

VIETNAM NATIONAL UNIVERSITY OF HO CHI MINH CITY
THE INTERNATIONAL UNIVERSITY
SCHOOL OF COMPUTER SCIENCE AND ENGINEERING



Web Application Development - IT093IU

Homework Lab 5: SERVLET & MVC PATTERN

Nguyễn Vũ Thành Tính - ITCSIU23039


Lab Instructor: N.T.Nghia

Github Link.....	3
1. List.....	3
2. Add.....	4
A. Showing the New Student Form:.....	4
B. Processing the Form Submission:.....	5
3. Edit.....	6
A. Showing the Edit Form (Pre-filled):.....	6
B. Processing the Update Submission:.....	7
4. Delete.....	8
5. Empty State.....	9

Github Link

https://github.com/ngvuthtinh/Web_Lab/tree/main/Lab_5/Homework

1. Home page with student list



Student Management System

MVC Pattern with Jakarta EE & JSTL

Add Student

Export Excel

-- All Majors --

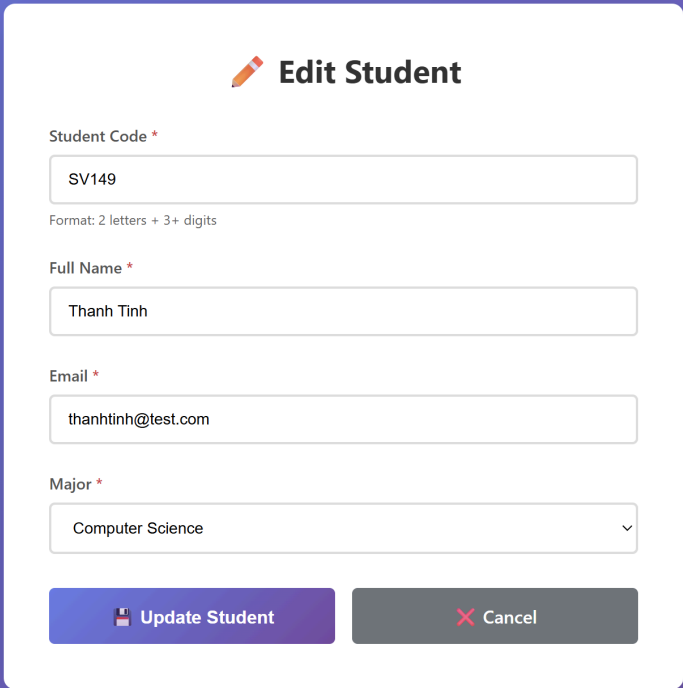
Clear

ID	CODE	FULL NAME	EMAIL	MAJOR	ACTION
6	SV149	Thanh Tinh	thanhtinh@test.com	Computer Science	<div>Edit</div> <div>Delete</div>
7	SV205	Anh Khoi	anhkhoi@test.com	Software Engineering	<div>Edit</div> <div>Delete</div>

Description: The main dashboard displays a paginated list of students. It includes a control panel for searching, filtering by major, and sorting by columns. Users can also export data to Excel or add new students from this view.

2. Add student form

3. Edit student form (pre-filled)



The 'Edit Student' form is a white card with rounded corners on a purple background. It features a pencil icon and the title 'Edit Student'. The form contains four input fields: 'Student Code' (pre-filled with 'SV149'), 'Full Name' (pre-filled with 'Thanh Tinh'), 'Email' (pre-filled with 'thanhtinh@test.com'), and 'Major' (a dropdown menu pre-filled with 'Computer Science'). Below the fields are two buttons: a blue 'Update Student' button with a save icon and a grey 'Cancel' button with a red 'X' icon.



