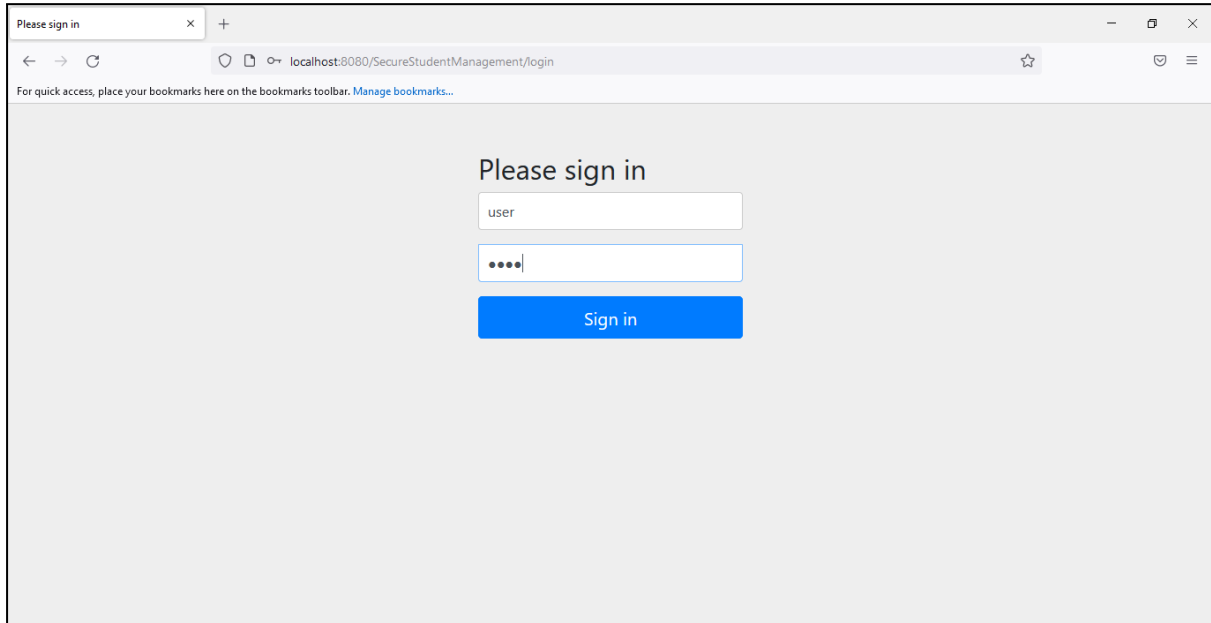
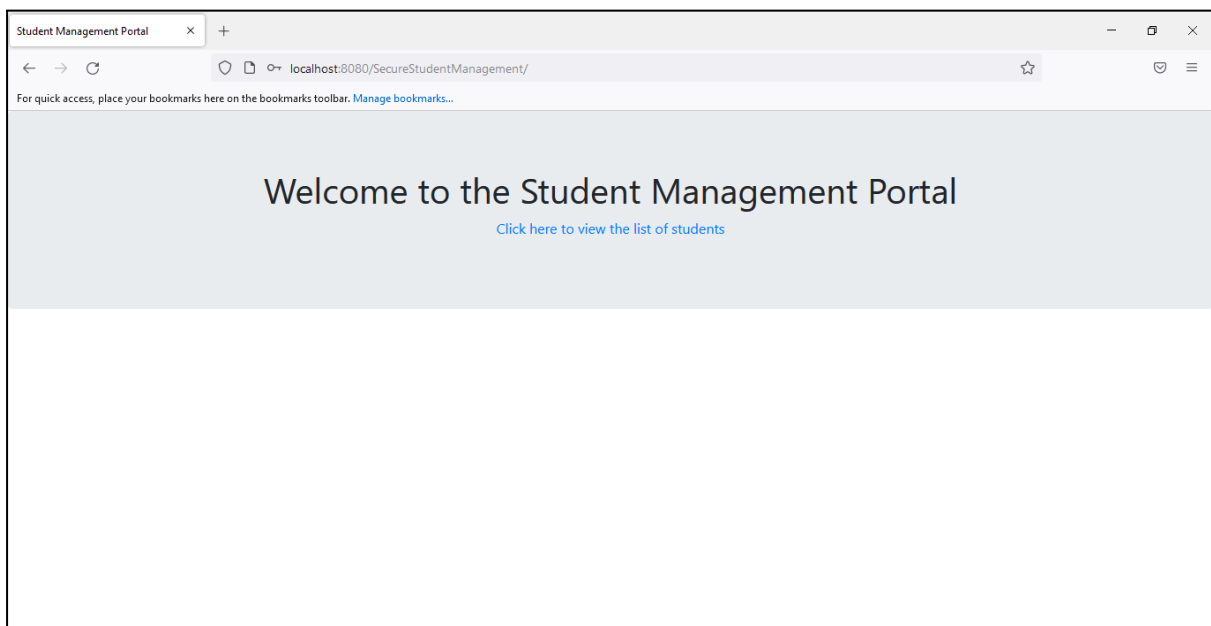


