

Examination WEB App Assignment

Name: Harsh Amin

Github Link: <https://github.com/1998harshamin1998/VWITS2020Assignments>

Packages:

1) `com.examination.models`

This package contains all the model classes such as the users , marks, Questions respectively. These provide the data models.

2) `com.examination.controller`

This package contains the classes for the crud operations for the respective data models, along with authenticator class which provides login and registration functions for a user

3) `com.examination.database`

This package contains the class `MyDBConnection` which is used for database connectivity and provides functions to get Statements and prepared statements.

4) `com.examination.servlets`

This Package contains the servlets files for the entire Web App

5) `com.examination.customTags`

This package contains the custom jsp tag classes to display all questions, marks of all students, and to display questions for exams.

JSP Files:

1) `index.jsp`

This file is the first page of the webapp it has login and registration forms ,

Session is checked here if not available the user has to login first else redirected to appropriate home screen. When either of the form is submitted the data is sent to `AuthenticatorServlet` where depending on the form submitted either a new user is registered or a session for the logged in user is created and further redirected respectively.

2) [Teacher.jsp](#)

This is the home page for the teachers. Once the session is validated.

From this page a teacher can add / update questions for the exam, see all questions, see marks of all the students and update their profile.

Except profile updation all the forms and operations are handled by TeacherServlet and profile updation is handled by ProfileServlet

3) [Student.jsp](#)

This is the home page for a student. Similar to the other pages the session is validated else redirect to the appropriate page.

Through this page a student can view his/her marks and also opt to give exam which will take them to exam page .Student can also update profile which is handled by ProfileServlet.

4) [Exam.jsp](#)

This is the exam page which is accessible from student page and like any page it is also session validated.

From here the student can start the exam.

Once the exam is submitted it is processed by the ResultServlet where the result is calculated and updated in the database. Only the latest score is saved the previous scores are discarded.

```
Run SQL Command Line

SQL> desc users;
Name                               Null?   Type
-----
USERID                             NOT NULL VARCHAR2(80)
NAME                               VARCHAR2(30)
USERNAME                           VARCHAR2(10)
PASSWORD                           VARCHAR2(20)
ROLE                               VARCHAR2(7)

SQL> desc questions;
Name                               Null?   Type
-----
QID                                NOT NULL NUMBER(38)
QUESTION                           VARCHAR2(255)
OPTION1                            VARCHAR2(255)
OPTION2                            VARCHAR2(255)
OPTION3                            VARCHAR2(255)
OPTION4                            VARCHAR2(255)
CORRECT_ANSWER                     VARCHAR2(255)

SQL> desc marks;
Name                               Null?   Type
-----
SID                                NOT NULL VARCHAR2(80)
MARKS                              NUMBER(38)

SQL>
```

Authenticate

localhost:8008/Examination/

Examinations

asd

Log In

Register:

Name:

Username:

Password:

Role:

Register

Authenticate

localhost:8008/Examination/authenticatorServlet

Examinations

Username: Password: Log In

Invalid Credentials!

Register:

