

# Student Management System

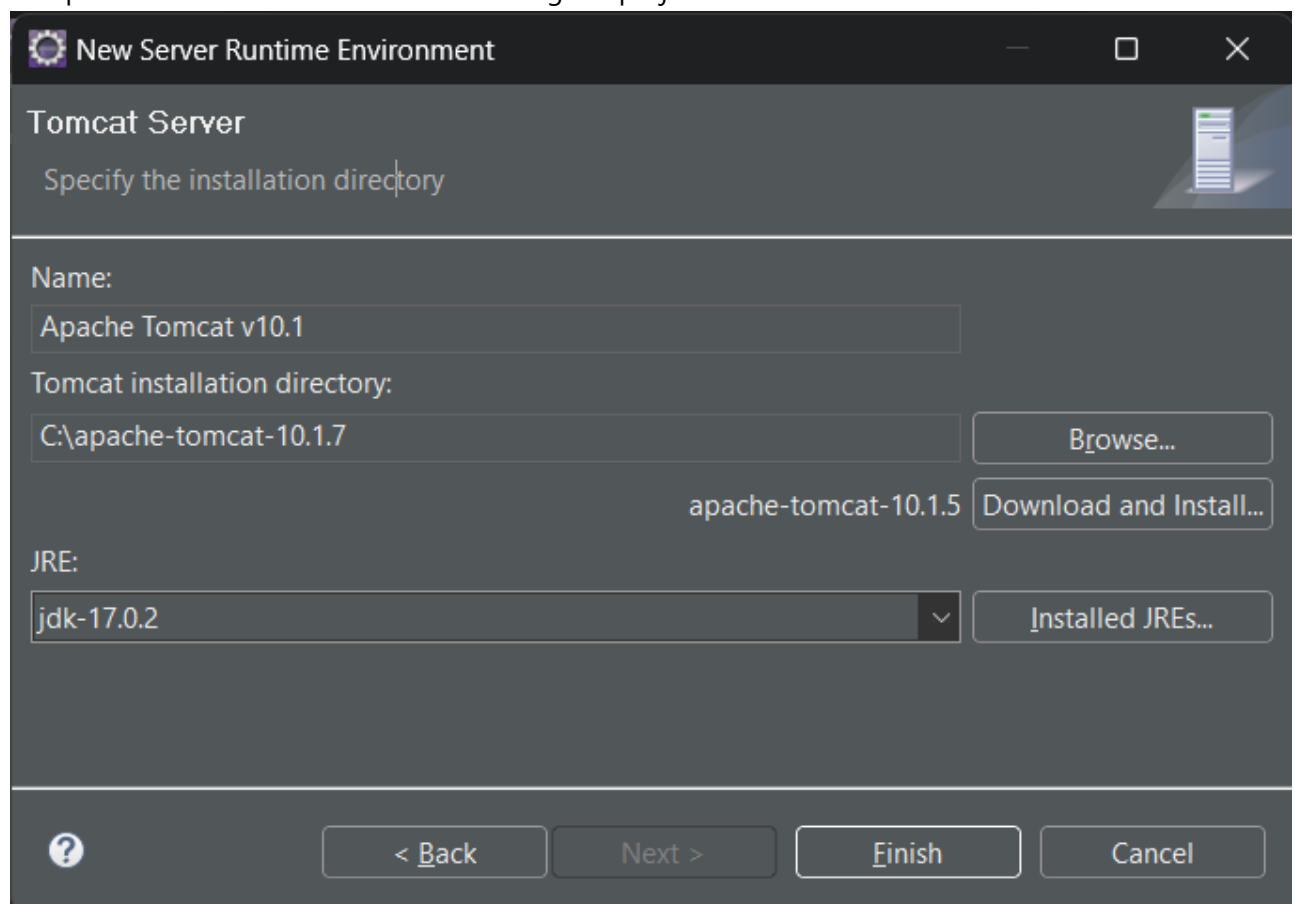
Author: Lê Kim Hiếu - 20120474

**Github:** <https://github.com/kimhieu153255>

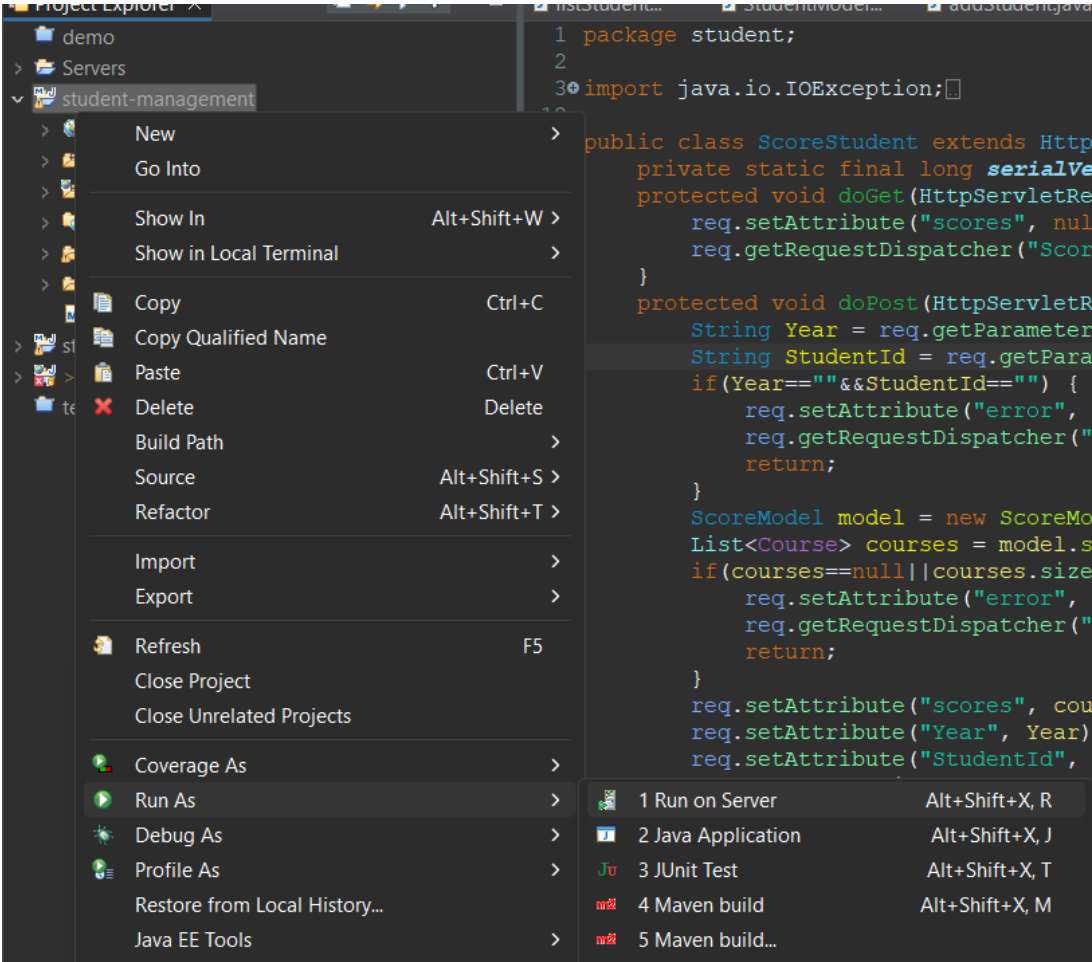
- **Required Score: 10/10.**
- **All Requirements are completed.** I also add some features to make the system more convenient to use.
- This is a simple student management system that allows you to add, edit, delete and find students. It also allows you to add, edit, delete, find courses and find Student of course. You can also add students to courses, remove students from courses, find students in courses and find scores of students in courses.
- It includes 4 main features: Student, Course, Courses of Student and Score Board. Each feature I will describe in detail below.