Screenshots of Project Operations

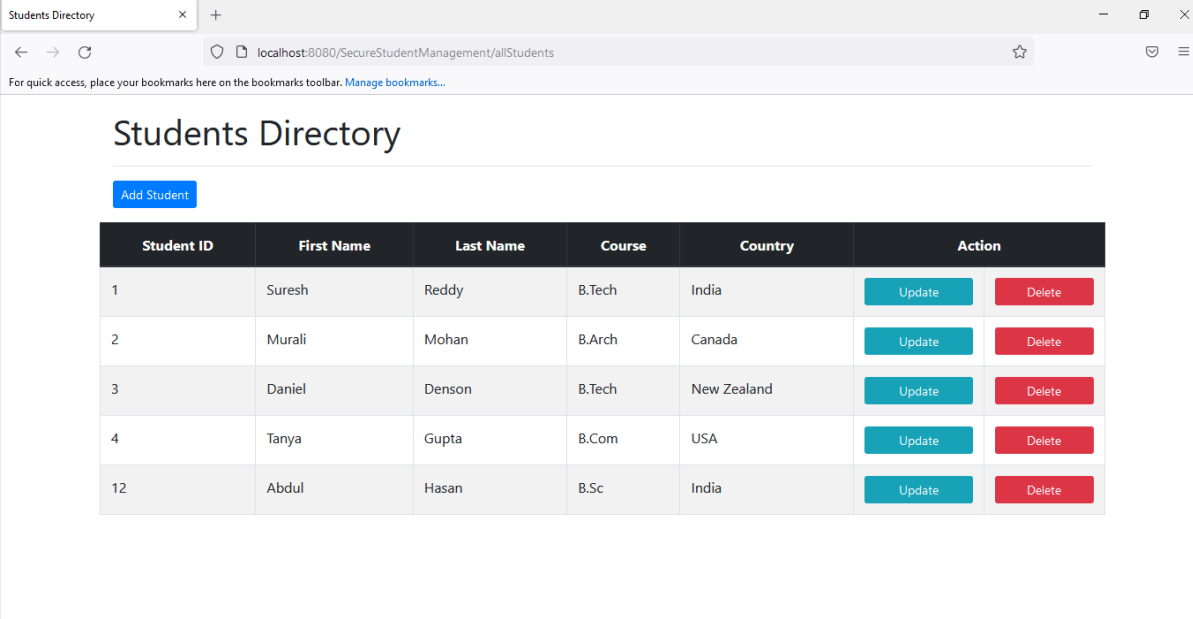
1. Default Spring Security login page appears. Logging in with User: user. Password: “user” (BCrypt encoded).



