CST8256 Web Programming Language I

Lab 3

Objective

1. Add JavaScript to Razor pages
2. Use Sessions in Razor page web application
3. Sort list of C# objects

Due Date

See Brightspace posting for the due date. To earn 5 points, you are required:

1. Complete the lab as required.

2. Zip your web application project folder into a zip file and submit the zip file to the Brightspace before the due date

3. Demonstrate your lab work during the lab session in the week after the due date.

Requirements

This lab is a continuation of lab 2. You can continue to work on your lab 2 to add the following new features to your lab 2.

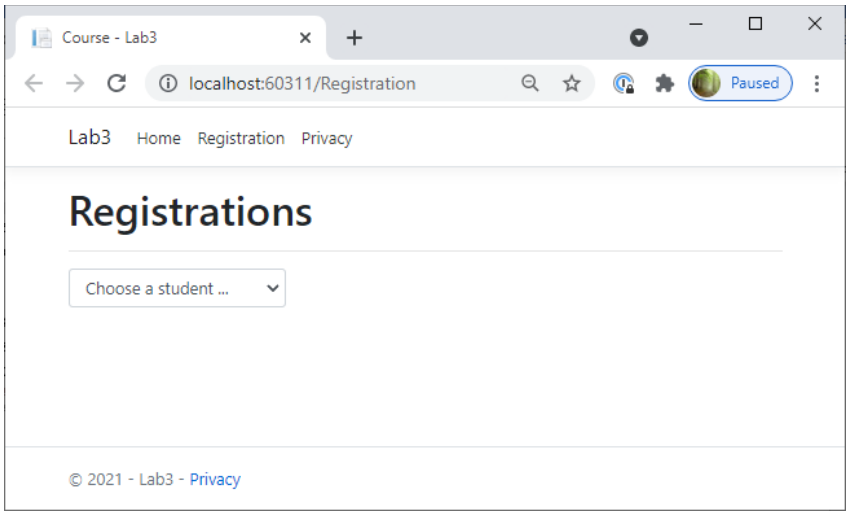
1. Add JavaScript to improve the user experience

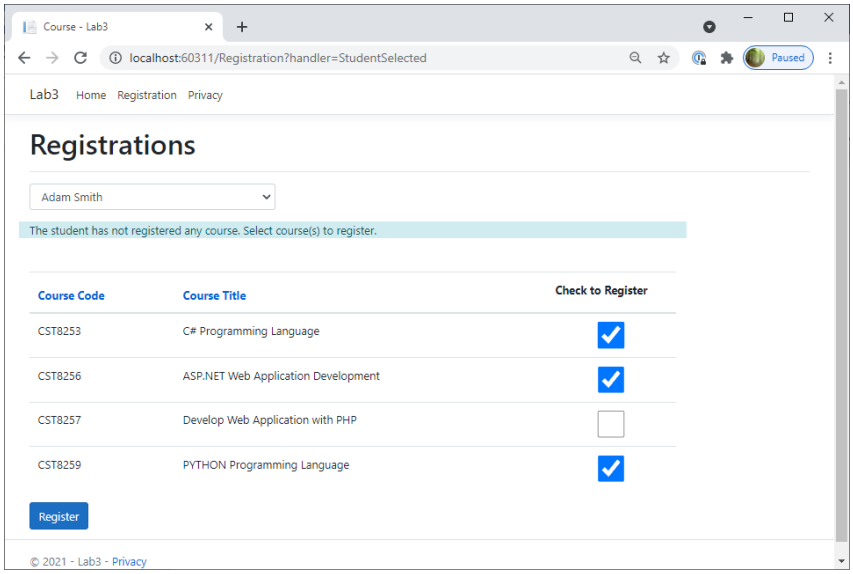
   In lab 2, after selecting a student from the dropdown list, the user has to click the Get Registration button next to the dropdown list to get the selected student's course registrations or course selections if the student has not registered any course yet. Not only it requires two actions (select and click) to accomplish a task, but it also becomes a source of confusion when the user forgets to click the button; the registrations in the display are not those of the student shown in the dropdown.

   The application should provide a better user experience; as soon as a student is selected from the dropdown list, the page displays the selected student's registrations.