## I. How to run

1. Clone this project to your computer.
2. Run **databaseInit.sql** in your Oracle database (Here I use Oracle 21c). I will change the password of User **System** to **153255**, so you have problems with this password of User **System** in different projects.
3. Setup **Tomcat 10.1.7** server before running the project.



4. Open the project in **Eclipse** and run project with this server.

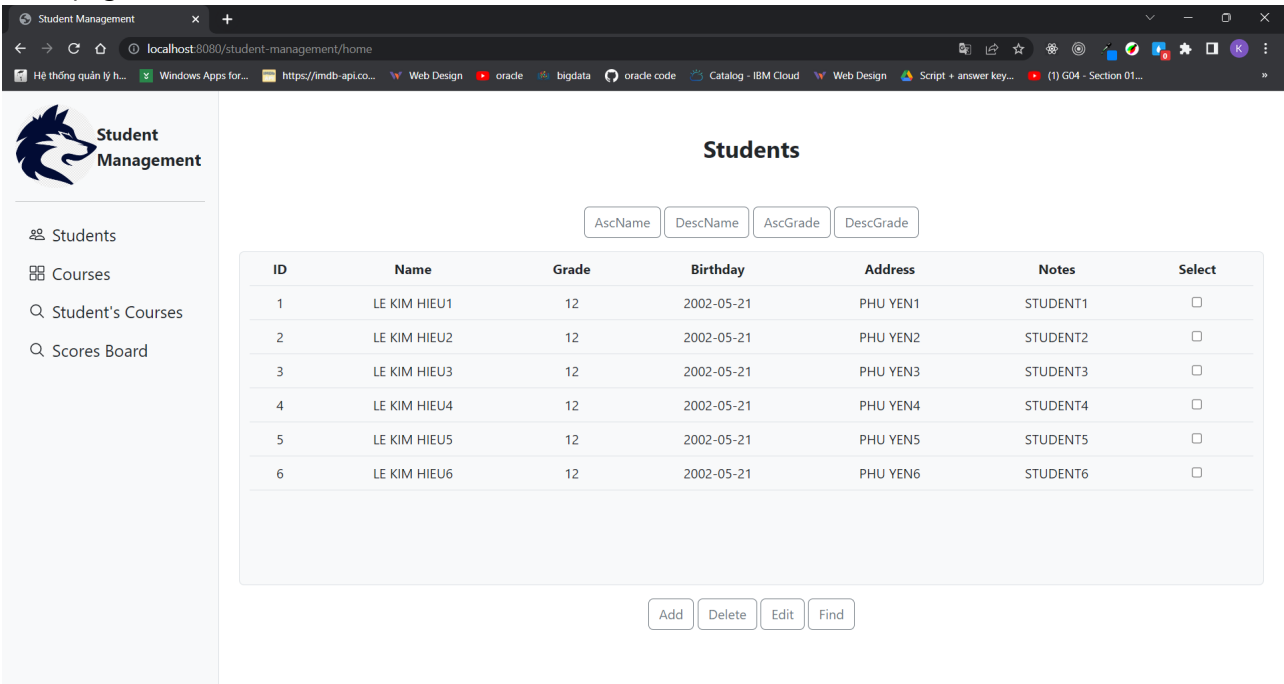


5. Open the browser and enter <http://localhost:8080/StudentManagementSystem/> to use the system.


## II. Description features

### 1. Student

- Main page Student:



- Add student:
  - Fill all fields in the information of the student (Notes field isn't required). Unless error message will appear.
  - Example Add student:



Student Management

- Students
- Courses
- Student's Courses
- Scores Board

### Add Student

KIM HIEU6

11


05/25/2002

PHU YEN6

STUDENT6

Submit

- Result:



Student Management

- Students
- Courses
- Student's Courses
- Scores Board

### Students

AscName DescName AscGrade DescGrade

ID	Name	Grade	Birthday	Address	Notes	Select
1	LE KIM HIEU1	12	2002-05-21	PHU YEN1	STUDENT1	<input type="checkbox"/>
2	LE KIM HIEU2	12	2002-05-21	PHU YEN2	STUDENT2	<input type="checkbox"/>
3	LE KIM HIEU3	12	2002-05-21	PHU YEN3	STUDENT3	<input type="checkbox"/>
4	LE KIM HIEU4	12	2002-05-21	PHU YEN4	STUDENT4	<input type="checkbox"/>
5	LE KIM HIEU5	12	2002-05-21	PHU YEN5	STUDENT5	<input type="checkbox"/>
6	LE KIM HIEU6	12	2002-05-21	PHU YEN6	STUDENT6	<input type="checkbox"/>
21	KIM HIEU6	11	2002-05-25	PHU YEN6	STUDENT6	<input type="checkbox"/>

Add Delete Edit Find

- Edit student:
  - Fill Student Id and Student Name to find the student you want to edit. Unless error message will appear.
  - Example Edit student:

Student Management

### Edit Student

21

Search

Student Management

### Edit Student

21

KIM HIEU5

11

05/25/2002

PHU YEN6

STUDENT6

Submit

- Result:

Student Management


### Students

AscName DescName AscGrade DescGrade

ID	Name	Grade	Birthday	Address	Notes	Select
1	LE KIM HIEU1	12	2002-05-21	PHU YEN1	STUDENT1	<input type="checkbox"/>
2	LE KIM HIEU2	12	2002-05-21	PHU YEN2	STUDENT2	<input type="checkbox"/>
3	LE KIM HIEU3	12	2002-05-21	PHU YEN3	STUDENT3	<input type="checkbox"/>
4	LE KIM HIEU4	12	2002-05-21	PHU YEN4	STUDENT4	<input type="checkbox"/>
5	LE KIM HIEU5	12	2002-05-21	PHU YEN5	STUDENT5	<input type="checkbox"/>
6	LE KIM HIEU6	12	2002-05-21	PHU YEN6	STUDENT6	<input type="checkbox"/>
21	KIM HIEU5	11	2002-05-25	PHU YEN6	STUDENT6	<input type="checkbox"/>

Add Delete Edit Find

- Delete student:
  - Choose the student you want to delete and click Delete button.

