**Project Setup Guide for Up\_To\_Date\_\_UTD\_**

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**1. Prerequisites**

Before you begin, ensure you have the following installed on your machine:

* **.NET SDK 8.0**: Download from [here](https://dotnet.microsoft.com/download/dotnet/8.0).
* **Visual Studio 2022 or later** (with ASP.NET and web development workload) or **Visual Studio Code**.
* **Microsoft SQL Server**: You can use [SQL Server Express](https://www.microsoft.com/en-us/sql-server/sql-server-downloads) for development.
* **Git**: To clone the repository (optional).

**2. Clone the Repository**

1. Open a terminal or command prompt.
2. Navigate to the directory where you want to clone the project.
3. Run the following command to clone the repository:

* git clone <https://code.umd.edu/sumi0309/ENPM680Fall2024Project-sumi0309.git>
* git clone [git@code.umd.edu:sumi0309/ENPM680Fall2024Project-sumi0309.git](mailto:git@code.umd.edu:sumi0309/ENPM680Fall2024Project-sumi0309.git)

**3. Install Dependencies**

1. Open the cloned project folder in Visual Studio or Visual Studio Code.
2. Restore the project dependencies by running the following command in the terminal:

* dotnet restore

This command will download and install all the necessary packages specified in your .csproj files.

**4. Set Up the Database**

1. **Configure Connection String**: Open appsettings.json located in the main project folder. Update the connection string to point to your SQL Server database. It should look like this:

* "ConnectionStrings": {

"DefaultConnection": "Server=YOUR\_SERVER;Database=YOUR\_DATABASE;Trusted\_Connection=True;MultipleActiveResultSets=true"

}

* Replace YOUR\_SERVER with your SQL Server instance name and YOUR\_DATABASE with the name of the database you want to use.

1. **Create the Database**: Open the Package Manager Console in Visual Studio (or use a terminal). Run the following command to create the database and apply migrations:

* dotnet ef database update

**5. Running the application**

* After setting up the project and cloning the repository, you would have a solution for the project. The solution contains three projects:

1. Up-To-Date (UTD) – It contains the main code for the application.
2. Up-To-Date (UTD).IntegrationTests – It contains the Integration Tests for the application.
3. Up-To-Date (UTD).Tests – It contains the Unit Tests for the application.

* Build the solution by navigating to Build->Build Solution or by shortcut keys (Ctrl+Shift+B)
* After the solution builds, run the IIS Express server to run the web server on localhost. To run, directly press the IIS Express button or by shortcut keys (Ctrl+F5)

• The application will run on localhost:44The application will run on <https://localhost:44369>

**6. Running the tests**

* Click on Build->Clean Solution
* To run the Tests, click on Test->Run All Tests or by pressing (Ctrl+R, A)
* This will open the Test Explorer window for Running Tests
* Select the Tests you want to run and click on Run (Green play button) or press (Ctrl+R, T)