

Lab:

HTML CSS JS Bootstrap

Duration:

The duration of the lab is 60 minutes.

Exercise 1

1. Create file named **"index.html"**.
2. Create a webpage title with the name **"Lab Exercise"**.
3. Create a grey banner with the text **"Athens School"** in headings 1 size and bold style, with the subtitle **"Student list"**. The text color will be white.
4. Create a **striped table** with 4 **columns**. The names of the columns will be **"Firstname"**, **"Lastname"**, **"Email"** and **"Class"**. The table must occupy $\frac{3}{4}$ of the screen.

Expected result:

Athens School			
Student List			
Firstname	Lastname	Email	Class
John	Doe	john@example.com	2
Mary	Moe	mary@example.com	1
July	Dooley	july@example.com	4

Exercise 2

1. Change the elements of Firstname, Lastname and Email so that they can be edited.
2. Add two buttons next to the elements of Class:
 - a. A bootstrap button “-”.
 - b. A bootstrap button “+”.

Each button lowers and raises the number of the class respectively. There are **8 classes** in total. The **lowest class is 1**.

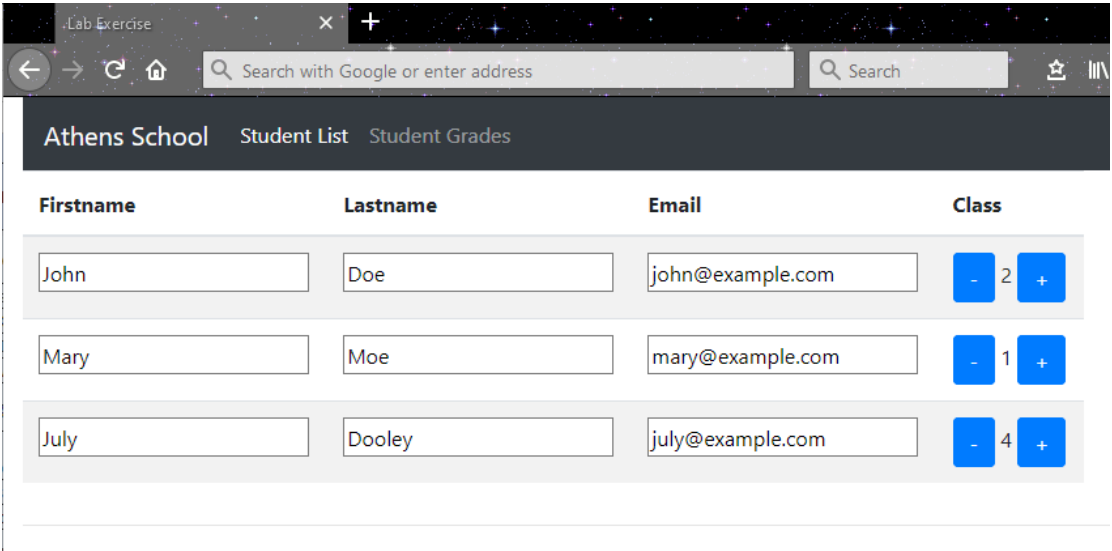
Expected result:

Athens School			
Student List			
Firstname	Lastname	Email	Class
<input type="text" value="John"/>	<input type="text" value="Doe"/>	<input type="text" value="john@example.com"/>	<input type="button" value="-"/> 2 <input data-bbox="1102 1106 1139 1137" type="button" value="+"/>
<input type="text" value="Mary"/>	<input type="text" value="Moe"/>	<input type="text" value="mary@example.com"/>	<input type="button" value="-"/> 1 <input data-bbox="1102 1178 1139 1209" type="button" value="+"/>
<input type="text" value="July"/>	<input type="text" value="Dooley"/>	<input type="text" value="july@example.com"/>	<input type="button" value="-"/> 4 <input data-bbox="1102 1249 1139 1281" type="button" value="+"/>

Exercise 3

1. Remove the grey banner and create a navigation bar with Bootstrap. The logo of the bar must be “Athens School”. The bar contains two links. One to “Student List” (this page) and one to “Student Grades”. The link of the active page must be highlighted.

Expected result:

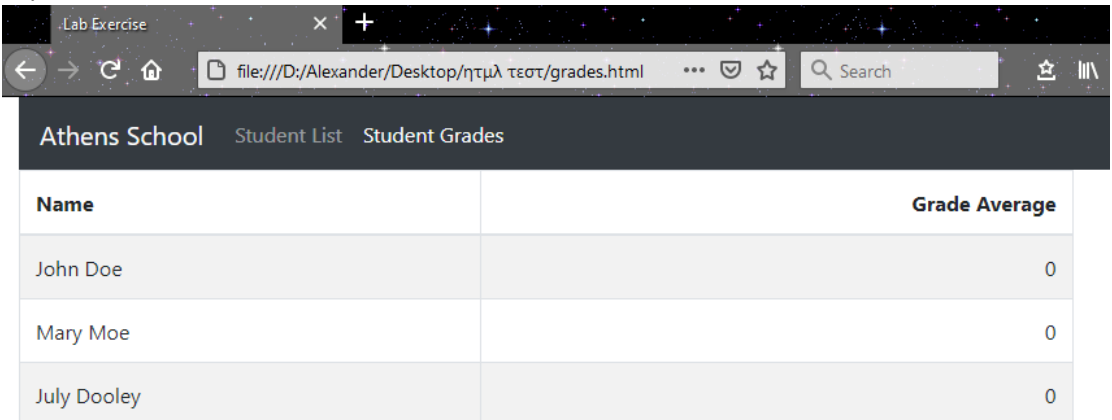


Athens School Student List Student Grades

Firstname	Lastname	Email	Class
<input type="text" value="John"/>	<input type="text" value="Doe"/>	<input type="text" value="john@example.com"/>	<input type="button" value="-"/> 2 <input type="button" value="+"/>
<input type="text" value="Mary"/>	<input type="text" value="Moe"/>	<input type="text" value="mary@example.com"/>	<input type="button" value="-"/> 1 <input type="button" value="+"/>
<input type="text" value="July"/>	<input type="text" value="Dooley"/>	<input type="text" value="july@example.com"/>	<input type="button" value="-"/> 4 <input type="button" value="+"/>

2. Create a file named **grades.html**. This file will contain the same **navigation bar**, as the first file, and a table with the **full names** of the three Students, along with their **average grades**.

Expected result:



Athens School Student List Student Grades

Name	Grade Average
John Doe	0
Mary Moe	0
July Dooley	0

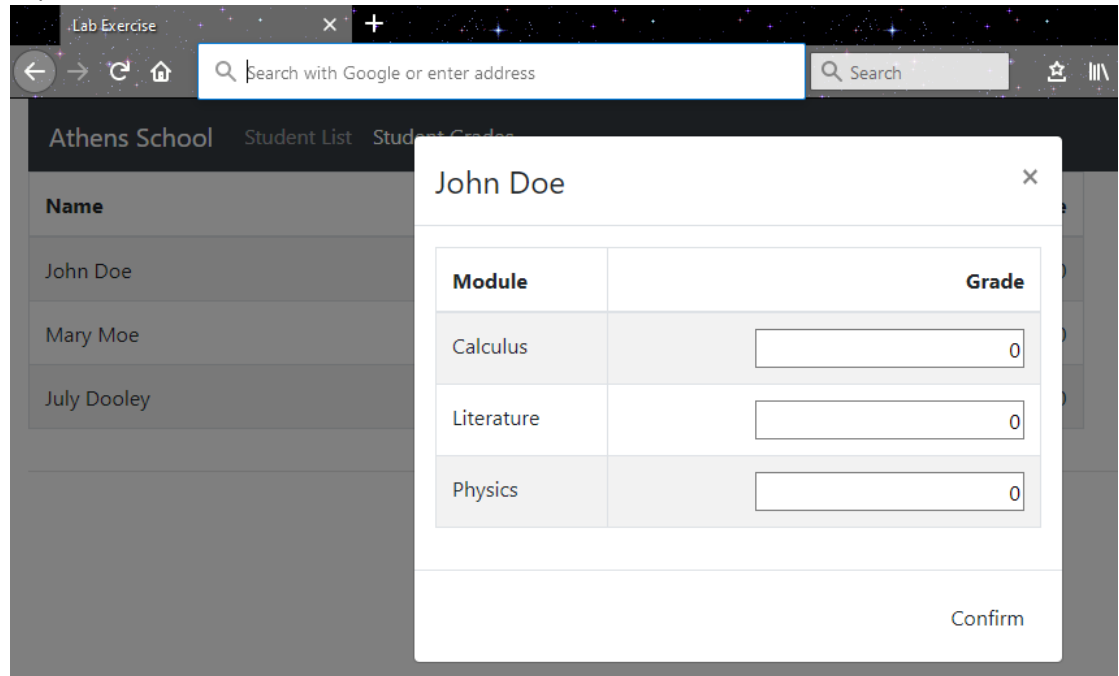
3. Create a JS class **"Student"**, with the following attributes: **name, calculus, literature, physics, average**. In the constructor of the class, only the name is a parameter, the the rest of the values are initialized at 0. Create an **array with all three students**.