Student Management

Students

Courses

Student's Courses

Scores Board


Students

AscNameDescNameAscGradeDescGrade

ID	Name	Grade	Birthday	Address	Notes	Select
1	LE KIM HIEU1	12	2002-05-21	PHU YEN1	STUDENT1	<input type="checkbox"/>
2	LE KIM HIEU2	12	2002-05-21	PHU YEN2	STUDENT2	<input type="checkbox"/>
3	LE KIM HIEU3	12	2002-05-21	PHU YEN3	STUDENT3	<input type="checkbox"/>
4	LE KIM HIEU4	12	2002-05-21	PHU YEN4	STUDENT4	<input type="checkbox"/>
5	LE KIM HIEU5	12	2002-05-21	PHU YEN5	STUDENT5	<input type="checkbox"/>
6	LE KIM HIEU6	12	2002-05-21	PHU YEN6	STUDENT6	<input type="checkbox"/>
21	KIM HIEU5	11	2002-05-25	PHU YEN6	STUDENT6	<input checked="" type="checkbox"/>

AddDeleteEditFind

- Result:

Student Management

Students

Courses

Student's Courses

Scores Board


Students

AscNameDescNameAscGradeDescGrade

ID	Name	Grade	Birthday	Address	Notes	Select
1	LE KIM HIEU1	12	2002-05-21	PHU YEN1	STUDENT1	<input type="checkbox"/>
2	LE KIM HIEU2	12	2002-05-21	PHU YEN2	STUDENT2	<input type="checkbox"/>
3	LE KIM HIEU3	12	2002-05-21	PHU YEN3	STUDENT3	<input type="checkbox"/>
4	LE KIM HIEU4	12	2002-05-21	PHU YEN4	STUDENT4	<input type="checkbox"/>
5	LE KIM HIEU5	12	2002-05-21	PHU YEN5	STUDENT5	<input type="checkbox"/>
6	LE KIM HIEU6	12	2002-05-21	PHU YEN6	STUDENT6	<input type="checkbox"/>

AddDeleteEditFind

- Sort student by Name:
  - Click on the button AscName or DescName to sort the list of students by name.
  - Ascending:



Student Management

Students

Courses

Student's Courses

Scores Board

Students


AscNameDescNameAscGradeDescGrade

ID	Name	Grade	Birthday	Address	Notes	Select
1	LE KIM HIEU1	12	2002-05-21	PHU YEN1	STUDENT1	<input type="checkbox"/>
2	LE KIM HIEU2	12	2002-05-21	PHU YEN2	STUDENT2	<input type="checkbox"/>
3	LE KIM HIEU3	12	2002-05-21	PHU YEN3	STUDENT3	<input type="checkbox"/>
4	LE KIM HIEU4	12	2002-05-21	PHU YEN4	STUDENT4	<input type="checkbox"/>
5	LE KIM HIEU5	12	2002-05-21	PHU YEN5	STUDENT5	<input type="checkbox"/>
6	LE KIM HIEU6	12	2002-05-21	PHU YEN6	STUDENT6	<input type="checkbox"/>

AddDeleteEditFind

localhost:8080/student-management/home?sort=asc&name=True

- Descending:



Student Management

Students

Courses

Student's Courses

Scores Board

Students


AscNameDescNameAscGradeDescGrade

ID	Name	Grade	Birthday	Address	Notes	Select
6	LE KIM HIEU6	12	2002-05-21	PHU YEN6	STUDENT6	<input type="checkbox"/>
5	LE KIM HIEU5	12	2002-05-21	PHU YEN5	STUDENT5	<input type="checkbox"/>
4	LE KIM HIEU4	12	2002-05-21	PHU YEN4	STUDENT4	<input type="checkbox"/>
3	LE KIM HIEU3	12	2002-05-21	PHU YEN3	STUDENT3	<input type="checkbox"/>
2	LE KIM HIEU2	12	2002-05-21	PHU YEN2	STUDENT2	<input type="checkbox"/>
1	LE KIM HIEU1	12	2002-05-21	PHU YEN1	STUDENT1	<input type="checkbox"/>

AddDeleteEditFind

localhost:8080/student-management/home?sort=desc&name=True

- Sort student by Grade:
  - Click on the button AscGrade or DescGrade to sort the list of students by grade.
  - Ascending:

Student Management

Students

Courses

Student's Courses

Scores Board

### Students


AscName DescName **AscGrade** DescGrade

ID	Name	Grade	Birthday	Address	Notes	Select
22	KIM HIEU6	11	2002-05-25	PHU YEN6	STUDENT6	<input type="checkbox"/>
1	LE KIM HIEU1	12	2002-05-21	PHU YEN1	STUDENT1	<input type="checkbox"/>
2	LE KIM HIEU2	12	2002-05-21	PHU YEN2	STUDENT2	<input type="checkbox"/>
3	LE KIM HIEU3	12	2002-05-21	PHU YEN3	STUDENT3	<input type="checkbox"/>
4	LE KIM HIEU4	12	2002-05-21	PHU YEN4	STUDENT4	<input type="checkbox"/>
5	LE KIM HIEU5	12	2002-05-21	PHU YEN5	STUDENT5	<input type="checkbox"/>
6	LE KIM HIEU6	12	2002-05-21	PHU YEN6	STUDENT6	<input type="checkbox"/>

Add Delete Edit Find

localhost:8080/student-management/home?sort=asc&name=false

- Descending:

Student Management

Students

Courses

Student's Courses

Scores Board

### Students

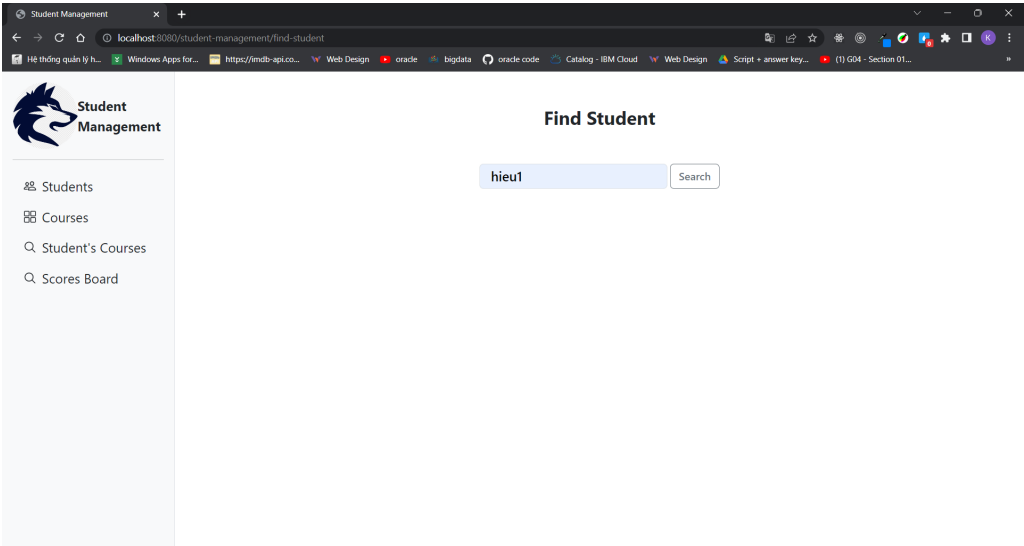
AscName DescName AscGrade **DescGrade**

ID	Name	Grade	Birthday	Address	Notes	Select
1	LE KIM HIEU1	12	2002-05-21	PHU YEN1	STUDENT1	<input type="checkbox"/>
2	LE KIM HIEU2	12	2002-05-21	PHU YEN2	STUDENT2	<input type="checkbox"/>
3	LE KIM HIEU3	12	2002-05-21	PHU YEN3	STUDENT3	<input type="checkbox"/>
4	LE KIM HIEU4	12	2002-05-21	PHU YEN4	STUDENT4	<input type="checkbox"/>
5	LE KIM HIEU5	12	2002-05-21	PHU YEN5	STUDENT5	<input type="checkbox"/>
6	LE KIM HIEU6	12	2002-05-21	PHU YEN6	STUDENT6	<input type="checkbox"/>
22	KIM HIEU6	11	2002-05-25	PHU YEN6	STUDENT6	<input type="checkbox"/>