Name: Username: Password: Role: --Select-- Register

Authenticate

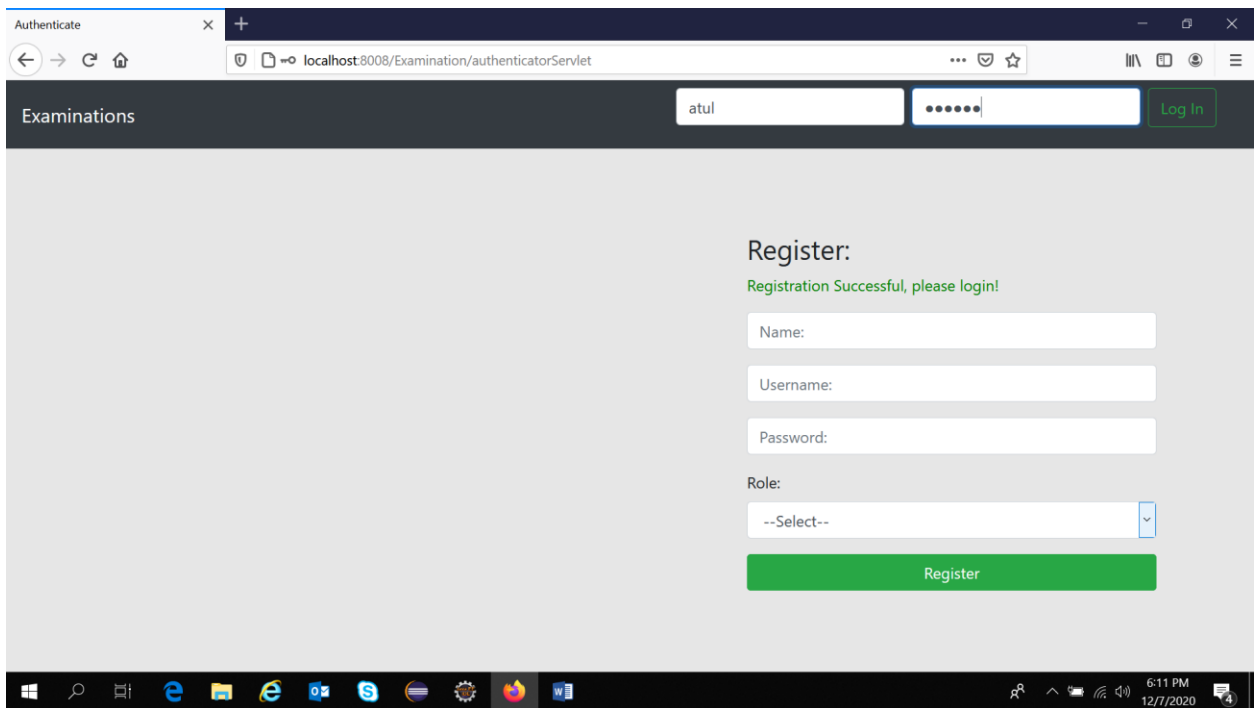
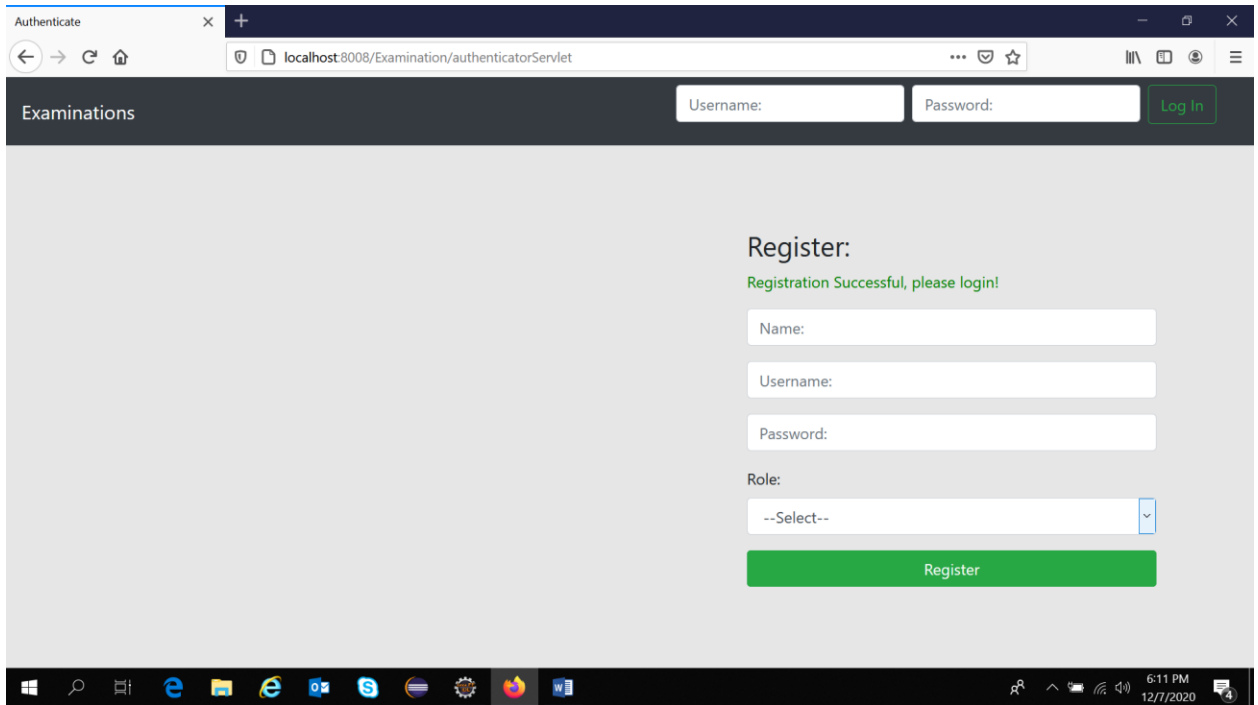
localhost:8008/Examination/

