

Soft 7008 Server Side Web Development

Assignment 1: **Student records server-side application in node.js.**

Value: 60 marks

Completion Date: 6th April 2017

On completion please zip up your files and upload to BlackBoard.

See separate notes document for implementation details.

See blackboard for the skeleton code.

Part a)

23 marks

Document all the javascript code in the studentrecs.js file using comments and a separate code description document. You may use a flow chart, pseudo code, diagrams etc to describe how the application works.

There is no requirement to document the header.html file except when you are explaining the operation of the edit and delete buttons.

Part b)

20 marks

Develop a menu driven system that allows an admin user:

a) to add, edit, remove and list students.

b) to add, edit, remove and list subjects.

See the following images as examples of what is required for a) and b):

Observe the delete buttons to delete the students and subjects. The Student view shows all the subjects for a student.

Put in another button for edit.

Student Records

ShowStudents
ShowSubjects

Students

first Name	Second Name	Subjects	Operation
Joe	Jones	<ul style="list-style-type: none">• OOP1• class 2	<button>Delete</button>
Mary	Jones	<ul style="list-style-type: none">• class 2• English	<button>Delete</button>

[Add Student](#)

Student Records

ShowStudents
ShowSubjects

Subjects

Name	Teacher	Room	Operation
class 1	joe	r1	<button>Delete</button>
English	mary	room 4	<button>Delete</button>
OOP1	john	ty 1	<button>Delete</button>

[Add Subject](#)

Part c)

7 marks

Populate dropdown lists.

- a) The user should be able to select the subjects that a student is studying and add them into the student record. The subject dropdown selection menu should be populated from the array of subjects.

- b) The user should be able to select the teacher who is teaching a subject and add him/her into the subject record – see image below. The subject dropdown selection menu should be populated from an array of teachers e.g.

```
var thestore = {  
  students: [],  
  subjects: [],  
  teachers : [{  
    name:"joe"},  
    {name:"mary"},{name:"john"}]  
};
```

The image shows a web form titled "New Subject". It contains three input fields: "Name:" with the value "French", "room:" with the value "r3", and "Teacher:" with a dropdown menu showing "joe". Below these fields is a button labeled "Submit Query".

Part d)

10 marks

The user should be able to give each student a mark for each subject he/she is studying. The marks can be implemented as an array in the student object, where the size of the array is the number of subjects.