2. Home page is accessible to all users.



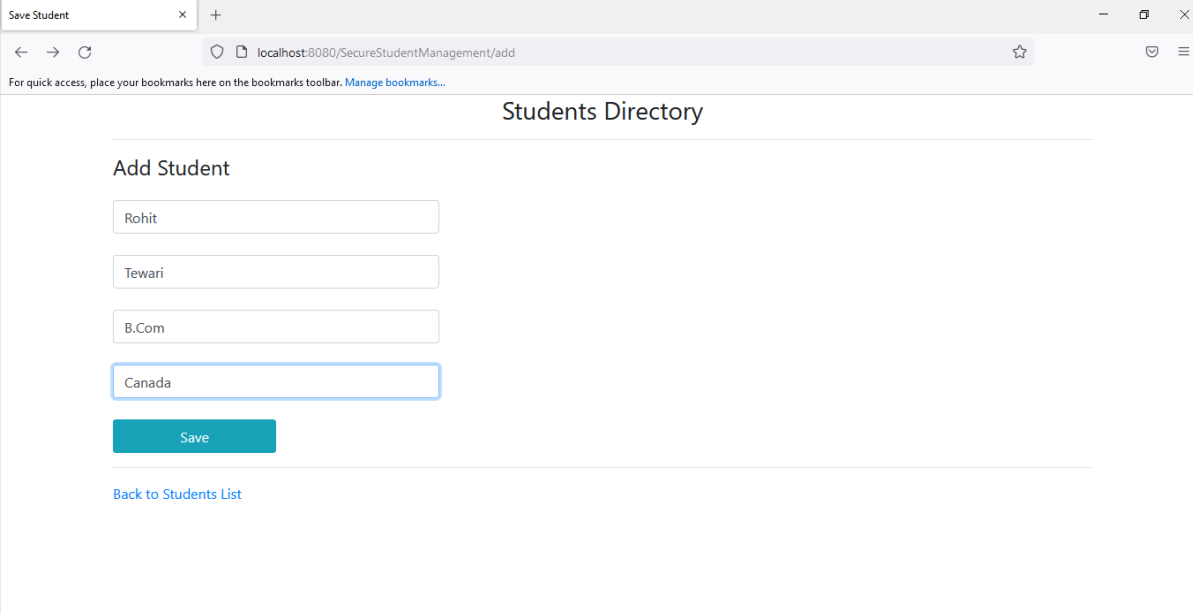
3. 'Print all students' page accessible to all users.



The screenshot shows a web browser window with the title 'Students Directory'. The address bar shows the URL 'localhost:8080/SecureStudentManagement/allStudents'. Below the browser window, there is a page header with the title 'Students Directory' and a blue 'Add Student' button. The main content area contains a table with the following data:

Student ID	First Name	Last Name	Course	Country	Action
1	Suresh	Reddy	B.Tech	India	Update Delete
2	Murali	Mohan	B.Arch	Canada	Update Delete
3	Daniel	Denson	B.Tech	New Zealand	Update Delete
4	Tanya	Gupta	B.Com	USA	Update Delete
12	Abdul	Hasan	B.Sc	India	Update Delete