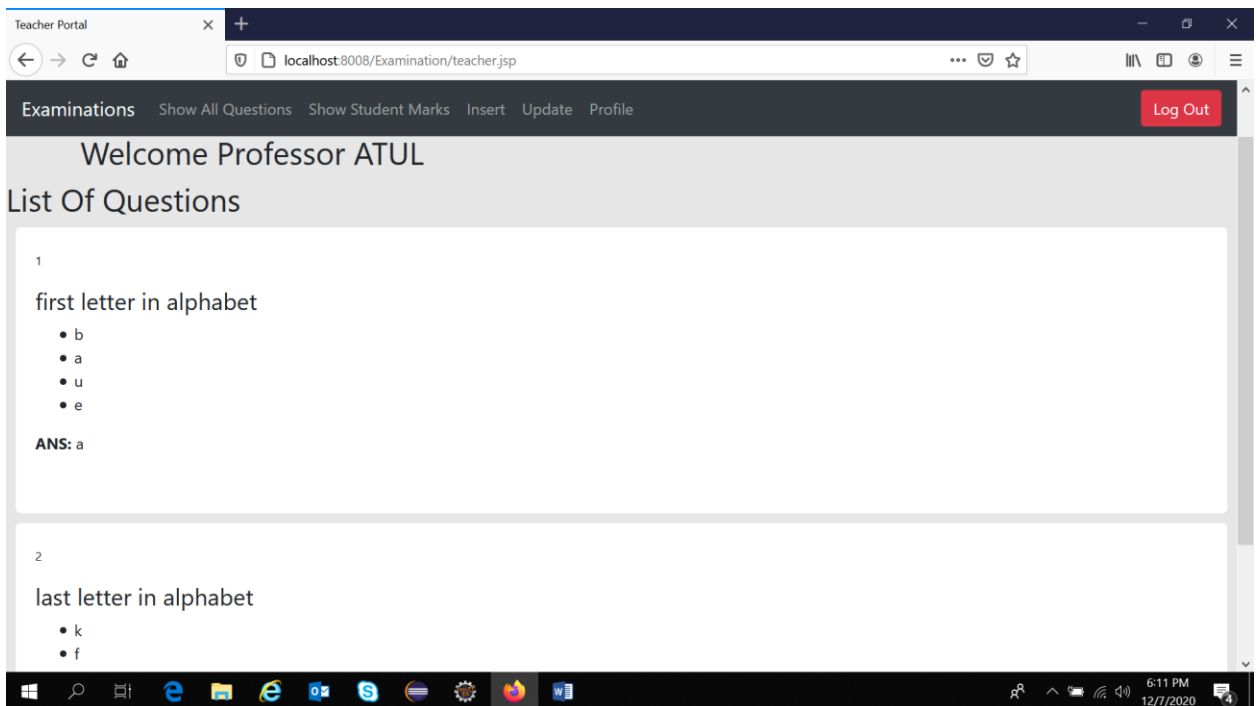
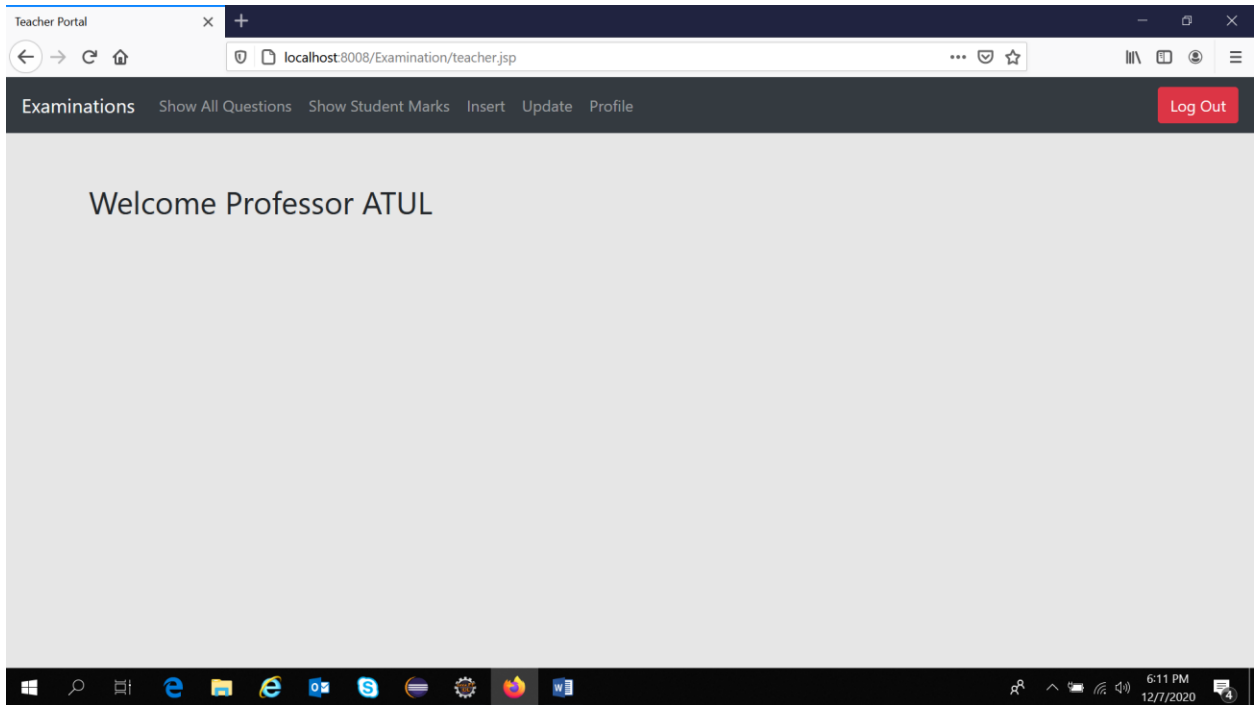
Examinations