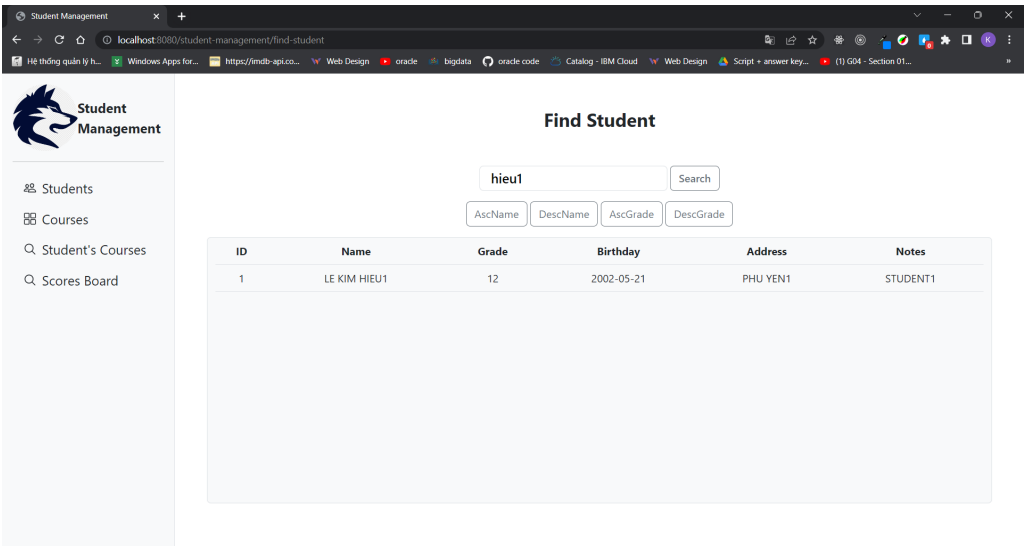
Add Delete Edit Find

localhost:8080/student-management/home?sort=desc&name=false

- Find a student by Name:
  - Fill Student Name to find the student you want to find.
  - Example Find student:

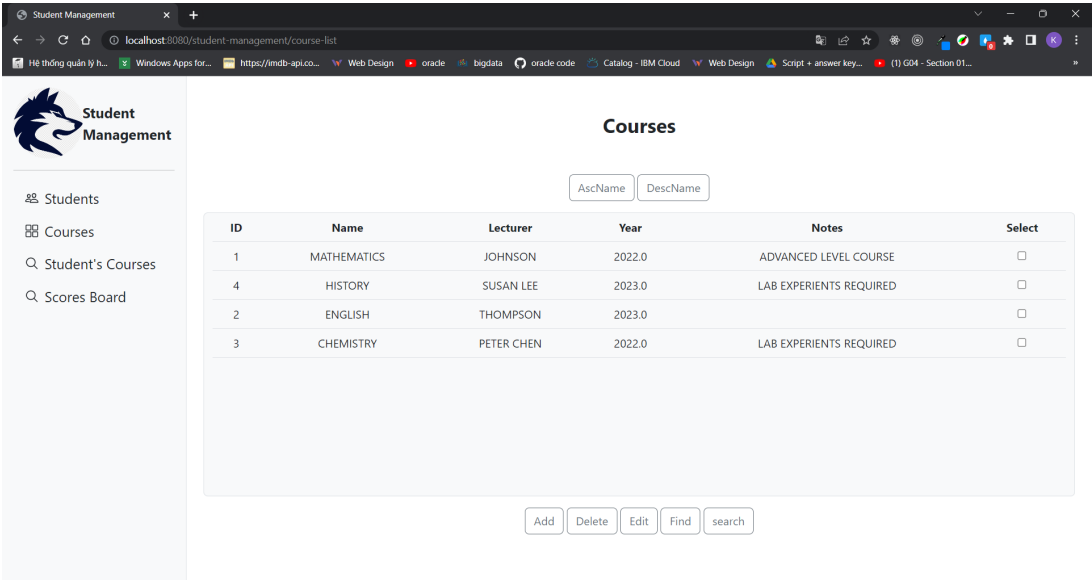


- Result:



## 2. Course

- Main page Course:





- Add course:
  - Fill all fields in the information of the course (Notes field isn't required). Unless error message will appear.
  - Example Add course:

The screenshot shows a web browser window with the URL `localhost:8080/student-management/add-course`. The page has a sidebar on the left with the 'Student Management' logo and navigation links: 'Students', 'Courses', 'Student's Courses', and 'Scores Board'. The main content area is titled 'Add Course' and contains four input fields: 'English', 'hieu', '2023', and 'Notes'. A 'Submit' button is located at the bottom right of the form.

◦ Result:

The screenshot shows the 'Courses' page in the Student Management application. The URL is `localhost:8080/student-management/course-list`. The page features a sidebar with the same navigation links as the previous screenshot. The main content area is titled 'Courses' and includes two dropdown menus for 'AscName' and 'DescName'. Below these is a table with the following data:

ID	Name	Lecturer	Year	Notes	Select
1	MATHEMATICS	JOHNSON	2022.0	ADVANCED LEVEL COURSE	<input type="checkbox"/>
4	HISTORY	SUSAN LEE	2023.0	LAB EXPERIENTS REQUIRED	<input type="checkbox"/>
21	English	hieu	2023.0		<input type="checkbox"/>
2	ENGLISH	THOMPSON	2023.0		<input type="checkbox"/>
3	CHEMISTRY	PETER CHEN	2022.0	LAB EXPERIENTS REQUIRED	<input type="checkbox"/>

At the bottom of the page, there are five buttons: 'Add', 'Delete', 'Edit', 'Find', and 'search'.