4. User with role "USER" can access the 'Add Student' page and save a student record.

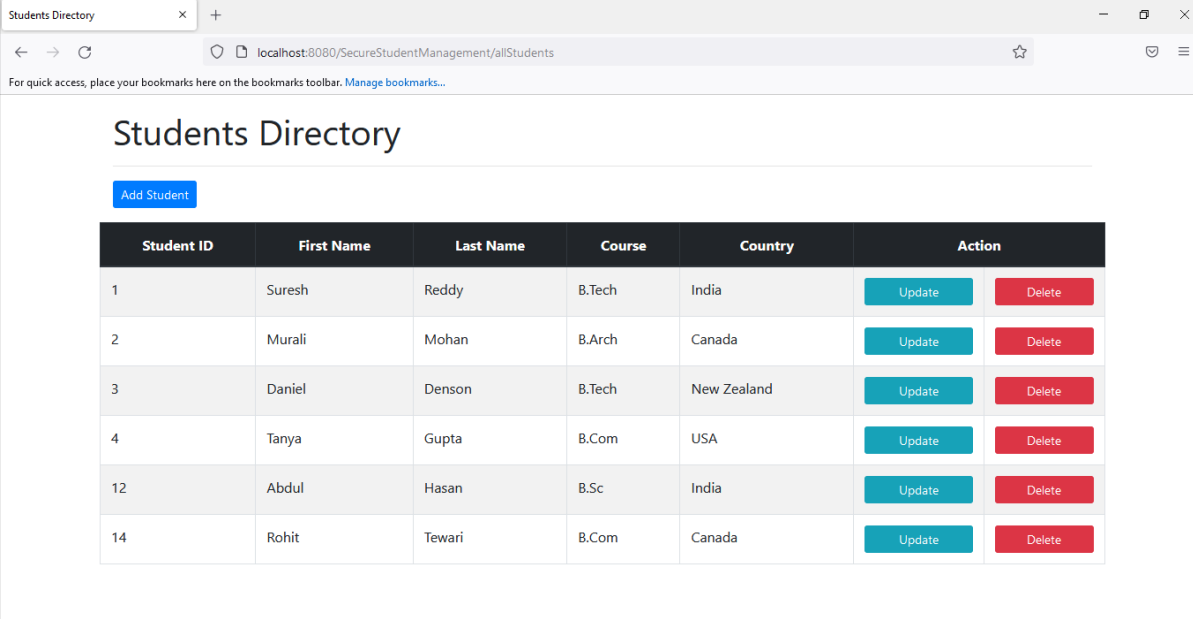


The screenshot shows a web browser window with the title 'Save Student'. The address bar shows the URL 'localhost:8080/SecureStudentManagement/add'. Below the browser window, there is a page header with the title 'Students Directory'. The main content area contains a form titled 'Add Student' with the following fields:

- First Name: Rohit
- Last Name: Tewari
- Course: B.Com
- Country: Canada

Below the form is a blue 'Save' button. At the bottom of the page, there is a link 'Back to Students List'.

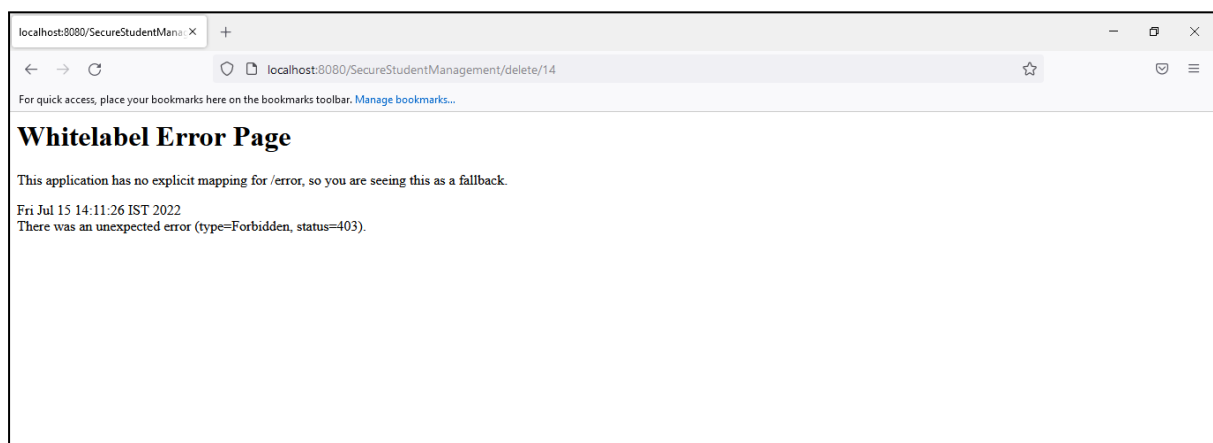
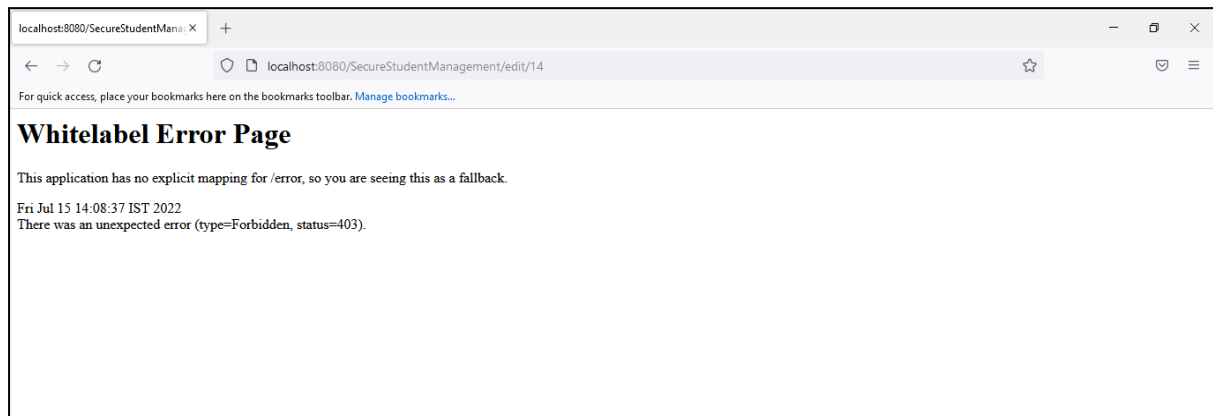
5. Saved student record persists in the table.



