

C# Cumulative Part 2

By: Christine Bittle

This cumulative project involves building a Minimum Viable Product (MVP) on the Teachers table of the provided School Database using ASP.NET Core Web API and MVC. Part 2 is the Add and Delete functionality

MVP: Create, Read, Update, Delete on the Teachers Table.

Type	Description	File
-	A class which connects to your MySQL database	/Models /SchoolDbContext.cs
Controller	A WebAPI Controller which allows you to add and delete teachers	/Controllers /TeacherApiController.cs
Controller	An MVC Controller which allows you to route to dynamic pages	/Controllers /TeacherPageController.cs
Model	A Model which allows you to represent information about a teacher	/Models /Teacher.cs
View	A View which uses server rendering to display a page that allows for a user to enter a new teacher	/Views /Teacher /New.cshtml
View	A View which uses server rendering to display a "Confirm Delete" page for a teacher from the MySQL Database	/Views /Teacher /DeleteConfirm.cshtml

How to submit

1. Use Visual Studio / git to push your work to a remote repository (Parts 1, 2, and 3 can be on the same repository)
2. Verify the repository:
 - a. contains the work you wish to submit (i.e. the files are there)
 - b. is public (if it is set to private, change it to public!)
3. Include repository github link as part of your assignment submission (Do not share the link or your work with anyone else)
4. Include evidence of your testing as a PDF with screenshots of your cURL commands and web pages

(Quantitative: 8 Marks): Implement the required MVP using ASP.NET Core:

- (2 Marks) An API which adds a Teacher
- (2 Marks) An API which deletes a Teacher
- (2 Marks) A web page that allows a user to enter new Teacher information
- (2 Marks) A web page that confirms the action to delete a Teacher

(Qualitative: 8 Marks): Document your work with (a) descriptive:

- (2 Marks) Summary blocks for your API methods
- (2 Marks) Teacher Model Properties (Teacher.cs)
- (2 Marks) Variable names
- (2 Marks) Project .readme

(Testing: 8 Marks): Include evidence of the following testing:

- (2 Marks) Your API that adds a Teacher using POST Data
- (2 Marks) Your API that deletes a Teacher
- (2 Marks) Your web page that allows a user to enter new Teacher information
- (2 Marks) Your web page that confirms the action to delete a Teacher

(Initiative: 8 Marks): Earn **up to 8** Initiative Marks by improving on MVP

- (2 Marks) Error Handling on Delete when trying to delete a teacher that does not exist
- (2 Marks) Error Handling on Add when the Teacher Name is empty
- (2 Marks) Error Handling on Add when the Teacher Hire Date is in the future
- (2 Marks) Error Handling on Add when the Employee Number is not "T" followed by digits¹
- (2 Marks) Error Handling on Add when the Employee Number is already taken by a different Teacher
- (2 Marks) Add Functionality Students
- (2 Marks) Delete Functionality for Students
- (2 Marks) Add Functionality Courses
- (2 Marks) Delete Functionality for Courses
- (2 Marks) Use JS and AJAX to add a Teacher
- (2 Marks) Use JS and AJAX to delete a Teacher
- (2 Marks) Modify Teachers table with "teacherworkphone" field, include that field as part of the Add functionality

¹ Best practice would be to have the Teacher Employee Number managed by the database as a unique identifier, similar to the Teacher Id primary key. Not part of this assignment

RUBRIC

	0 Marks	1 Mark	2 Marks
Quantitative	Functionality not implemented	Functionality partially implemented / implemented with room for improvements	Functionality implemented, no improvements required
Qualitative	Documentation not included	Documentation partially included / included with room for improvements	Documentation included, no improvements required
Testing	Testing not included	Testing partially included / included with room for improvements	Testing included, no improvements required
Initiative	No initiative elements attempted	Initiative elements partially implemented / implemented with room for improvements	Initiative included, no room for improvements