**Using Chat GPT**

<https://chat.openai.com/>

1. ChatGPT can be a useful tool for developers if used correctly
   1. You can roleplay with ChatGPT
      1. Ask ChatGPT to assume the role of a senior developer
2. DO NOT use ChatGPT to do your homework
   1. You pay good money for this course, using AI to write your code teaches you nothing, only repetition can do that
3. DO ask ChatGPT leading questions
   1. “what are data types in C#” for example
4. DO NOT use ChatGPT as a crutch – rely on your knowledge and instincts

**C# Intro with the Command Line**

1. You can create a project from the command line as a fallback as follows:
   1. Make sure you are in your repos folder
   2. Make 2 directories for your project
      1. Mkdir “yourFolderName”
      2. Cd yourFolderName
      3. Mkdir “youFolderName”
      4. Cd yourFolderName
   3. Now init git
      1. Ensure you are in the FIRST folder of your project
      2. Git init
   4. Create the app
      1. Dotnet new console
   5. Build your program
      1. Dotnet build
   6. Run your program
      1. Dotnet run

**Important things to Remember**

1. Your SOLUTION files contain PROJECT files
2. Your PROJECT files contain SOURCE CODE and compiler settings/config files
3. You can have multiple projects in a solution

**Value and Reference Types**

\*Comments are used for the coder for reference, they are ignored by the compiler\*

//this is a comment

* Value Types – actually hold a VALUE stored in the stack are not automatically nullable, can null with ? example int? a = null
  + <https://learn.truecoders.io/csharp/types/>
* Reference Types – storing the actual data and a reference
  + Statically typed –must have a type
  + Strongly typed - cannot change type
* Stack – LIFO (Last In First Out) Dynamic memory type
* Heap - used for dynamic memory allocation no order for in and out

**Reference**

<https://www.c-sharpcorner.com/UploadFile/vikie4u/type-safety-in-net/>