

College Fest Student Debate

Lab 6 – Spring Assignment Solution

By-

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Change username and password of your database connection (and port if required) in application.properties.

No need to create any schema/table in database before starting the application, my program will do that on its own.

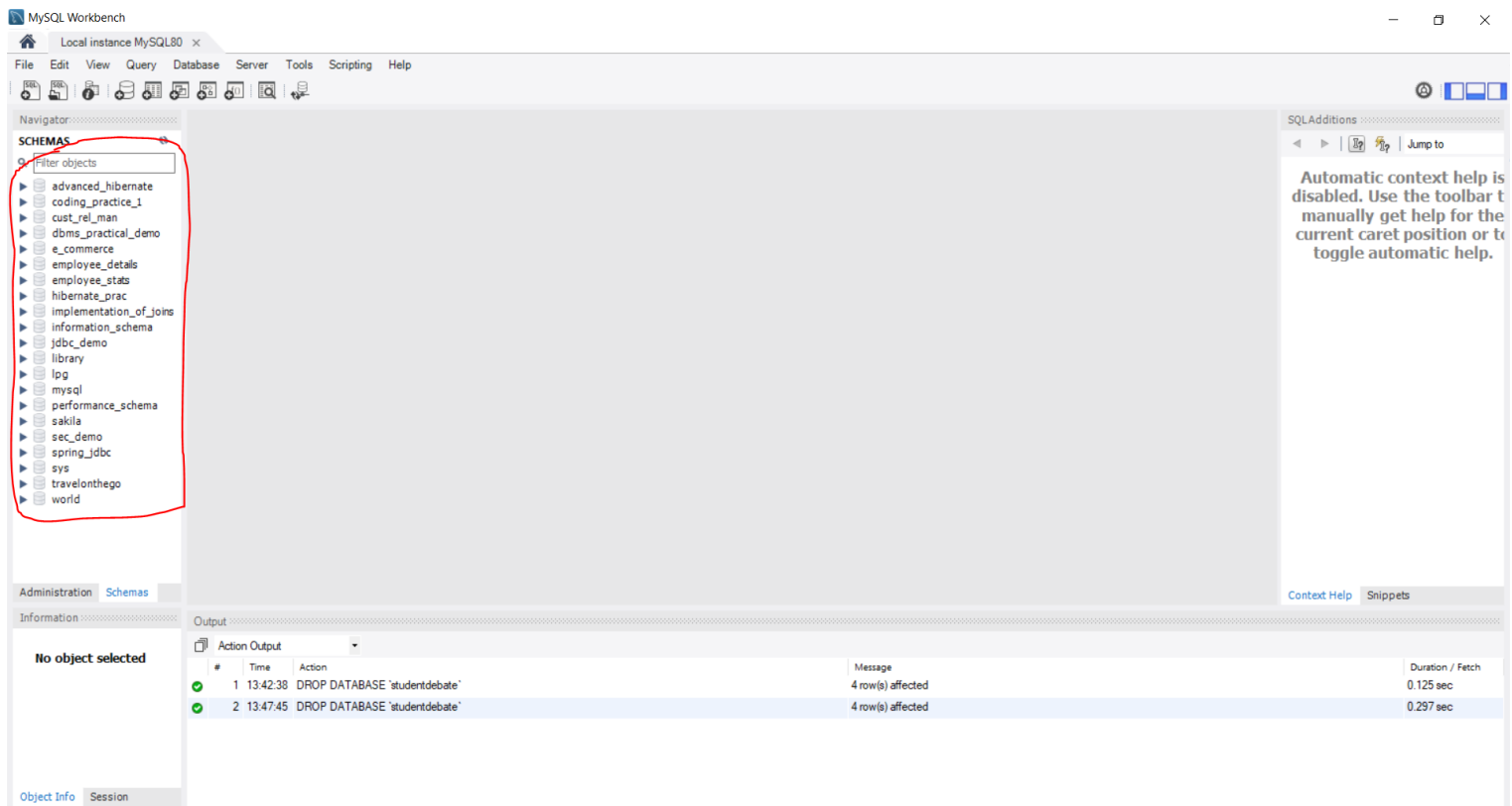
Application.properties:

```
1 info.project.name=College Fest Student Debate
2 info.project.instructor=Sandeep Sharma
3 info.project.env=local
4
5 server.port=8080
6 spring.jpa.hibernate.ddl-auto=update
7 spring.sql.init.mode=always
8 spring.jpa.defer-datasource-initialization=true
9 spring.datasource.url=jdbc:mysql://localhost:3306/studentDebate?createDatabaseIfNotExist=true
0
1 #No need to change anything except username and password
2 spring.datasource.username=root
3 spring.datasource.password=Sanet@2021_12
4
5 server.servlet.context-path=/CollegeFestStudentDebate
6
7 spring.mvc.view.prefix: /WEB-INF/views/
8 spring.mvc.view.suffix: .jsp
```