Expected list:

```
var studentList = [
  new Student("John Doe"),
  new Student("Mary Moe"),
  new Student("July Dooley")
];
```

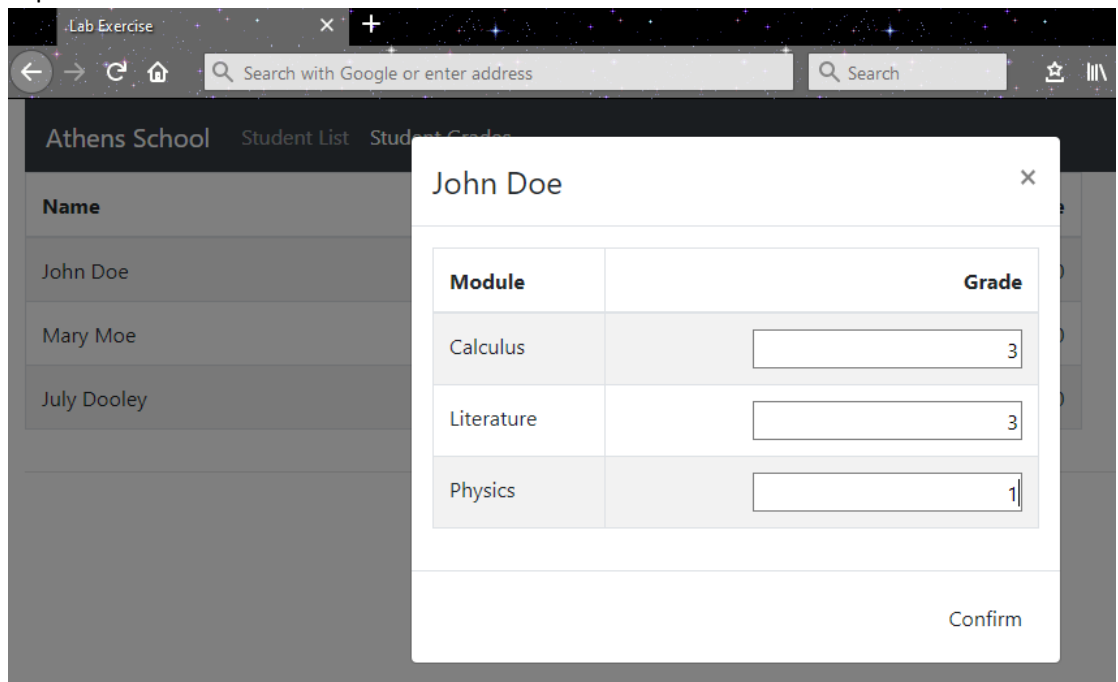
- When a student **table row** is clicked, a **Bootstrap modal** will open. The **title** of the modal will be **the name of the student**. The body of the modal contains a **table** with the classes **"Calculus", "Literature", "Physics" and their grades**. The grade values **must be taken from the appropriate student**. At the foot of a modal, a **"Confirm"** button must be made.

Expected Result:



- When the grades are changed and the button "Confirmed" is pressed, the **grades must be stored in the appropriate student object**. Additionally the average must be calculated to **1 decimal place** and shown in the **"Grade Average"** of the student.

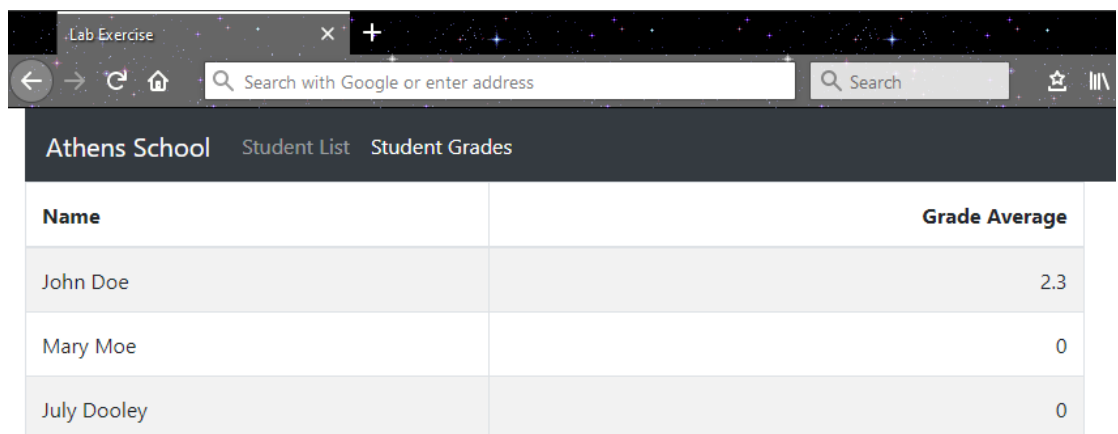
Expected result:



The screenshot shows a web application interface with a dark header and a light sidebar. The main content area displays a table of student names. A modal form titled "John Doe" is open, allowing the user to input grades for specific modules. The modal contains a table with columns "Module" and "Grade".

Module	Grade
Calculus	<input type="text" value="3"/>
Literature	<input type="text" value="3"/>
Physics	<input type="text" value="1"/>

At the bottom right of the modal, there is a "Confirm" button.



The screenshot shows the same web application interface, but the modal form is closed. The main content area now displays a table with student names and their calculated grade averages.

Name	Grade Average
John Doe	2.3
Mary Moe	0
July Dooley	0