

[Template for Fortnightly eFolio submission]

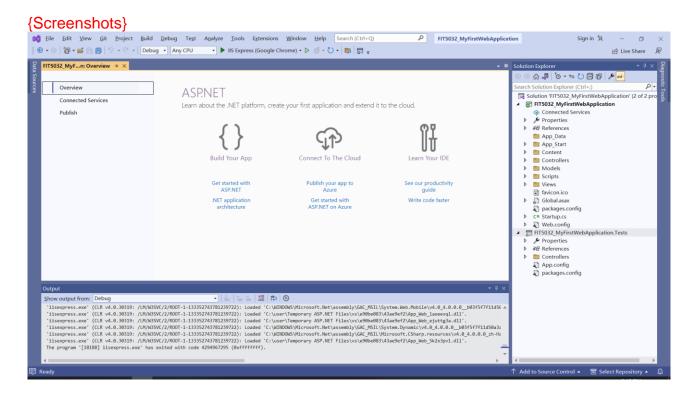
Studio {Specify Studio # 1 & 2}
Name and Student Id: {Peigian Lin and 33319227}

Self-Evaluation (To be highlighted by Student only):

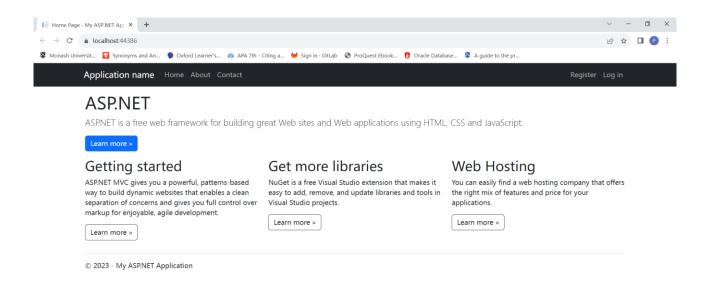
Task {1.1}:

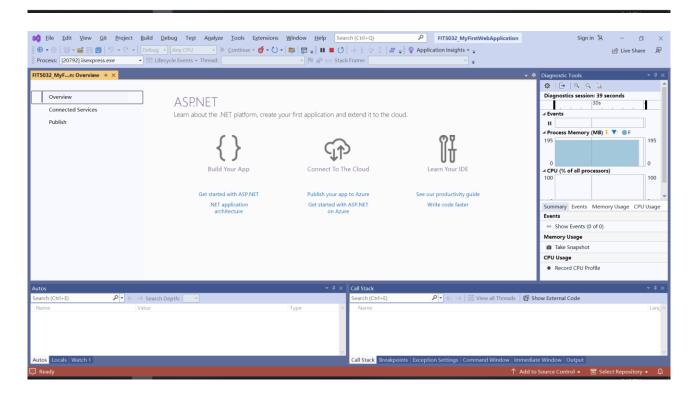
{Answers}

Successfully run the visual studio community edition IDE and its IIS localhost.









{Link to code repository}

{References}

{URLs}



Task {1.2}:

{Answers}

IDE

- 1. Visual studio
- 2. Pycharm
- 3. PhpStorm
- 4. Eclipse
- 5. IntelliJ IDEA
- 6. Atom

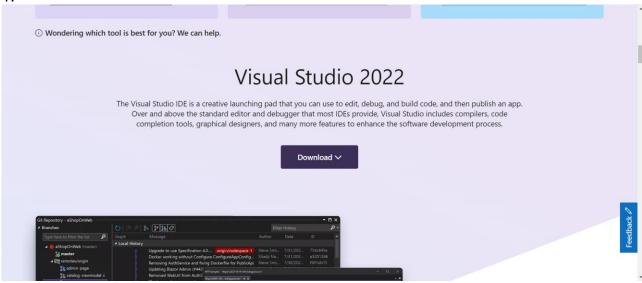
Features

- 1. Support many programming languages
- 2. Easy to debug
- 3. Easy to generate a project for unit test
- 4. Version control
- 5. Visual Studio enables real-time collaborative development

{Screenshots}

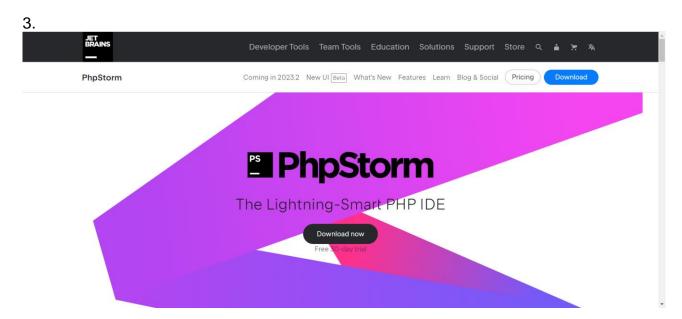
Five IDE

1.