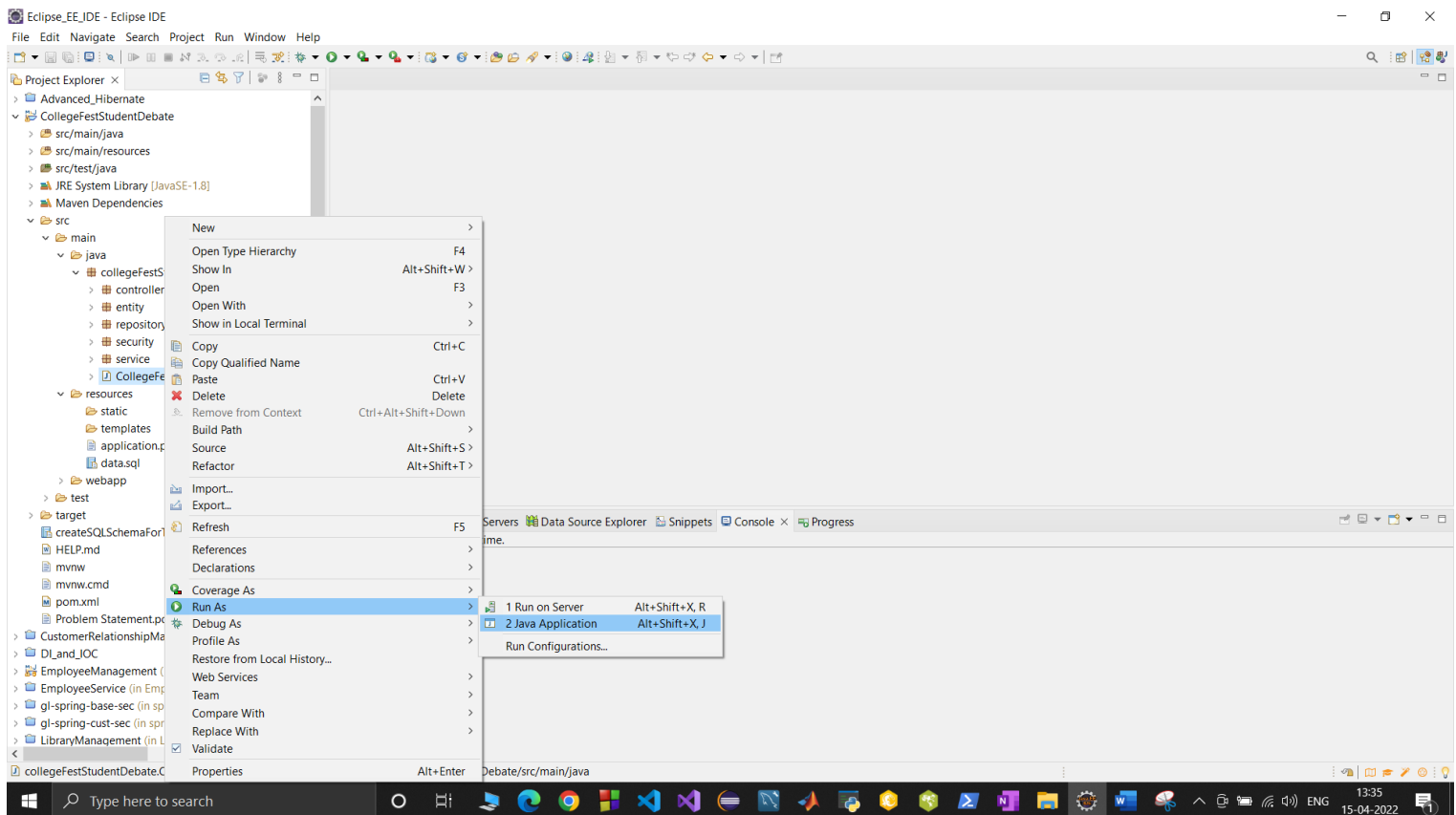
Data.sql:

```
data.sql x
Connection profile
Type: Name: Database: Status: Disconnected,
1 delete from users_roles;
2 delete from role;
3 delete from users;
4
5 insert into role values (1, 'ADMIN');
6 insert into role values (2, 'USER');
7
8 insert into users (id, username, password) values (1, 'sandeep', '$2a$10$PXk9eaqe.wAU6IHHsOTPz0AxKPtR0.Z5SFpHwKbBNprfkpueGRdCq');
9 insert into users_roles values (1,1);
10 --password for Admin(sandeep) - 123Admin
11
12 insert into users (id, username, password) values (2, 'sandeep2', '$2a$10$2QHDmYNrFD/QHVZkujURq.5hX2tgB1MI7MLrisIAau/0HGLTffhCa');
13 insert into users_roles values (2,2);
14 --password for user(sandeep2) - 123User
15
```

Before starting database doesn't have studentdebate schema:



To start the application:



```

CollegeFestStudentDebateApplication [Java Application] X:\Java\jdk-17.0.1\bin\javaw.exe (15-Apr-2022, 1:35:38 pm)
13:35:44.408 [Thread-0] DEBUG org.springframework.boot.devtools.restart.classloader.RestartClassLoader - Created RestartClassLoader org.springframework.boot.devtools.restart.classloader.RestartClassLoader@...

:: Spring Boot ::
(v2.5.6)

2022-04-15 13:35:45.306 INFO 4736 --- [ restartedMain] c.CollegeFestStudentDebateApplication : Starting CollegeFestStudentDebateApplication using Java 17.0.1 on Super-Laptop-31101995 with PID 4736 (S...)
2022-04-15 13:35:45.307 INFO 4736 --- [ restartedMain] c.CollegeFestStudentDebateApplication : No active profile set, falling back to default profiles: default
2022-04-15 13:35:45.451 INFO 4736 --- [ restartedMain] e.DevToolsPropertyDefaultsPostProcessor : Devtools property defaults active! Set 'spring.devtools.add-properties' to 'false' to disable
2022-04-15 13:35:45.451 INFO 4736 --- [ restartedMain] e.DevToolsPropertyDefaultsPostProcessor : For additional web related logging consider setting the 'logging.level.web' property to 'DEBUG'
2022-04-15 13:35:46.839 INFO 4736 --- [ restartedMain] s.d.r.c.RepositoryConfigurationDelegate : Bootstrapping Spring Data JPA repositories in DEFAULT mode.
2022-04-15 13:35:46.948 INFO 4736 --- [ restartedMain] s.d.r.c.RepositoryConfigurationDelegate : Finished Spring Data repository scanning in 94 ms. Found 2 JPA repository interfaces.
2022-04-15 13:35:48.648 INFO 4736 --- [ restartedMain] o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat initialized with port(s): 8080 (http)
2022-04-15 13:35:48.666 INFO 4736 --- [ restartedMain] o.apache.catalina.core.StandardService : Starting service [Tomcat]
2022-04-15 13:35:48.666 INFO 4736 --- [ restartedMain] org.apache.catalina.core.StandardEngine : Starting Servlet engine: [Apache Tomcat/9.0.54]
2022-04-15 13:35:49.609 INFO 4736 --- [ restartedMain] org.apache.jasper.servlet.TldScanner : At least one JAR was scanned for TLDs yet contained no TLDs. Enable debug logging for this logger for a complete log.
2022-04-15 13:35:49.625 INFO 4736 --- [ restartedMain] a.c.c.c.[.[./CollegeFestStudentDebate] : Initializing Spring embedded WebApplicationContext
2022-04-15 13:35:49.625 INFO 4736 --- [ restartedMain] w.s.c.ServletWebServerApplicationContext : Root WebApplicationContext: initialization completed in 4174 ms
2022-04-15 13:35:50.236 INFO 4736 --- [ restartedMain] o.hibernate.jpa.internal.util.LogHelper : HHH0000204: Processing PersistenceUnitInfo [name: default]
2022-04-15 13:35:50.288 INFO 4736 --- [ restartedMain] org.hibernate.Version : HHH0000412: Hibernate ORM core version 5.4.32.Final
2022-04-15 13:35:50.425 INFO 4736 --- [ restartedMain] o.hibernate.annotations.common.Version : HCANN000001: Hibernate Commons Annotations {5.1.2.Final}
2022-04-15 13:35:50.540 INFO 4736 --- [ restartedMain] com.zaxxer.hikari.HikariDataSource : HikariPool-1 - Starting...
2022-04-15 13:35:50.980 INFO 4736 --- [ restartedMain] com.zaxxer.hikari.HikariDataSource : HikariPool-1 - Start completed.
2022-04-15 13:35:51.008 INFO 4736 --- [ restartedMain] org.hibernate.dialect.Dialect : org.hibernate.dialect.MySQL8Dialect
2022-04-15 13:35:52.609 INFO 4736 --- [ restartedMain] o.h.e.t.j.p.i.JtaPlatformInitiator : HHH0000400: Using dialect: org.hibernate.dialect.MySQL8Dialect
2022-04-15 13:35:52.609 INFO 4736 --- [ restartedMain] j.LocalContainerEntityManagerFactoryBean : Initialized JPA EntityManagerFactory for persistence unit 'default'
2022-04-15 13:35:53.320 WARN 4736 --- [ restartedMain] jpaBaseConfiguration$JpaWebConfiguration : spring.jpa.open-in-view is enabled by default. Therefore, database queries may be performed during view rendering.
2022-04-15 13:35:54.510 INFO 4736 --- [ restartedMain] o.s.s.web.DefaultSecurityFilterChain : Will secure any request with [org.springframework.security.web.context.request.async.WebAsyncManagerIntegrationFilter]
2022-04-15 13:35:55.043 INFO 4736 --- [ restartedMain] o.s.b.d.a.OptionalLiveReloadServer : LiveReload server is running on port 35729
2022-04-15 13:35:55.181 INFO 4736 --- [ restartedMain] o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat started on port(s): 8080 (http) with context path '/CollegeFestStudentDebate'
2022-04-15 13:35:55.113 INFO 4736 --- [ restartedMain] c.CollegeFestStudentDebateApplication : Started CollegeFestStudentDebateApplication in 10.691 seconds (JVM running for 11.711)
2022-04-15 13:35:55.410 INFO 4736 --- [nio-8080-exec-1] a.c.c.c.[.[./CollegeFestStudentDebate] : Initializing Spring DispatcherServlet 'dispatcherServlet'
2022-04-15 13:35:55.410 INFO 4736 --- [nio-8080-exec-1] o.s.web.servlet.DispatcherServlet : Initializing Servlet 'dispatcherServlet'
2022-04-15 13:35:55.411 INFO 4736 --- [nio-8080-exec-1] o.s.web.servlet.DispatcherServlet : Completed initialization in 1 ms