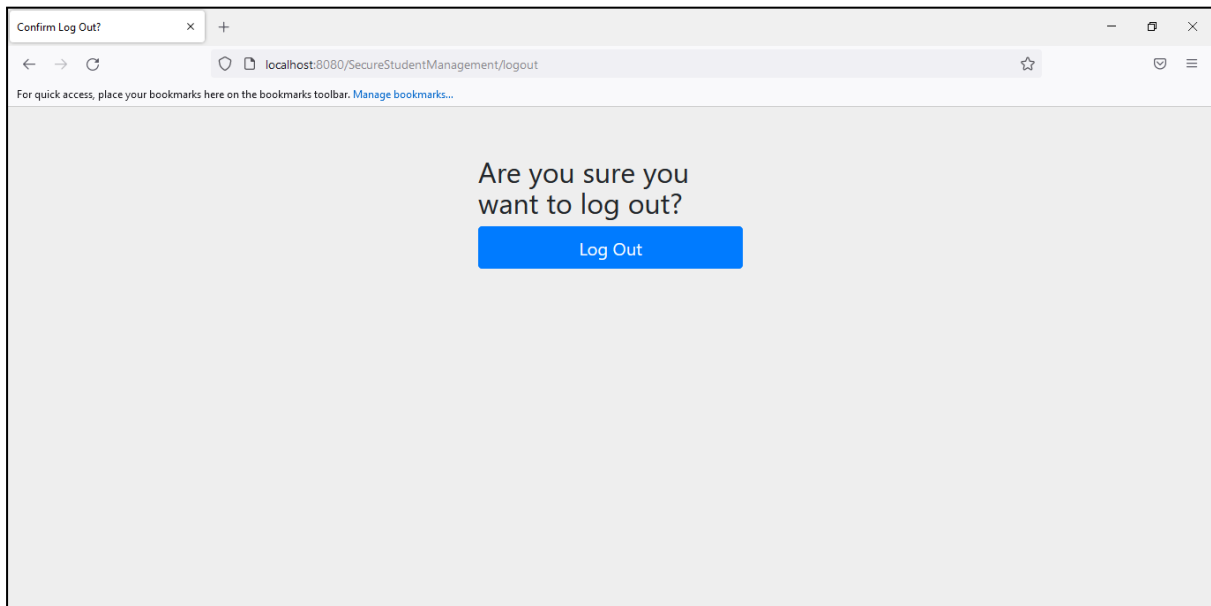
The screenshot shows a web browser window with the title "Students Directory". The address bar shows the URL "localhost:8080/SecureStudentManagement/allStudents". Below the header, there is a blue "Add Student" button. The main content is a table with the following columns: Student ID, First Name, Last Name, Course, Country, and Action. The table contains six rows of student data. Each row has "Update" and "Delete" buttons in the Action column.

