

5/4/21 App Architecture

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Separation of Concerns:

The concept of organizing your code such that logic that follows a certain theme or have some dedicated functionality are grouped together.

In a nutshell: Leveraging classes and other grouping mechanisms to group data and logic that belong with each other

Classes [Type]:

- Building blocks of your program
- They are the blueprints to the actual objects that you process in your program
- Besides being used to structure data, you also use classes to encapsulate logic and the data that go together
- There are also Interfaces and Abstract Classes

Namespace:

- Logical grouping of types that follow a certain theme of functionality
- To utilize the classes located in a different namespace, use the **using** keyword
 - ** There are differences between **using** keyword, statement, block
- Analogous to Java packages
- Note: If namespaces are the logical groupings of types, the physical groupings are called assemblies.

Project

- A project contains all files that are compiled into an executable, library, or website.
 - These files can include source code, icons, images, data files, and so on.

This is not the whole thing.
- A project also contains compiler settings and other config files that might be needed by various services or components that your program communicates with.
- The project file is an XML document that contains all the information and instructions that MSBuild needs in order to build your project, including the content, platform requirements, versioning information, web server or database server settings, and the tasks to perform
- File ext describes what kind of project you're compiling, ex. .csproj, .vbproj

Solution

- Despite its name a solution is not an "answer" It's simply a container for one or more related projects, along with build information, Visual Studio window settings, and any miscellaneous files that aren't associated with a particular project.
- It's a final packaging of your application.
- One main method per solution