```

Database after starting application:

The screenshot shows the MySQL Workbench interface. On the left, the 'Schemas' pane lists various databases, with 'studentdebate' highlighted and its 'Tables' folder expanded. The 'Tables' list includes 'role', 'student', 'users', and 'users_roles'. The 'users_roles' table is selected, and a query is executed in the SQL editor: `SELECT * FROM studentdebate.users_roles;`. The 'Result Grid' shows two rows of data: (1, 1) and (2, 2). The 'Output' pane at the bottom shows the execution log, including the query execution and the number of rows affected and returned.

#	Time	Action	Message	Duration / Fetch
1	13:42:38	DROP DATABASE 'studentdebate'	4 row(s) affected	0.125 sec
2	13:47:45	DROP DATABASE 'studentdebate'	4 row(s) affected	0.297 sec
3	13:50:00	SELECT * FROM studentdebate.role LIMIT 0, 1000	2 row(s) returned	0.016 sec / 0.000 sec
4	13:50:00	SELECT * FROM studentdebate.student LIMIT 0, 1000	0 row(s) returned	0.000 sec / 0.000 sec
5	13:50:01	SELECT * FROM studentdebate.users LIMIT 0, 1000	2 row(s) returned	0.000 sec / 0.000 sec
6	13:50:02	SELECT * FROM studentdebate.users_roles LIMIT 0, 1000	2 row(s) returned	0.000 sec / 0.000 sec

Tables after application starts:

The following tables are displayed after the application starts:

id	name
1	ADMIN
2	USER

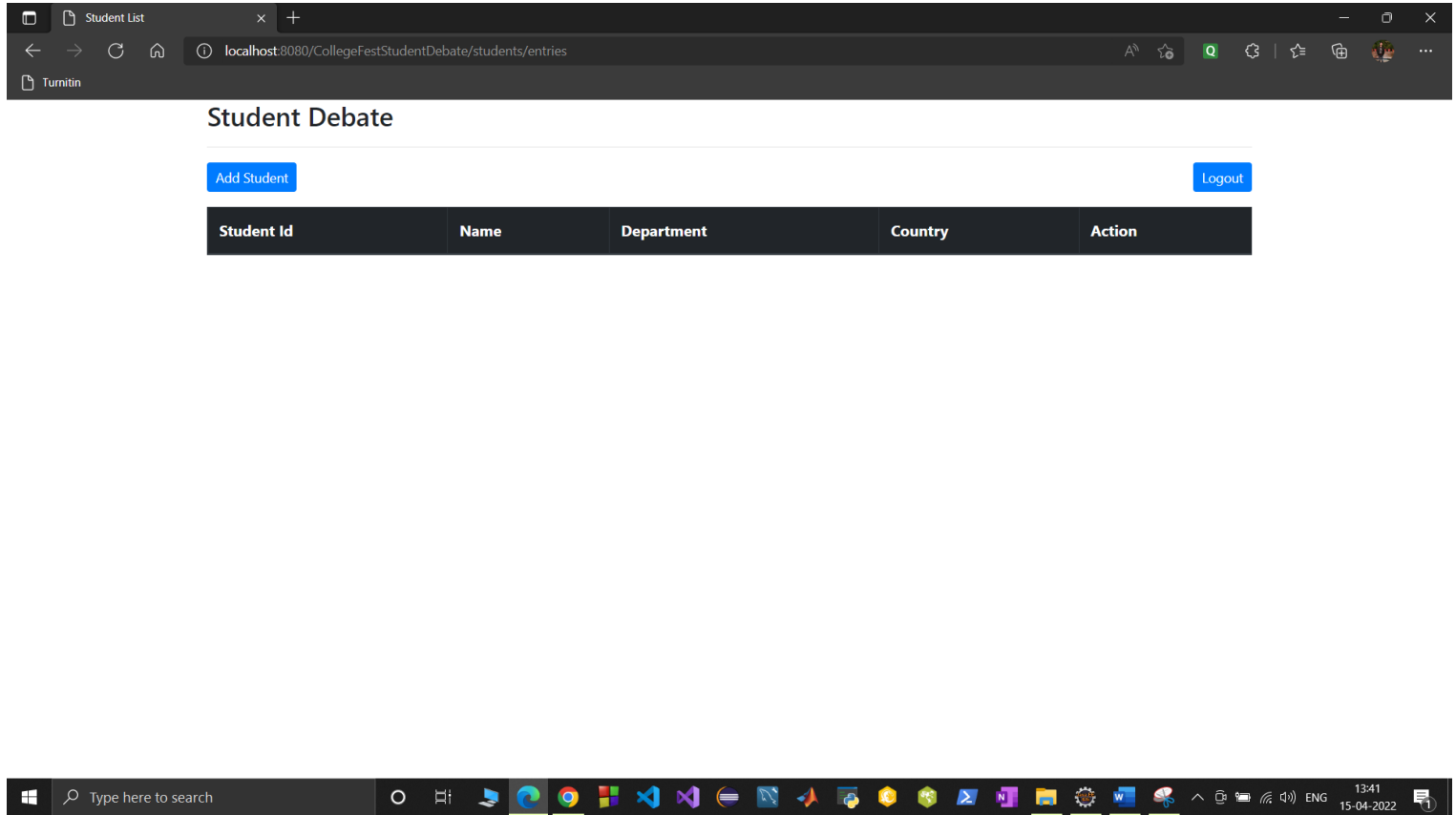
student_id	country	department	name
NULL	NULL	NULL	NULL