Student ID	First Name	Last Name	Course	Country	Action
1	Suresh	Reddy	B.Tech	India	<button>Update</button> <button>Delete</button>
2	Murali	Mohan	B.Arch	Canada	<button>Update</button> <button>Delete</button>
3	Daniel	Denson	B.Tech	New Zealand	<button>Update</button> <button>Delete</button>
4	Tanya	Gupta	B.Com	USA	<button>Update</button> <button>Delete</button>
12	Abdul	Hasan	B.Sc	India	<button>Update</button> <button>Delete</button>
14	Rohit	Tewari	B.Com	Canada	<button>Update</button> <button>Delete</button>

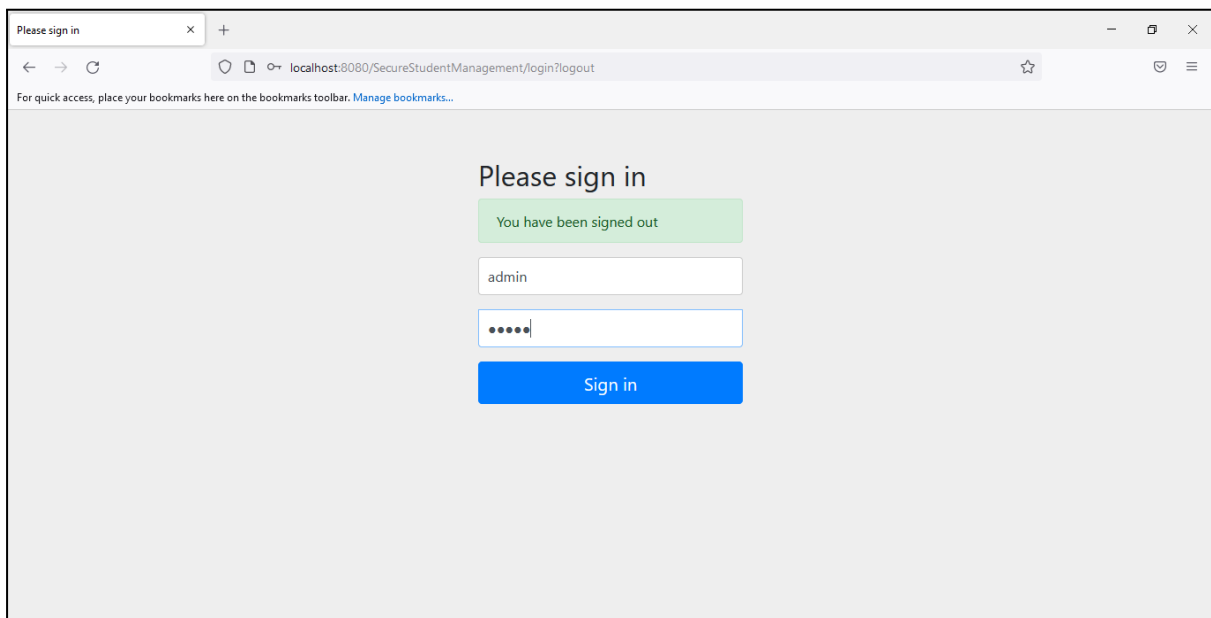
6. User with role "USER" does not have privilege of performing edits or deletes.



7. Default Spring Security logout page loads when typed in the address bar.



8. Logged out of “USER” and logging in as “ADMIN”. Password: “admin” (BCrypt encoded).



9. ADMIN has privilege of adding new students.

The screenshot shows a web browser window with the title 'Save Student'. The address bar shows 'localhost:8080/SecureStudentManagement/add'. The page content is titled 'Students Directory' and features an 'Add Student' form. The form has four input fields: 'Adrita', 'Roy', 'M.Sc', and 'Denmark'. Below the fields is a 'Save' button. At the bottom of the form, there is a link 'Back to Students List'.

Students Directory

Add Student

Adrita

Roy

M.Sc

Denmark

Save

[Back to Students List](#)

10. Added data persists in table

The screenshot shows a web browser window with the title 'Students Directory'. The address bar shows 'localhost:8080/SecureStudentManagement/allStudents'. The page content is titled 'Students Directory' and features a table of students. The table has columns for 'Student ID', 'First Name', 'Last Name', 'Course', 'Country', and 'Action'. The 'Action' column contains 'Update' and 'Delete' buttons. The table contains 7 rows of data, including the student 'Adrita Roy' who was added in the previous step.