Edit Student

Student Code *
SV149
Format: 2 letters + 3+ digits

Full Name *
Thanh Tinh

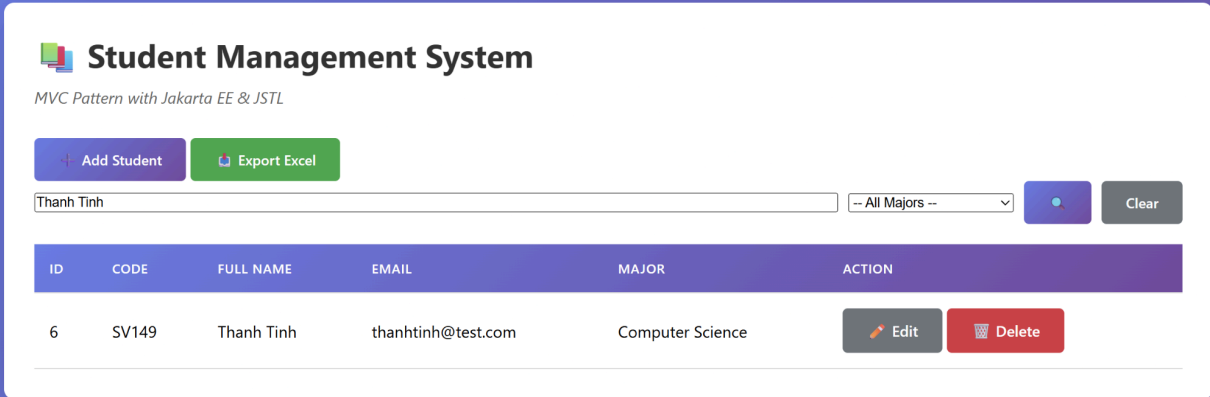
Email *
thanhtinh@test.com

Major *
Computer Science

 Update Student  Cancel



Description: The edit form pre-loads the existing student's data from the database, allowing the user to modify details while preserving the Student ID.


4. Search results





The 'Student Management System' interface has a purple header with a logo and the title. Below the header, there are two buttons: 'Add Student' (blue) and 'Export Excel' (green). A search bar contains the text 'Thanh Tinh'. To the right of the search bar is a dropdown menu set to '-- All Majors --' and a 'Clear' button. Below the search bar is a table with columns: ID, CODE, FULL NAME, EMAIL, MAJOR, and ACTION. The table contains one row for the student with ID 6, code SV149, name Thanh Tinh, email thanhtinh@test.com, and major Computer Science. The ACTION column for this row has two buttons: 'Edit' (blue) and 'Delete' (red).

Student Management System
MVC Pattern with Jakarta EE & JSTL


 Add Student  Export Excel

Thanh Tinh -- All Majors --  Clear

ID	CODE	FULL NAME	EMAIL	MAJOR	ACTION
6	SV149	Thanh Tinh	thanhtinh@test.com	Computer Science	 Edit  Delete

Description: Search functionality allows finding students by Name, Code, or Email. The search state is preserved across pagination.

5. Validation errors

 **Edit Student**

Student Code *

⚠ Student code is required
Format: 2 letters + 3+ digits

Full Name *

⚠ Full name is required


Email *

⚠ Email is required

Major *

-- Select Major --


⚠ Major is required

 Update Student

✖ Cancel

Description: Server-side validation prevents invalid data entry. Error messages are displayed directly below the relevant fields if inputs are missing or format constraints (like Regex for Student Code/Email) are violated.

6. Sorted list



Student Management System

MVC Pattern with Jakarta EE & JSTL

Add Student

Export Excel


-- All Majors --

Clear

ID ▾	CODE	FULL NAME	EMAIL	MAJOR	ACTION
8	SV310	Hoang Phuong	hoangphuong@test.com	Business Administration	<div>Edit</div> <div>Delete</div>
7	SV205	Anh Khoi	anhkhoi@test.com	Software Engineering	<div>Edit</div> <div>Delete</div>
6	SV149	Thanh Tinh	thanh tinh@test.com	Computer Science	<div>Edit</div> <div>Delete</div>

Description: Clicking on column headers sorts the data in Ascending or Descending order. Visual indicators (arrows) show the current sort direction.

7. Filtered list



Student Management System

MVC Pattern with Jakarta EE & JSTL

Add Student

Export Excel

Business Administration

Clear

ID ▲	CODE	FULL NAME	EMAIL	MAJOR	ACTION
8	SV310	Hoang Phuong	hoangphuong@test.com	Business Administration	<div>Edit</div> <div>Delete</div>

Description: Users can filter the list to show only students from a specific Major. The filter dropdown reflects the current selection.