id	password	username
1	\$2a\$10\$Pxx9eaqe.wAU6IHsOTPzOAxkPtRO....	sandeep
2	\$2a\$10\$2QHDmYNrfd/QHVZkujURq.5hX2tgB1M...	sandeep2

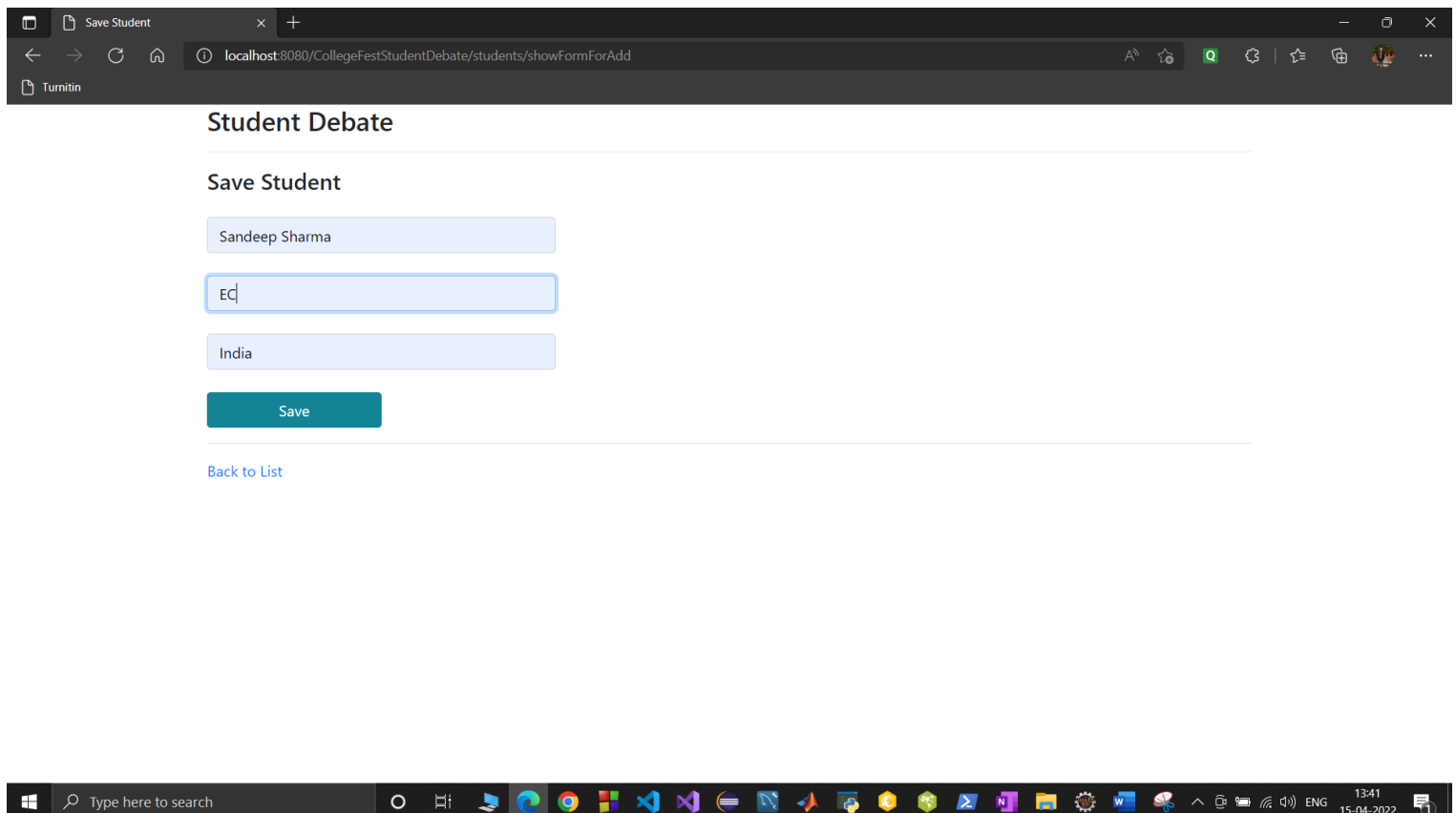
user_id	role_id
1	1
2	2

Login as Admin (sandeep, 123Admin)

The login page is titled "Please sign in". It contains a text input field with the value "sandeep", a password input field with masked characters "*****", and a blue "Sign in" button.



Add Student and save:



Student Debate

Add Student

Logout

Student Id	Name	Department	Country	Action
1	Sandeep Sharma	EC	India	<div>UpdateDelete</div>



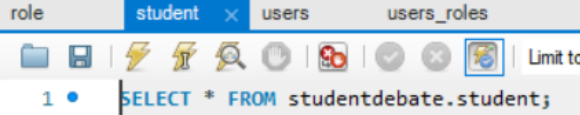
Database after adding student:

The screenshot shows the SQL Developer interface. The top pane contains the SQL query: `SELECT * FROM studentdebate.student;`. The bottom pane displays the 'Result Grid' with the following data:

student_id	country	department	name
1	India	EC	Sandeep Sharma

The 'Filter Rows' field is empty, and the 'Edit' button is visible.

Database after updating student department:



Result Grid

	student_id	country	department	name
▶	1	India	E&EC	Sandeep Sharma
•	NULL	NULL	NULL	NULL

Add one more student and save:

The image is a screenshot of a web browser window. The browser's address bar shows the URL 'localhost:8080/CollegeFestStudentDebate/students/showFormForAdd'. The page title is 'Student Debate'. Below the title, there is a section titled 'Save Student'. This section contains three text input fields. The first field contains the text 'Student2', the second field contains 'Dummy', and the third field contains 'Imaginary'. Below these fields is a teal-colored button