Students Directory

[Add Student](#)

Student ID	First Name	Last Name	Course	Country	Action	
1	Suresh	Reddy	B.Tech	India	Update	Delete
2	Murali	Mohan	B.Arch	Canada	Update	Delete
3	Daniel	Denson	B.Tech	New Zealand	Update	Delete
4	Tanya	Gupta	B.Com	USA	Update	Delete
12	Abdul	Hasan	B.Sc	India	Update	Delete
14	Rohit	Tewari	B.Com	Canada	Update	Delete
15	Adrita	Roy	M.Sc	Denmark	Update	Delete

11. ADMIN can update table records

Update Student

localhost:8080/SecureStudentManagement/edit/15

For quick access, place your bookmarks here on the bookmarks toolbar. Manage bookmarks...

Students Directory

Update Student

Adrita

Roy

M.Sc

New Zealand

Update

[Back to Students List](#)

Students Directory

localhost:8080/SecureStudentManagement/allStudents

For quick access, place your bookmarks here on the bookmarks toolbar. Manage bookmarks...

Students Directory

Add Student

Student ID	First Name	Last Name	Course	Country	Action	
1	Suresh	Reddy	B.Tech	India	<div>Update</div>	<div>Delete</div>
2	Murali	Mohan	B.Arch	Canada	<div>Update</div>	<div>Delete</div>
3	Daniel	Denson	B.Tech	New Zealand	<div>Update</div>	<div>Delete</div>
4	Tanya	Gupta	B.Com	USA	<div>Update</div>	<div>Delete</div>
12	Abdul	Hasan	B.Sc	India	<div>Update</div>	<div>Delete</div>
14	Rohit	Tewari	B.Com	Canada	<div>Update</div>	<div>Delete</div>
15	Adrita	Roy	M.Sc	New Zealand	<div>Update</div>	<div>Delete</div>

12. ADMIN can delete table records

The screenshot shows a web browser window with the title "Students Directory". The address bar displays "localhost:8080/SecureStudentManagement/allStudents". Below the browser window, there is a confirmation dialog box with the text "Are you sure you want to delete this student?" and buttons for "OK" and "Cancel". The dialog box is positioned over a table of student records. The table has columns: Student ID, First Name, Last Name, Course, Country, and Action. The Action column contains "Update" and "Delete" buttons. The student record being targeted for deletion is Student ID 15, with First Name "Adrita", Last Name "Roy", Course "M.Sc", and Country "New Zealand".

Student ID	First Name	Last Name	Course	Country	Action
1	Suresh	Reddy	B.Tech	India	<button>Update</button> <button>Delete</button>
2	Murali				<button>Update</button> <button>Delete</button>
3	Daniel				<button>Update</button> <button>Delete</button>
4	Tanya	Gupta	B.Com	USA	<button>Update</button> <button>Delete</button>
12	Abdul	Hasan	B.Sc	India	<button>Update</button> <button>Delete</button>
14	Rohit	Tewari	B.Com	Canada	<button>Update</button> <button>Delete</button>
15	Adrita	Roy	M.Sc	New Zealand	<button>Update</button> <button>Delete</button>

The screenshot shows the same web browser window, but the confirmation dialog is no longer present. The table of student records has been updated, and the student with ID 15 has been removed. The table now contains 6 records.

Student ID	First Name	Last Name	Course	Country	Action
1	Suresh	Reddy	B.Tech	India	<button>Update</button> <button>Delete</button>
2	Murali	Mohan	B.Arch	Canada	<button>Update</button> <button>Delete</button>
3	Daniel	Denson	B.Tech	New Zealand	<button>Update</button> <button>Delete</button>
4	Tanya	Gupta	B.Com	USA	<button>Update</button> <button>Delete</button>
12	Abdul	Hasan	B.Sc	India	<button>Update</button> <button>Delete</button>
14	Rohit	Tewari	B.Com	Canada	<button>Update</button> <button>Delete</button>