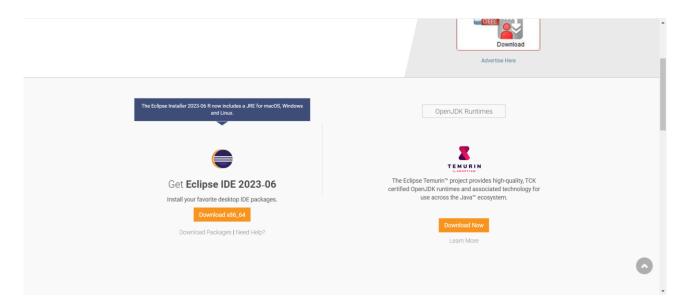








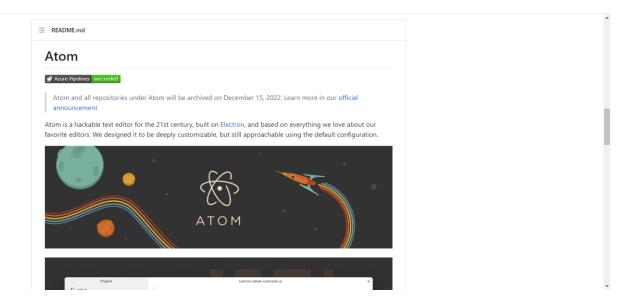




Intellij IDEA — the Leading
Java and Kotlin IDE

The IDE that makes development a more productive and enjoyable experience

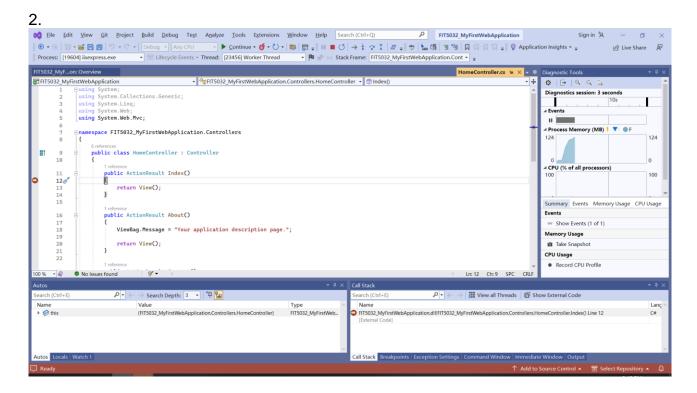
Download



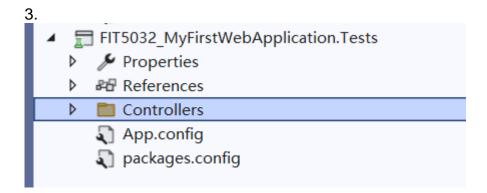


Features

Create a new project ٠ مر Search for templates (Alt+S) Clear all Recent project templates Windows Web All <u>l</u>anguages C# je (.NET Framework) ASP.NET Web Application (.NET Framework) C# C++ unit tests that can automate UI testing of web F# er (using Microsoft WebDriver). JavaScript Test Pvthon Query Language TypeScript reating an ASP.NET Core application with example Visual Basic ges content XAML Windows Cloud Service Blazor Server App A project template for creating a Blazor server app that runs server-side inside an ASP.NET Core app and handles user interactions over a SignalR connection. This template can be used for web apps with rich dynamic user interfaces (UIs). Linux macOS Windows Blazor Cloud ASP.NET Core Web API A project template for creating an ASP.NET Core application with an example Controller for a RESTful HTTP service. This template can also be used for ASP.NET Core MVC Views and Controllers. C# Linux macOS Windows Cloud Service Web WebAPI Next







4.

Version control

With the integrated Git features in Visual Studio, you can clone, create, or open your own repositories. The Git tool window has everything you need for committing and pushing changes to code, managing branches, and resolving merge conflicts. If you have a GitHub account, you can manage those repos directly within Visual Studio.

Learn more about version control in Visual Studio:

- · Version control with Git

5.

Collaborate with others

Visual Studio Live Share enables real-time collaborative development. With Live Share you can share your project with your peers, no matter the language or platform. Get to the bottom of an issue fast by allowing your team to connect, navigate, set break points, and type in your editor session.

Learn more about how to collaborate with Live Share:

- Collaborate with Live Share
- Common use cases

{Link to code repository}

{References}

{URLs}

Five IDE

- 1. https://visualstudio.microsoft.com/#vs-section
- 2. https://www.jetbrains.com/pycharm/
- 3. https://www.jetbrains.com/phpstorm/
- 4. https://www.eclipse.org/downloads/
- 5. https://www.jetbrains.com/idea/



6. https://github.com/atom/atom

Features

https://learn.microsoft.com/en-us/visualstudio/get-started/visual-studio-ide?view=vs-2022

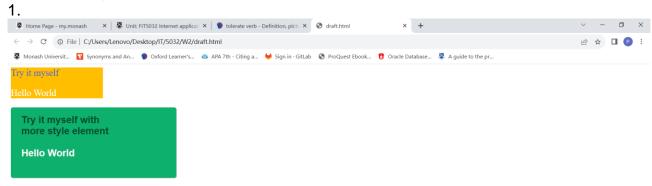


Task {2.1}:

{Answers}

- 1. Screenshot of a website using some CSS examples and code
- 2. Screenshot of a website using some Bootstrap responsiveness examples and code

{Screenshots}

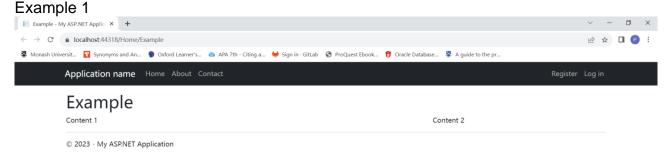


```
<style>
    .preview {
        background-color: rgb(255, 191, 0);
       width: 220px;
    .previewsecondLevel {
        color: rgba(0, 64, 255, 0.805);
       font-size: 22px;
       font-weight: normal;
   }
   p {
       color: white;
       font-size: 22px;
       font-weight: normal;
</style>
<div class="preview" >
   <div class="previewsecondLevel">Try it myself</div>
    Hello World
</div>
```



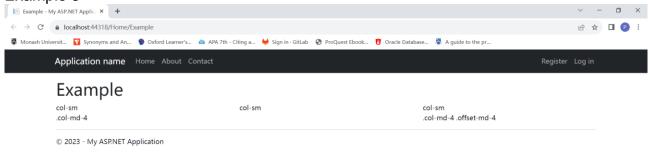
```
<style>
   .preview2 {
       background-color: rgb(14, 176, 109);
       border-radius: 5px;
       width: 370px;
       padding: 17px 0px 45px 25px;
       box-shadow: 1px 1px rgb(186, 183, 183);
    .preview2secondLevel {
       color: rgba(0, 0, 0, 0.585);
       font-size: 23px;
       font-weight: bold;
       font-family:Arial, Helvetica, sans-serif;
   p1 {
       color: white;
       font-size: 23px;
       font-weight: bold;
       font-family:Arial, Helvetica, sans-serif;
   }
</style>
<div class="preview2">
   <div class="preview2secondLevel">
       Try it myself with <br>
       more style element
   </div>
   <p1>
       <br>
       Hello World
   </p1>
</div>
```







Example 3





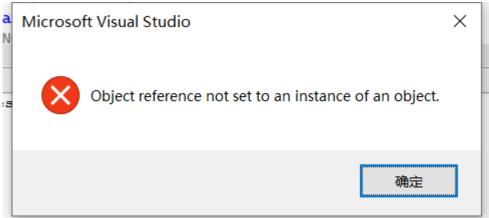
Task {2.2}:

{Answers}

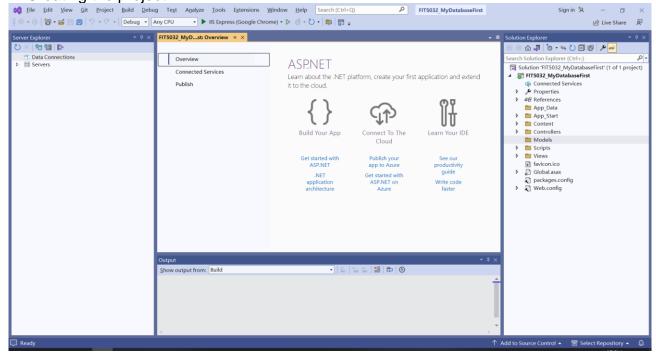
Screenshots of a running ASP.NET MVC Web Application along with database schema and code

{Screenshots}

Before creating the project, I open the VS by using *Administrator mode* due to its broader authority. If I open the visual studio without using it, then I will come across something object reference problems when creating a model which refers to the students, units database structure.