with the text 'Save'. At the bottom of the form, there is a blue link that says 'Back to List'. The browser window is open on a Windows operating system, as evidenced by the Windows taskbar at the bottom. The taskbar includes a search bar on the left, followed by several application icons (including Edge, Chrome, and various office applications), and a system tray on the right showing the time as 13:45 and the date as 15-04-2022.

Student Debate

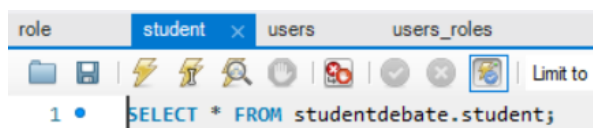
Add Student

Logout

Student Id	Name	Department	Country	Action
1	Sandeep Sharma	E&EC	India	<div>UpdateDelete</div>
2	Student2	Dummy	Imaginary	<div>UpdateDelete</div>



Database after adding one more student:



	student_id	country	department	name
▶	1	India	E&E	Sandeep Sharma
	2	Imaginary	Dummy	Student2
*	NULL	NULL	NULL	NULL

Delete student2:

Student List

localhost:8080/CollegeFestStudentDebate/students/entries

Turnitin

Student Debate

localhost:8080 says
Are you sure you want to delete this student?

OKCancel

Add StudentLogout

Student Id	Name	Department	Country	Action
1	Sandeep Sharma	E&EC	India	<div>UpdateDelete</div>
2	Student2	Dummy	Imaginary	<div>UpdateDelete</div>

Student List

localhost:8080/CollegeFestStudentDebate/students/entries

Turnitin

Student Debate

Add StudentLogout

Student Id	Name	Department	Country	Action
1	Sandeep Sharma	E&EC	India	<div>UpdateDelete</div>

Database after deletion:

rolestudentusersusers_roles

Limit t

1

SELECT * FROM studentdebate.student;

Result Grid

Filter Rows:

Edit:

	student_id	country	department	name
▶	1	India	E&EC	Sandeep Sharma
*	NULL	NULL	NULL	NULL

Logout:

Please sign in

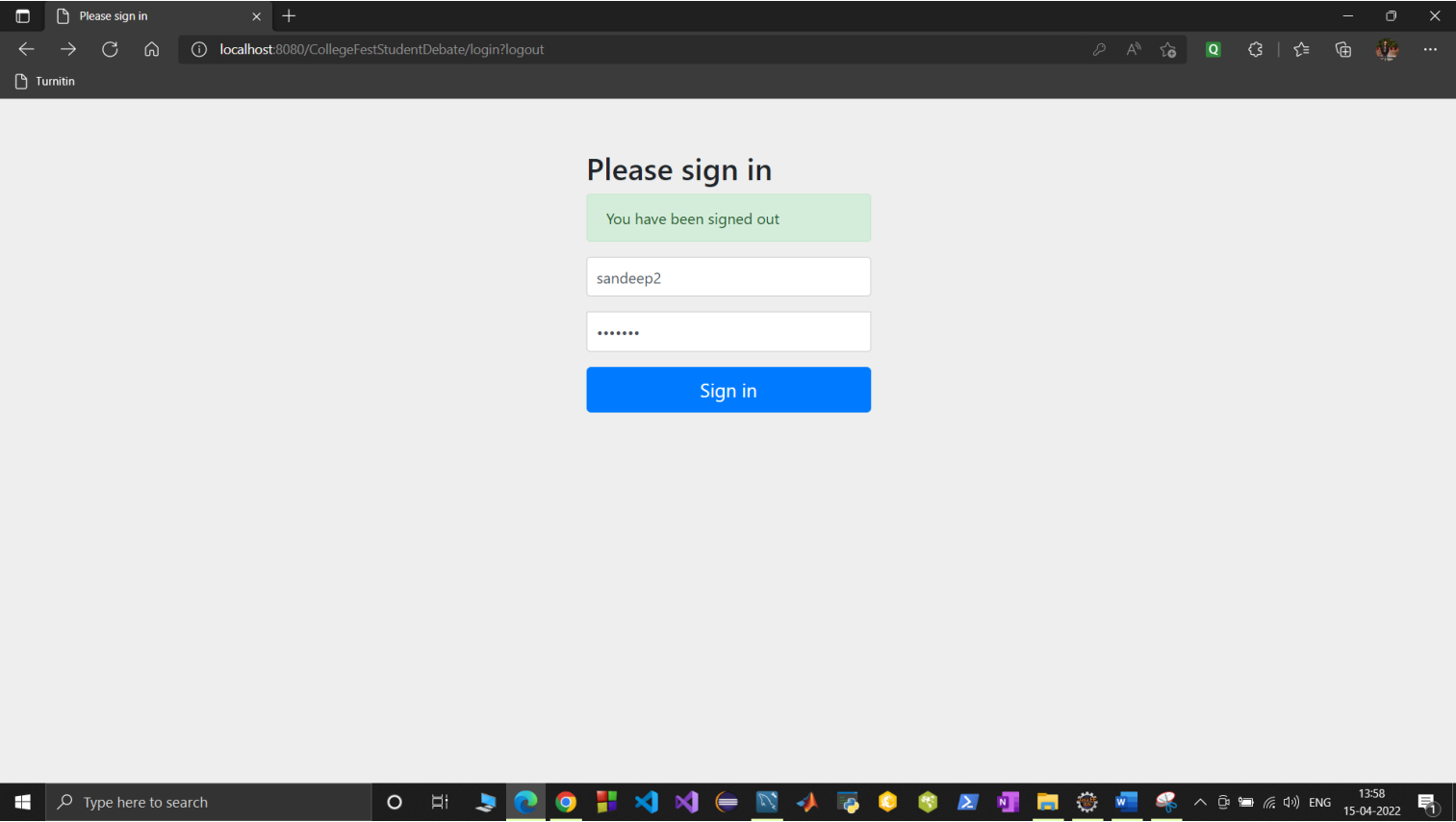
You have been signed out

Username

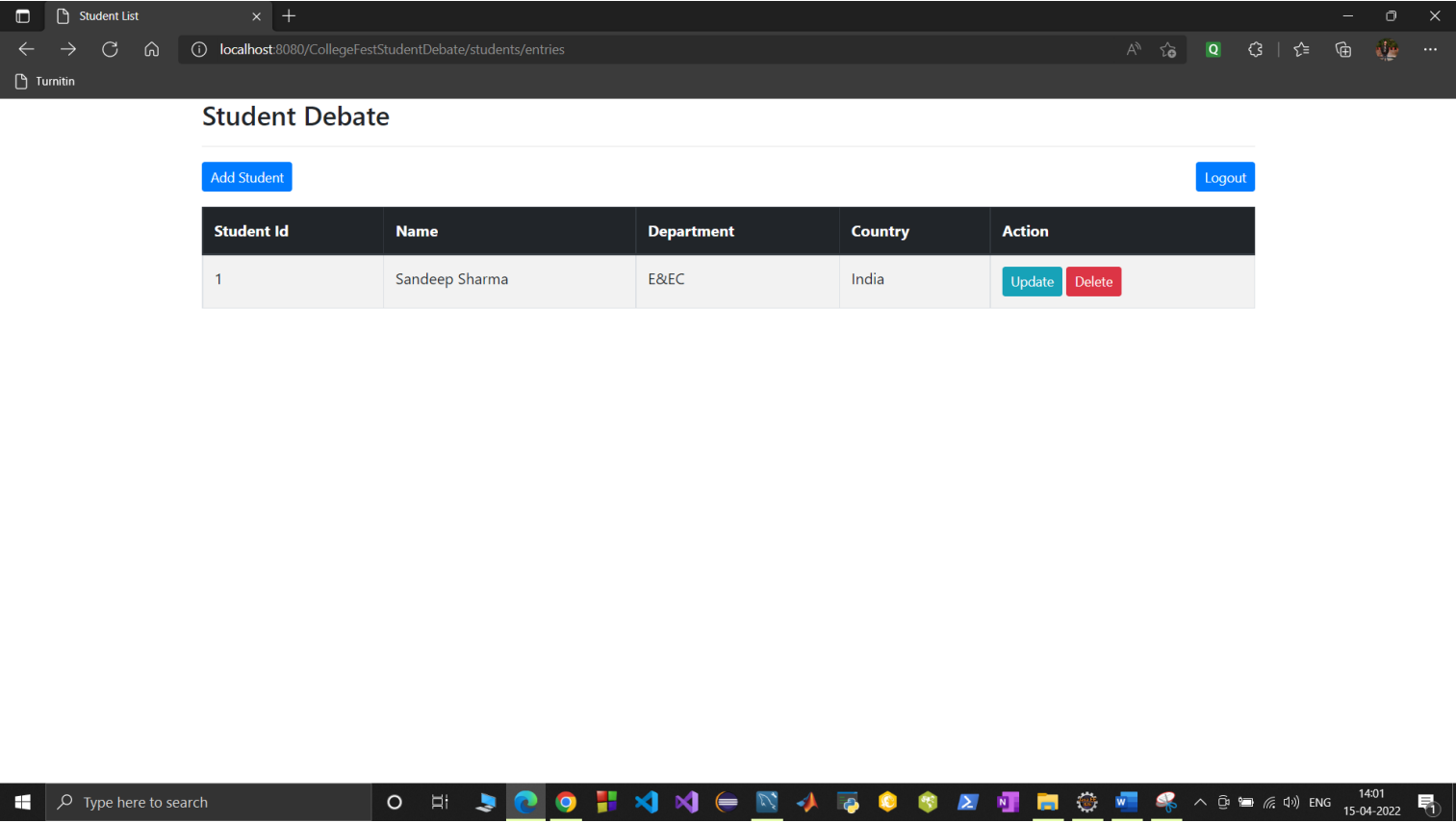
Password

Sign in

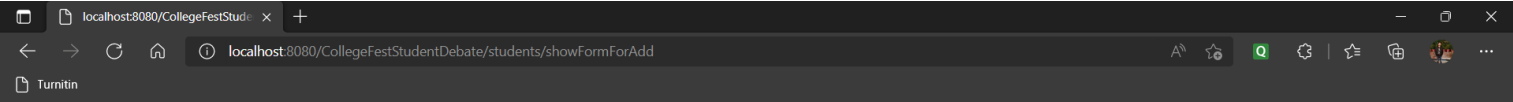
Login as User (sandeep2, 123User):



User can only view the student list and is not allowed to do any other operation.



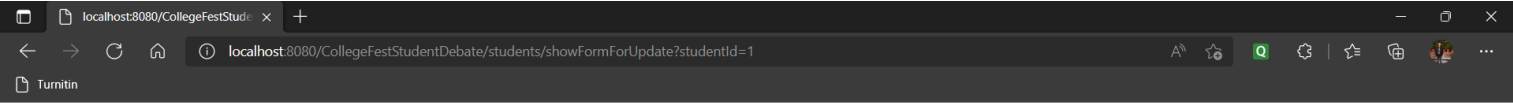
Try Add Student:



HTTP Status 403 - Access is denied

Hi sandeep2, you do not have permission to access this page!

Try updating student details:



HTTP Status 403 - Access is denied

Hi sandeep2, you do not have permission to access this page!

Try deleting the student:

Student List

localhost:8080/CollegeFestStudentDebate/students/entries

Turnitin

Student Debate

Add Student

Logout

localhost:8080 says

Are you sure you want to delete this student?

OKCancel

Student Id	Name	Department	Country	Action
1	Sandeep Sharma	E&EC	India	<div>UpdateDelete</div>

Type here to search

localhost:8080/CollegeFestStud

localhost:8080/CollegeFestStudentDebate/students/delete?studentId=1

Turnitin

HTTP Status 403 - Access is denied

Hi sandeep2, you do not have permission to access this page!

Type here to search

localhost:8080/CollegeFestStud

localhost:8080/CollegeFestStudentDebate/students/delete?studentId=1

Turnitin

Finally, logout:

