

# Prerequisite Document for Angular 14, PostgreSQL with pgAdmin, .NET 8, and Visual Studio 2022

## Introduction:

This document outlines the step-by-step installation instructions necessary for students to effectively work with Angular 14, PostgreSQL with pgAdmin, .NET 8, and Visual Studio 2022.

## System Requirements:

Ensure that your system meets the following requirements:

- Operating System: Windows 10, macOS, or Linux
- Sufficient RAM: At least 8GB recommended
- Disk Space: At least 20GB of free disk space

## Software Installation:

### 1. Visual Studio Code:

#### 1. Download Visual Studio Code:

- ✎ Go to [Visual Studio Code website](https://code.visualstudio.com/) in your web browser. (https://code.visualstudio.com/)
- ✎ Click on the "Download for [Your Operating System]" button.

#### 2. Install Visual Studio Code:

- ✎ Once the installer is downloaded, locate it in your computer's downloads folder or wherever you saved it.
- ✎ Double-click on the installer to run it.
- ✎ Follow the instructions in the setup wizard:

- ✎ Click "Next" to proceed through the setup process.
- ✎ Review and accept the license agreement if prompted.
- ✎ Choose the installation location (you can leave it as default).
- ✎ Select additional tasks if desired (e.g., adding to PATH environment variable).
- ✎ Click "Install" to begin the installation process.
- ✎ Wait for the installation to be completed.
- ✎ Click "Finish" to exit the setup wizard.

### 3. Install Required Extensions:

- ✎ Open Visual Studio Code.
- ✎ Go to the Extensions view by clicking on the square icon on the sidebar or pressing `Ctrl+Shift+X`.
- ✎ In the Extensions view, search for "Angular Essentials" and "C# for Visual Studio Code".
- ✎ Click on the "Install" button next to each extension to install them.

### 4. Here is the video link to install Visual Studio Code:

- ✎ Installing & Setting Up Visual Studio Code

(<https://youtu.be/YSH21p8MPSg?si=XrMXhrA21buGN5CW>)

## 2. Angular 14:

### 1. Install Node.js and npm:

- ✎ Go to the Node.js official website: [Node.js](https://nodejs.org/). (<https://nodejs.org/>)
- ✎ Download the LTS version of Node.js for your operating system.
- ✎ Run the downloaded installer and follow the installation wizard instructions.

### 2. Install Angular CLI:

- ✎ Open a terminal or command prompt.
- ✎ Run the following command to install Angular CLI globally:

```
npm install -g @angular/cli@14
```

### 3. Here is the video link to install and learn Angular 14 and Node.js:

- ✎ [How to Install Angular 14 on Windows](#)
- ✎ [Angular 14 Tutorial Step by Step for Beginners](#)

### 3. PostgreSQL with pgAdmin:



#### 1. Install PostgreSQL:

- ✎ Go to the PostgreSQL official website: [PostgreSQL](https://www.postgresql.org/download/).  
(<https://www.postgresql.org/download/>)
- ✎ Download the installer for your operating system.
- ✎ Run the downloaded installer and follow the installation wizard instructions:
  - ✎ Click "Next" to proceed through the setup process.
  - ✎ Choose the installation directory (you can leave it as default).
  - ✎ Select components to install (usually leave everything selected).
  - ✎ Set a password for the default PostgreSQL user ("postgres").
  - ✎ Click "Next" and then "Install" to begin the installation.
  - ✎ Wait for the installation to complete.
  - ✎ Click "Finish" to exit the setup wizard.

#### 2. Install pgAdmin:

- ✎ Go to the pgAdmin official website: [pgAdmin](https://www.pgadmin.org/).
- ✎ Download the installer for your operating system.
- ✎ Run the downloaded installer and follow the installation wizard instructions:
  - ✎ Click "Next" to proceed through the setup process.
  - ✎ Choose the installation directory (you can leave it as default).
  - ✎ Click "Next" and then "Install" to begin the installation.
  - ✎ Wait for the installation to complete.
  - ✎ Click "Finish" to exit the setup wizard.

#### 4. Here is the video link to install PostgreSQL:

- ✎ [How to Install PostgreSQL 15 on Windows](#)
- ✎ [PostgreSQL Tutorial](#)

### 4. .NET 8 SDK:

#### 1. Download .NET 8 SDK:

- ✎ Go to the official website: [.NET SDK](https://dotnet.microsoft.com/download/dotnet/).  
(<https://dotnet.microsoft.com/download/dotnet/>)
- ✎ Download the .NET 8 SDK installer for your operating system.

- ✎ Run the downloaded installer and follow the installation wizard instructions:
  - ✎ Click "Next" to proceed through the setup process.
  - ✎ Review and accept the license agreement if prompted.
  - ✎ Choose the installation location (you can leave it as default).
  - ✎ Click "Install" to begin the installation.
  - ✎ Wait for the installation to complete.
  - ✎ Click "Finish" to exit the setup wizard.

2. Here is the video link to install .NET 8 SDK:

- ✎ [Install/Setup .NET 8](#)

## 5. Visual Studio 2022:

1. Download Visual Studio 2022:

- ✎ Go to the Visual Studio official website: [Visual Studio](#).  
(<https://visualstudio.microsoft.com/downloads/>)

- ✎ Click on the "Download Visual Studio" button.
- ✎ Choose "Visual Studio Community 2022" edition.
- ✎ Click on the "Download" button.

2. Run the Visual Studio 2022 Installer:

- ✎ Once the installer is downloaded, locate it in your computer's downloads folder or wherever you saved it.
- ✎ Double-click on the installer to run it.

3. Choose Workloads:

- ✎ In the Visual Studio Installer window, select "ASP.NET and web development" workload.
- ✎ Optionally, you can select additional workloads as needed.
- ✎ Click "Install" to begin the installation process.

4. Wait for Installation to Complete:

- ✎ The installation process may take some time depending on your system and selected components.
- ✎ Once the installation is complete, you'll see a confirmation message.

5. Launch Visual Studio 2022:

- ✎ After the installation is finished, you can launch Visual Studio 2022 from the Start menu or desktop shortcut.

- ⚡ When you first launch Visual Studio 2022, you may be prompted to sign in with your Microsoft account or create a new one.
6. Here is the video link to install Visual Studio 2022:  
⚡ [How to install Visual Studio 2022 for ASP.NET](#)
7. Note – Kindly install Visual Studio 2022 using the provided link

## **Additional Resources:**

- Angular Documentation: [Angular Documentation](#)
- PostgreSQL Documentation: [PostgreSQL Documentation](#)
- .NET Documentation: [.NET Documentation](#)
- Visual Studio Documentation: [Visual Studio Documentation](#)