- Edit course:
  - Fill Course Id to find the course you want to edit then fill the information of the course you want to edit (Notes isn't required). Unless error message will appear.
  - Example Edit course:

Student Management

### Edit Course

21

Search

Student Management

### Edit Course

21

English

hieu1

2023.0

Notes

Submit

- Result:

Student Management


### Courses

AscName DescName

ID	Name	Lecturer	Year	Notes	Select
1	MATHEMATICS	JOHNSON	2022.0	ADVANCED LEVEL COURSE	<input type="checkbox"/>
4	HISTORY	SUSAN LEE	2023.0	LAB EXPERIENTS REQUIRED	<input type="checkbox"/>
21	English	hieu1	2023.0		<input type="checkbox"/>
2	ENGLISH	THOMPSON	2023.0		<input type="checkbox"/>
3	CHEMISTRY	PETER CHEN	2022.0	LAB EXPERIENTS REQUIRED	<input type="checkbox"/>

Add Delete Edit Find search

- Delete course:
  - Choose the course you want to delete and click Delete button.
  - Example Delete course:



Student Management

Students

Courses

Student's Courses

Scores Board


Courses

AscName DescName

ID	Name	Lecturer	Year	Notes	Select
1	MATHEMATICS	JOHNSON	2022.0	ADVANCED LEVEL COURSE	<input type="checkbox"/>
4	HISTORY	SUSAN LEE	2023.0	LAB EXPERIENTS REQUIRED	<input type="checkbox"/>
6	English	hieu1	2023.0		<input checked="" type="checkbox"/>
2	ENGLISH	THOMPSON	2023.0		<input type="checkbox"/>
3	CHEMISTRY	PETER CHEN	2022.0	LAB EXPERIENTS REQUIRED	<input type="checkbox"/>

Add Delete Edit Find search

◦ Result:



Student Management

Students

Courses

Student's Courses

Scores Board


Courses

AscName DescName

ID	Name	Lecturer	Year	Notes	Select
1	MATHEMATICS	JOHNSON	2022.0	ADVANCED LEVEL COURSE	<input type="checkbox"/>
4	HISTORY	SUSAN LEE	2023.0	LAB EXPERIENTS REQUIRED	<input type="checkbox"/>
2	ENGLISH	THOMPSON	2023.0		<input type="checkbox"/>
3	CHEMISTRY	PETER CHEN	2022.0	LAB EXPERIENTS REQUIRED	<input type="checkbox"/>

Add Delete Edit Find search

- Sort course by Name:
  - Click on the button AscName or DescName to sort the list of courses by name.
  - Ascending:



Student Management

Students

Courses

Student's Courses

Scores Board

Courses


AscName DescName

ID	Name	Lecturer	Year	Notes	Select
3	CHEMISTRY	PETER CHEN	2022.0	LAB EXPERIENTS REQUIRED	<input type="checkbox"/>
2	ENGLISH	THOMPSON	2023.0		<input type="checkbox"/>
4	HISTORY	SUSAN LEE	2023.0	LAB EXPERIENTS REQUIRED	<input type="checkbox"/>
1	MATHEMATICS	JOHNSON	2022.0	ADVANCED LEVEL COURSE	<input type="checkbox"/>

Add Delete Edit Find search

localhost:8080/student-management/course-list?sort=asc

- Descending:



Student Management

Students

Courses

Student's Courses

Scores Board

Courses

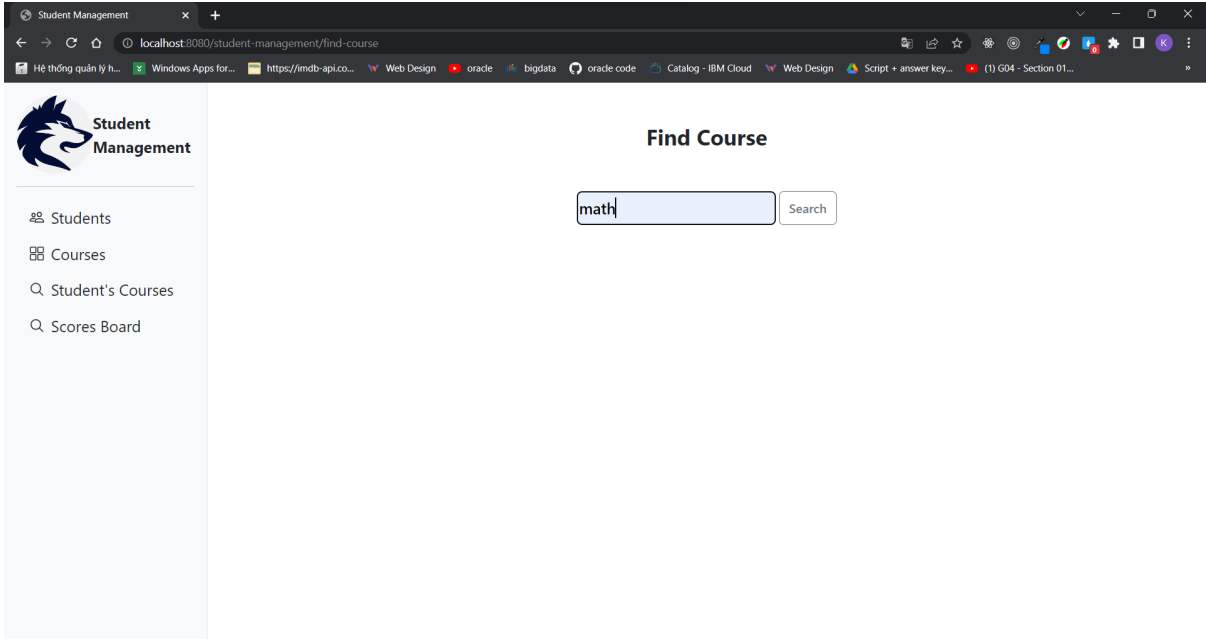
AscName DescName

ID	Name	Lecturer	Year	Notes	Select
1	MATHEMATICS	JOHNSON	2022.0	ADVANCED LEVEL COURSE	<input type="checkbox"/>
4	HISTORY	SUSAN LEE	2023.0	LAB EXPERIENTS REQUIRED	<input type="checkbox"/>
2	ENGLISH	THOMPSON	2023.0		<input type="checkbox"/>
3	CHEMISTRY	PETER CHEN	2022.0	LAB EXPERIENTS REQUIRED	<input type="checkbox"/>