   Since button/input (type="submit") is the only HTML element which submits the user entered data to the server when clicked. To send the user entered data to the server as soon as the student dropdown list changed, we must use JavaScript.

   The simplest way (not the best way, however) to achieve effect is to hide the **Get Registration** button and use the JavaScript to trig the button's click event when the user changes the selected student from the dropdown list:


Course - Lab3
localhost:60311/Registration
Paused
Lab3 Home Registration Privacy
Registrations
Choose a student ...
© 2021 - Lab3 - Privacy


Course - Lab3
localhost:60311/Registration?handler=StudentSelected
Paused
Lab3 Home Registration Privacy
Registrations
Adam Smith
The student has not registered any course. Select course(s) to register.
Course Code
Course Title
Check to Register
CST8253
C# Programming Language
CST8256
ASP.NET Web Application Development
CST8257
Develop Web Application with PHP
CST8259
PYTHON Programming Language
Register
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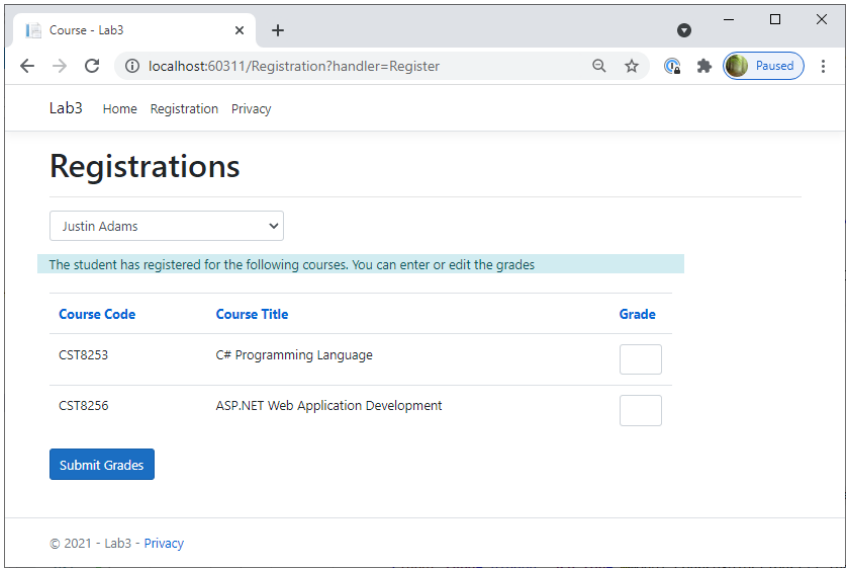
Course - Lab3
localhost:60311/Registration?handler=Register
Paused
Lab3 Home Registration Privacy
Registrations
Justin Adams
The student has registered for the following courses. You can enter or edit the grades
Course Code
Course Title
Grade
CST8253
C# Programming Language
CST8256
ASP.NET Web Application Development
Submit Grades
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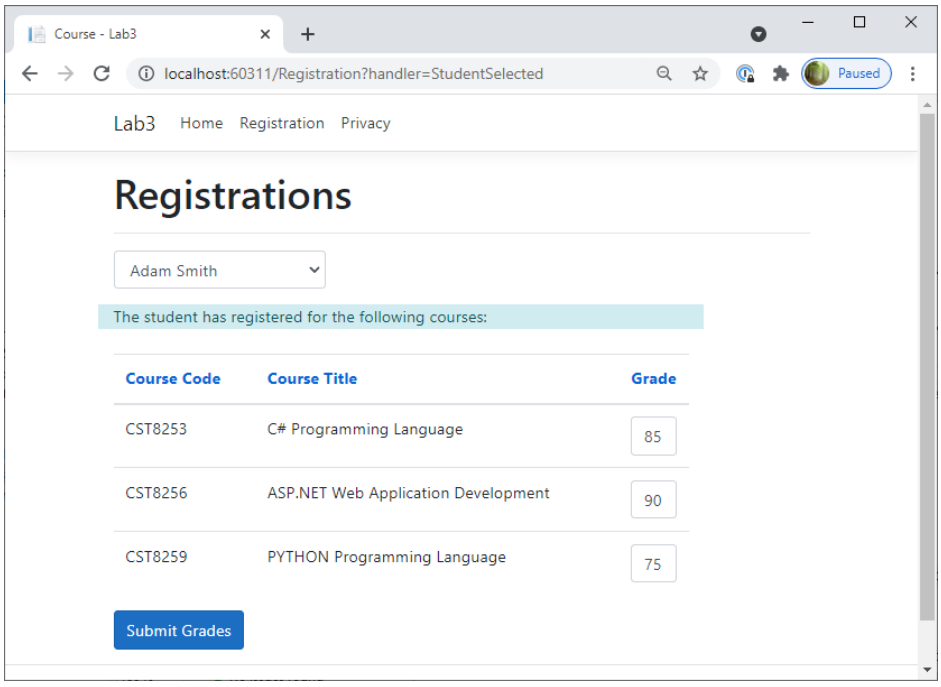
2. Enter Grade