Username: Password: Log In

Register:

Atulatul..... Role: Teacher Register





Teacher Portal

localhost:8008/Examination/teacher.jsp

Examinations

Show All Questions

Show Student Marks

Insert

Update

Profile

Log Out

Welcome Professor ATUL

Marks Sheet

Sr no.	Name	Marks
1	aman	2

6:12 PM 12/7/2020

Teacher Portal

localhost:8008/Examination/teacher.jsp

Examinations

Show All Questions

Show Student Marks

Insert

Update

Profile

Log Out

Insert Form:

5

2+2=?

1

3

4

10

4

Submit Question

6:13 PM 12/7/2020

Teacher Portal

localhost:8008/Examination/teacher.jsp

Examinations

Show All Questions

Show Student Marks

Insert

Update

Profile

Log Out

last letter in alphabet

- k
- f
- z
- h

ANS: z

5

$2+2=?$

- 1
- 3
- 4
- 10

ANS: 4

Teacher Portal

localhost:8008/Examination/teacher.jsp

Examinations

Show All Questions

Show Student Marks

Insert

Update

Profile

Log Out

Update Form:

QuestionID:

Question:

Option 1:

Option 2:

Option 3:

Option 4:

Correct Answer:

Update Question

Teacher Portal

localhost:8008/Examination/teacher.jsp

Examinations Show All Questions Show Student Marks Insert Update Profile Log Out

Atul

Username: atul

NewUsername: New Username:

Password:

New Password: New Password:

Role: TEACHER

Cancel

Teacher Portal

localhost:8008/Examination/teacher.jsp

Examinations Show All Questions Show Student Marks Insert Update Profile Log Out

Atul

Username: atul

NewUsername: notphad

Password:

New Password: New Password:

Role: TEACHER

Save Cancel

