_User**) the **boss** that can be accessed the application  
       + The **login page** must be named login.html  
       + The signature of checklogin must be type as following sentence  
   **public boolean checkLogin(String username, String password)**

       + Label **"Login Page"** must be **put into h1 tag**  
       + **Two text boxes** in login form must be named as txtUsername and txtPassword that is similar to username and password that inputted from users  
       + **All button** must be named as btAction with label Login  
     - If the user is authenticated **with only boss** in **tbl\_User,**

       o   The page will be **shown all Amour (the page must be named as search.jsp)**

       o   **Otherwise**, the **error page** is shown (error page must be named invalid.html)

     - In the ***showing page***,

       o Label **"Search Page"** must be **put into h1 tag**  
       o The data grid of search result is shown with **number, description, classification, defense, time of create, status, and Delete link**

o The delete link at the end of row is used delete each row in GUI     - After delete function is succeeded, the data grid of the page must be refreshed

* **Notes**

     -  **Student design the application’s pages himself/herself**

     - The application must be built on **MVC2 using Filter as Controller or Servlet as Controller. The EL must be recommended to use display information on JSP.**Besides, **the DB connection must be used Data Source.**

     -  The application must be organized to modularization

     - All fields **must be validation in process**

     - The DB, functions must obey the following requirement (**if you do not obey the requirement, you will get 0 mark**)

**- Do not copy anything from other projects, or other source code, or cheating. You will get 0 mark.**  
**- All package name in project must be used** prefix with com.practicalexam.student**. Then you need create package** tblAmour**, you must create package as** com.practicalexam.student.tblAmour**. You will get 0 mark.**  
**- Make connection using Data Source must be modified in DBUtilities.java that are available in provided projects**  
**- Do not change or remove anything in provided project**