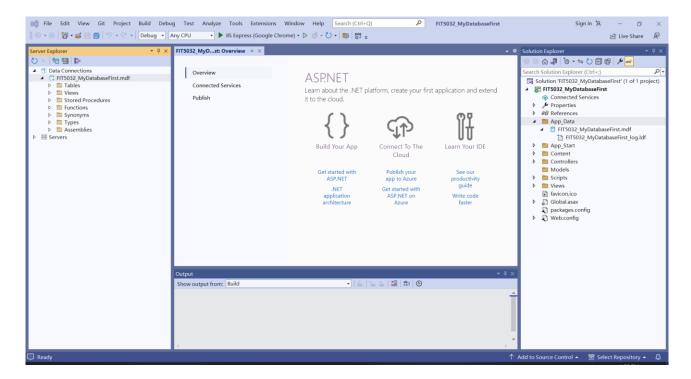


1. Creating the project.



2. Creating a database structure in App_Data folder





3. Run the query and build a database

```
- Creating table 'Students'
                                                                                                            ‡
           ☐ CREATE TABLE [dbo].[Students] (
             [Id] int IDENTITY(1,1) NOT NULL,
      3
      4
              [FirstName] nvarchar(max) NOT NULL,
             [LastName] nvarchar(max) NOT NULL,
      5
            PRIMARY KEY (Id)
      6
      7
            );
      8
            GO
      9
     10
            -- Creating table 'Units'
     11
          □CREATE TABLE [dbo].[Units] (
     12
              [Id] int IDENTITY(1,1) NOT NULL,
     13
             [Name] nvarchar(max) NOT NULL,
     14
             [Description] nvarchar(max) NOT NULL,
     15
             [StudentId] int NOT NULL,
     16
     17
            PRIMARY KEY (Id),
            FOREIGN KEY (StudentId) REFERENCES Students(Id)
     18
     19
            GO
     20
100 % - No issues found
                                                                                      Ln: 10 Ch: 1 TABS CRLF
```

Note:

Varchar vs Nyarchar

Varchar data type can store non-Unicode string data.

Varchar stores data at 1 byte per character.

Varchar supports up to 8000 characters.

Nvarchar data type can store Unicode string data.

Nvarchar stores data at 2 bytes per character.

Nvarchar supports up to 4000 characters.

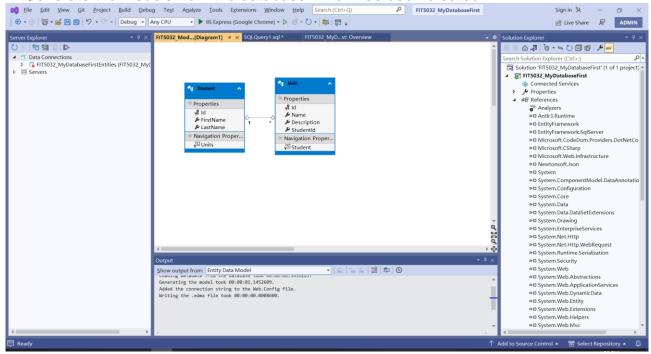


Primary key vs identity

An identity is simply an auto-increasing column.

A primary key is the unique column or columns that define the row.

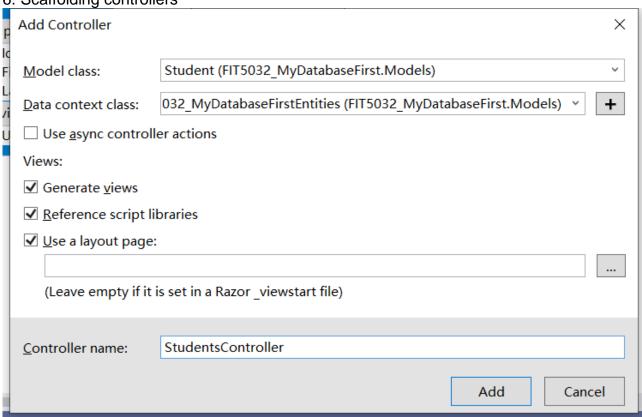
4. Generate the models from the database which has been created



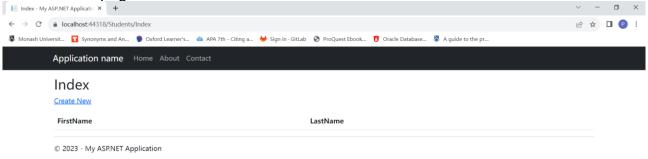
5. Rebuild the project before scaffolding controllers (This procedure is crucial)



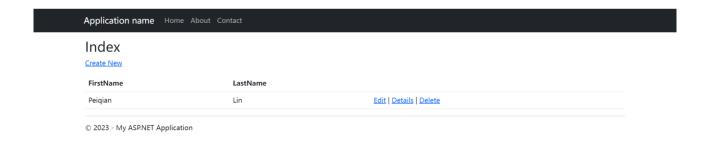
6. Scaffolding controllers



7. Generated pages







{Link to code repository}

{References}

{URLs}