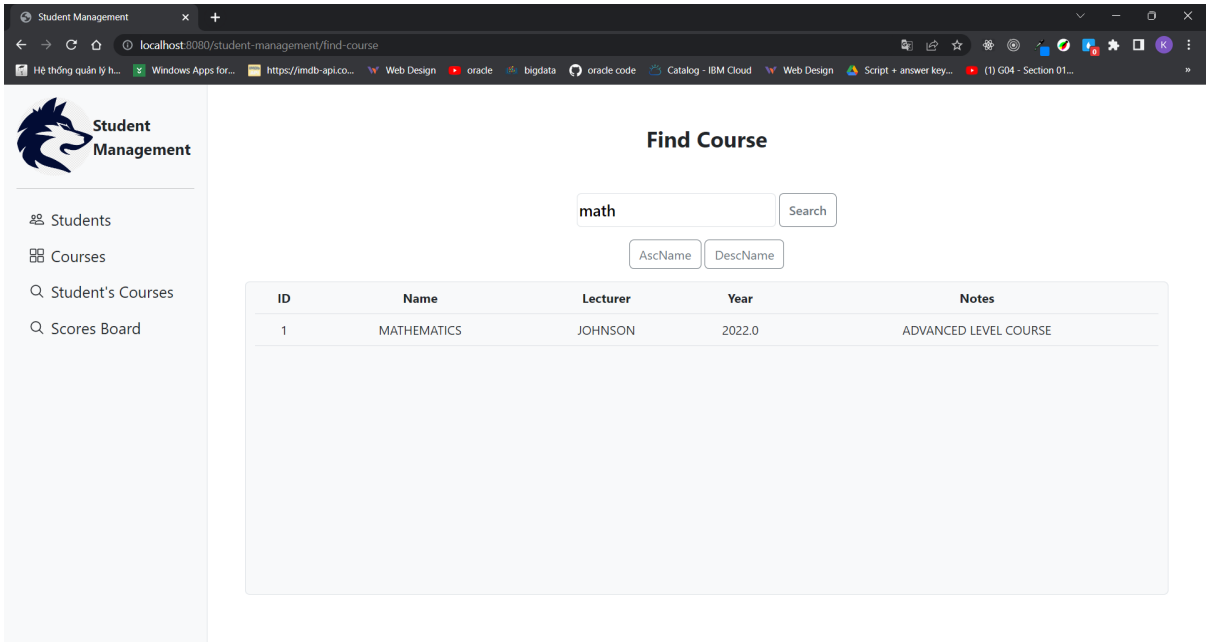
Add Delete Edit Find search

localhost:8080/student-management/course-list?sort=desc

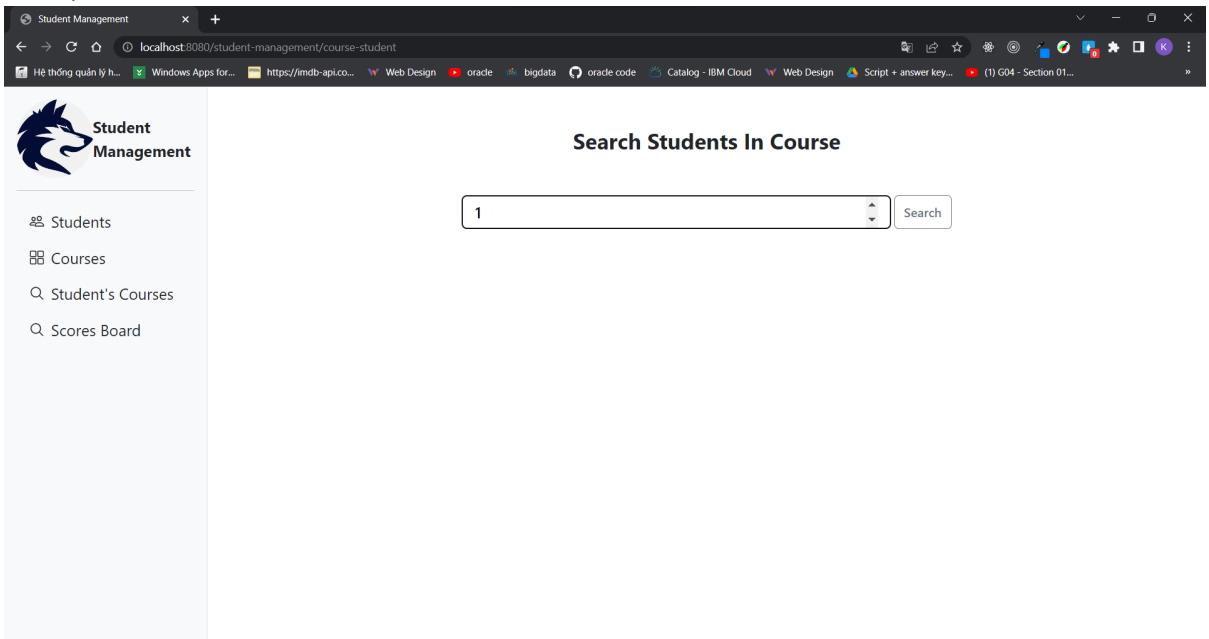
- Find a course by Name:
  - Click on the button Find to find the course you want to find then fill Course Name you want to find.
  - Example Find course:



Result:



- Search Students in Course:
  - Click on the button Search to find the students in the course you want to find then fill Course Id you want to find.
  - Example Search students in course:



Student Management

### Search Students In Course

1

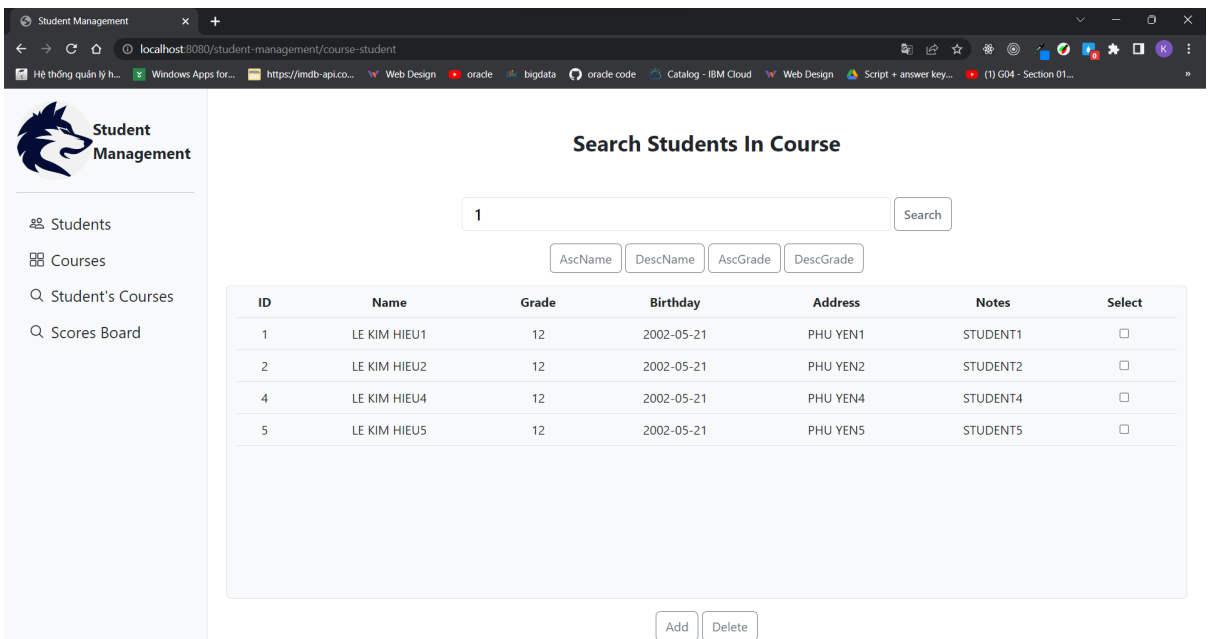
Students

Courses

Student's Courses

Scores Board

- Result:



Student Management

### Search Students In Course

1

AscName DescName AscGrade DescGrade

ID	Name	Grade	Birthday	Address	Notes	Select
1	LE KIM HIEU1	12	2002-05-21	PHU YEN1	STUDENT1	<input type="checkbox"/>
2	LE KIM HIEU2	12	2002-05-21	PHU YEN2	STUDENT2	<input type="checkbox"/>
4	LE KIM HIEU4	12	2002-05-21	PHU YEN4	STUDENT4	<input type="checkbox"/>
5	LE KIM HIEU5	12	2002-05-21	PHU YEN5	STUDENT5	<input type="checkbox"/>

Add Delete

- Add Student into Course:
  - Click on the button Add to add the student into the course then fill Student Id you want to add.
  - Example Add student into course:

The screenshot shows a web browser window with the URL `localhost:8080/student-management/course-add-student?CourseId=1`. The page has a sidebar on the left with the 'Student Management' logo and a menu containing 'Students', 'Courses', 'Student's Courses', and 'Scores Board'. The main content area is titled 'Add Student In Course' and contains three input fields: a text field with the value '1', a text field with the value '6', and a dropdown menu with the value 'Score'. Below these fields is a 'Submit' button.

◦ Result:


The screenshot shows a web browser window with the URL `localhost:8080/student-management/course-student?CourseId=1`. The page has the same sidebar as the previous screenshot. The main content area is titled 'Search Students In Course'. It features a search bar with the value '1' and a 'Search' button. Below the search bar are four filter buttons: 'AscName', 'DescName', 'AscGrade', and 'DescGrade'. The main part of the page is a table with the following data:

ID	Name	Grade	Birthday	Address	Notes	Select
1	LE KIM HIEU1	12	2002-05-21	PHU YEN1	STUDENT1	<input type="checkbox"/>
2	LE KIM HIEU2	12	2002-05-21	PHU YEN2	STUDENT2	<input type="checkbox"/>
4	LE KIM HIEU4	12	2002-05-21	PHU YEN4	STUDENT4	<input type="checkbox"/>
5	LE KIM HIEU5	12	2002-05-21	PHU YEN5	STUDENT5	<input type="checkbox"/>
6	LE KIM HIEU6	12	2002-05-21	PHU YEN6	STUDENT6	<input type="checkbox"/>

Below the table are two buttons: 'Add' and 'Delete'.

- Delete Student in Course:

- Click on the button Delete to delete the student in the course then fill Student Id you want to delete.
- Example Delete student in course:



Student Management

Students

Courses

Student's Courses

Scores Board

Search Students In Course

1

Search

AscName

DescName

AscGrade


DescGrade

ID	Name	Grade	Birthday	Address	Notes	Select
1	LE KIM HIEU1	12	2002-05-21	PHU YEN1	STUDENT1	<input type="checkbox"/>
2	LE KIM HIEU2	12	2002-05-21	PHU YEN2	STUDENT2	<input type="checkbox"/>
4	LE KIM HIEU4	12	2002-05-21	PHU YEN4	STUDENT4	<input type="checkbox"/>
5	LE KIM HIEU5	12	2002-05-21	PHU YEN5	STUDENT5	<input type="checkbox"/>
6	LE KIM HIEU6	12	2002-05-21	PHU YEN6	STUDENT6	<input checked="" type="checkbox"/>

Add

Delete

- Result:



Student Management

Students

Courses

Student's Courses

Scores Board

Search Students In Course

1

Search

AscName

DescName

AscGrade

DescGrade

ID	Name	Grade	Birthday	Address	Notes	Select
1	LE KIM HIEU1	12	2002-05-21	PHU YEN1	STUDENT1	<input type="checkbox"/>
2	LE KIM HIEU2	12	2002-05-21	PHU YEN2	STUDENT2	<input type="checkbox"/>
4	LE KIM HIEU4	12	2002-05-21	PHU YEN4	STUDENT4	<input type="checkbox"/>
5	LE KIM HIEU5	12	2002-05-21	PHU YEN5	STUDENT5	<input type="checkbox"/>

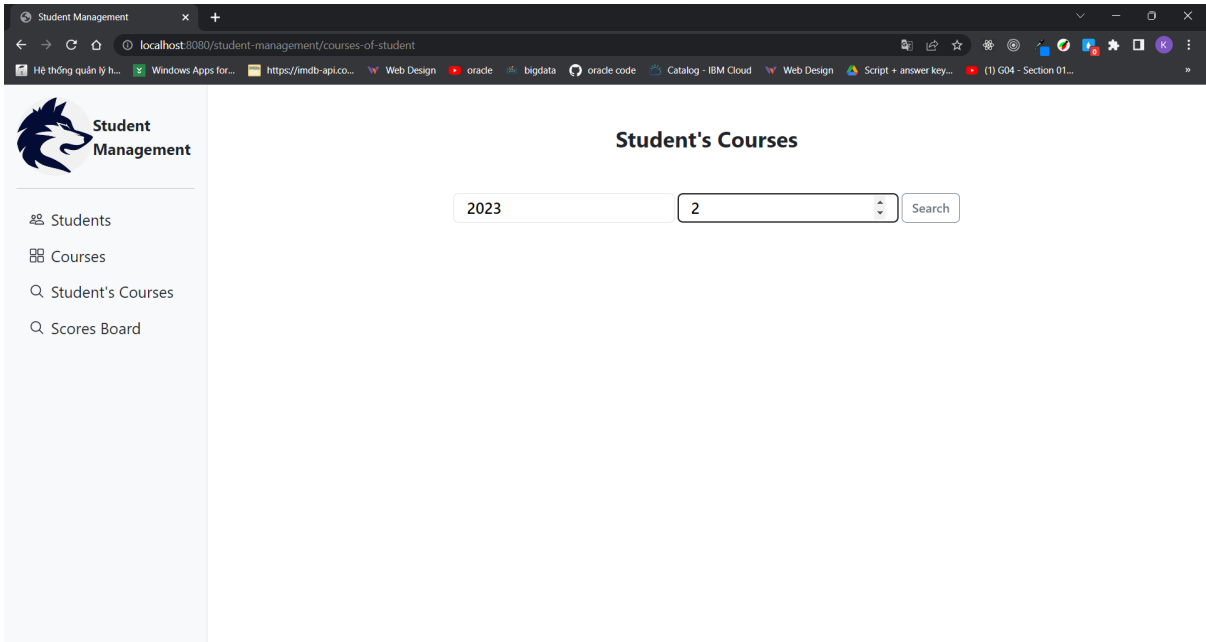
Add

Delete

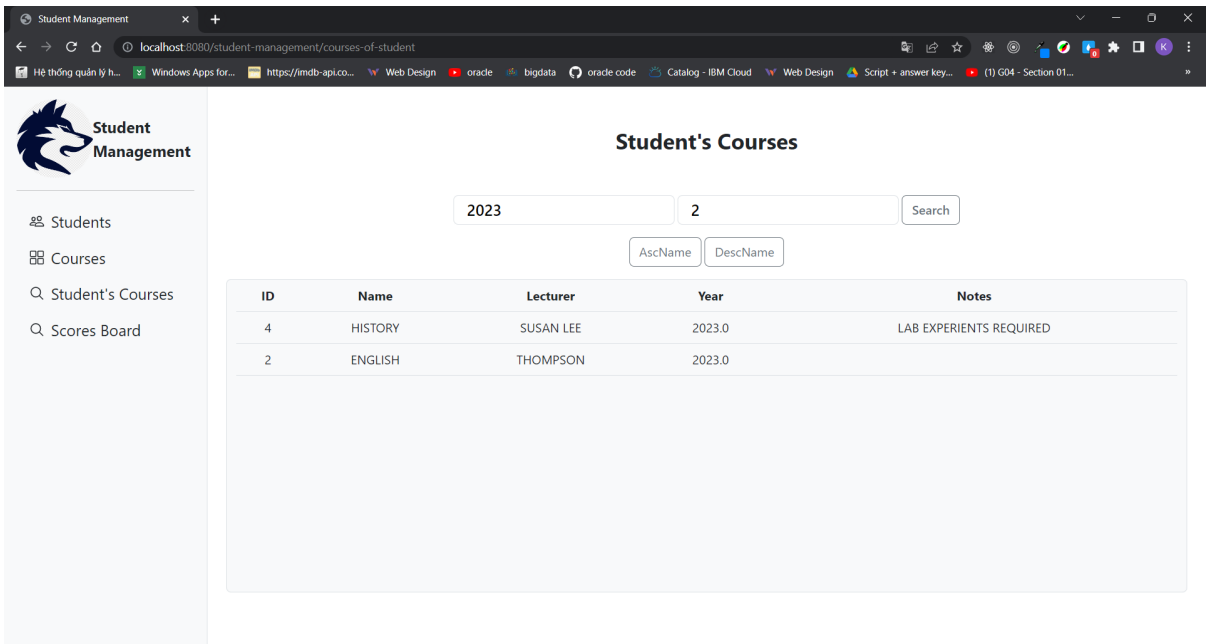


3. Courses of Student

- Main page Courses of Student:
  - Click on the button Student's Course in Sidebar to find the courses of the student then fill Course Id and Year you want to find.
  - Example Courses of Student:

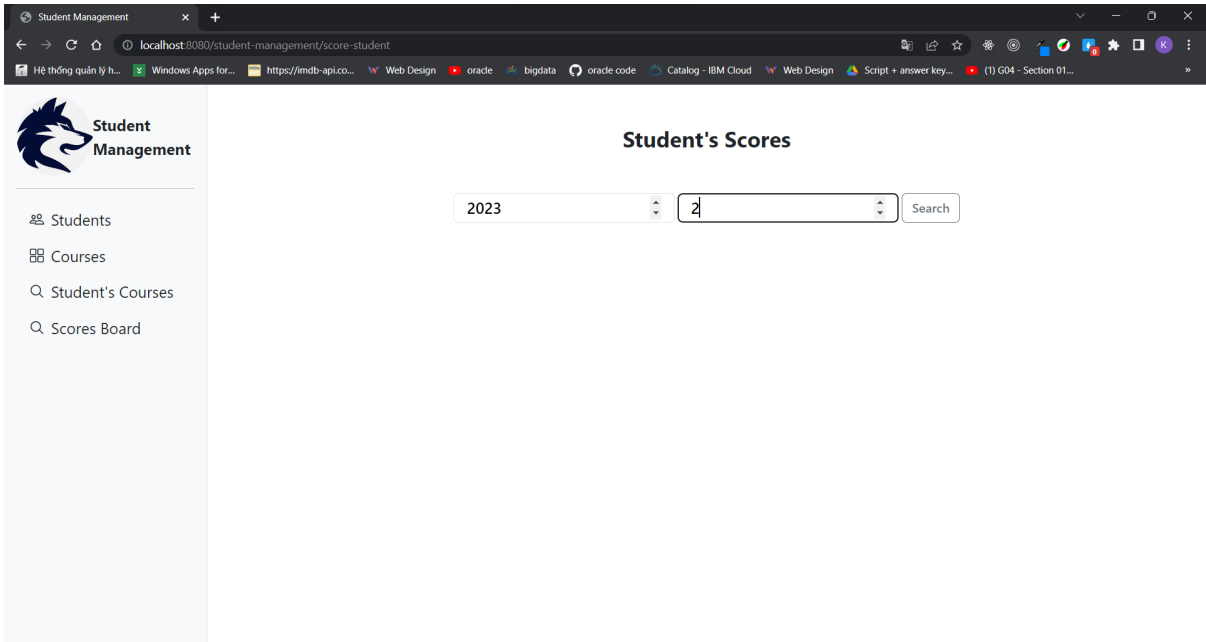


◦ result:

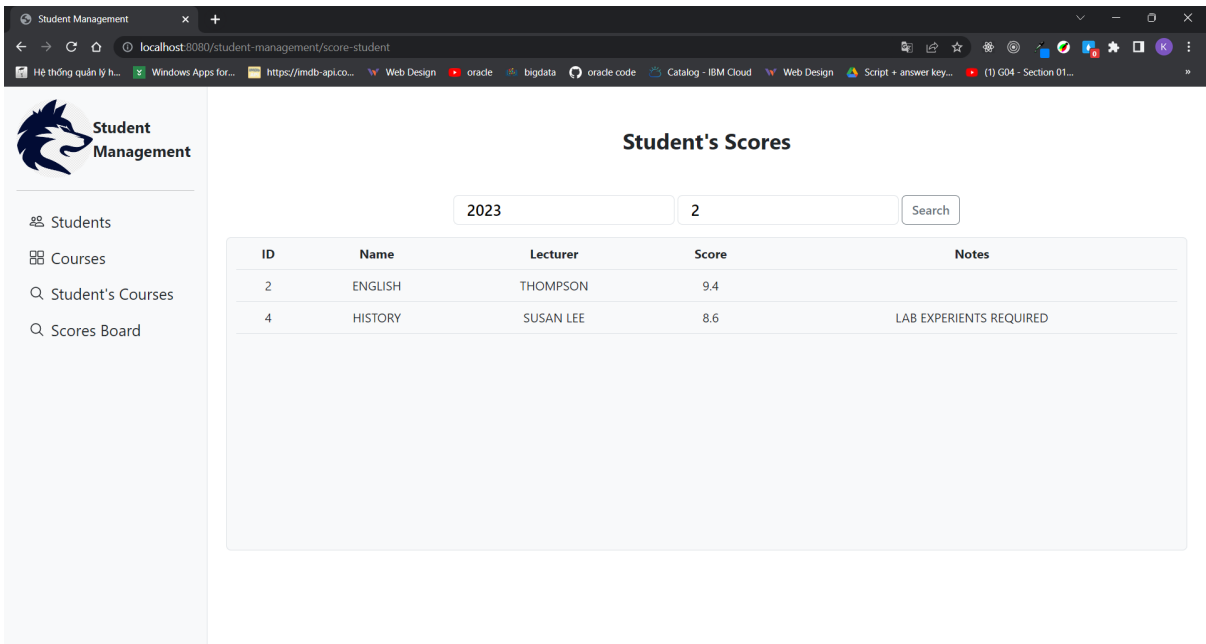


4. Score Board

- Main page Score Board:
  - Click on the button Scores Board in Sidebar to find the scores of the student then fill Student Id and Year you want to find.
  - Example Score Board:

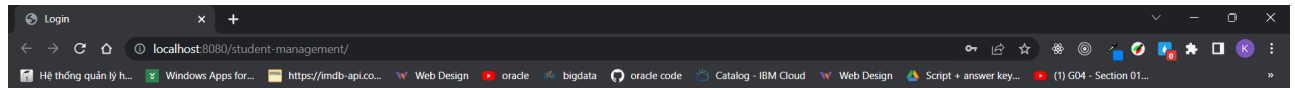


◦ Result:



## 5. Login (bonus):

- When you run the project, you will be directed to the login page. You can log in with the username and password you entered when you created the database.

A login form with a light gray background. At the top, the word 'Login' is displayed in a large, dark font. Below it, there are two input fields. The first field contains the text 'kimhieu'. The second field contains three dots '...'. Below the input fields is a blue button with the text 'Submit' in white.

- Here, I still can't create register, Authentication and Authorization for the project.

Thank you for reading!