   Modify the Registration page such that when a student has registered one or more courses, the page shows the student's grade for each registered course in a text input field. The user can enter/change the grade and clicks the **Submit Grades** button to save the entered/changed grades.

   If no grade has ever entered for a course, the grade text input field should be left as blank.



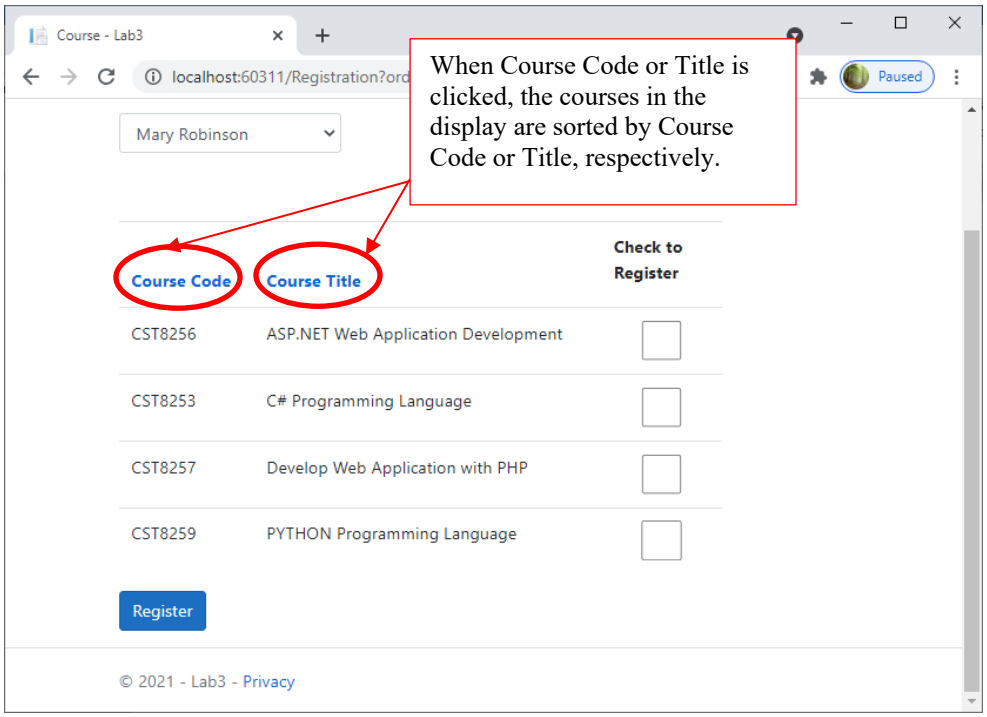
3. Sort Courses and Academic Records

   As a rule of thumb, if a list contains more than 6 elements, the list should be sorted when shown on a page. Although in this lab, we only have 4 hard-coded courses, you can imagine that a real course registration web application will offer a couple of dozen (if not hundreds) courses for user to choose from. To help the user to find a course easily, add the sorting functionality to Registration page.

   - Make the column head of the Course Selection table clickable. When clicked courses in the table will be sorted by Course Code or Course Title, respectively.

     When the user selects a different student from the dropdown list, the page must maintain the previous selected sort order.

     Hint: Use session to store and retrieve the selected student and sort order.



- In the same way, make the column head of the Academic Record table clickable. When clicked academic records in the table will be sorted by Course Code, Course Title, or Grade, respectively.