Reflection

* Allows you to look at bits of IL code at runtime
* Why is it useful?
  + Reflection can be used to check the IL code for something like Code Analysis, It can be used on ANY compiled assembly to check for coding standards etc.
  + If i have code written in C#, and I pass out assembly and someone wants to see my source code. They could use IL and reverse engineer it to get your original source code.
    - You can use a tool called ILDasm to view .Dll and compiled files to look at the original src code.
  + Void Main (FileInfo file, Action action, FileInfo extractFile)
    - What if I could write a main like this?
    - We are assuming that we have written an enum for action.
    - Unzip [file] [action] [extractFile]
      * I can use reflection to generate this line - the header of the help text for the console program.
  + We could use reflection to Require a using statement to work instead of with only IDisposables with anything that has an Dispose() method.
  + Gives the ability to find out what APIs are available at runtime.

Roslyn

* Allows you to look at src code
* Why is it useful?
  + Allows you to look at src code to look to do Code Analysis Stuff, most CA features now a days use a Roslyn. Roslyn is easier for live CA?

Expression Trees

* In order to understand how linq turns things into sql statements you need to understand this

Typescript

* Whole Language

Selenium

* UI testing capability to simulate and actual user navigating to your site.

Containers/Docker

* Probably would be mark

MSBuild

* DSL is a domain specific language, and csproj is actually a DSL to define how to compile your code.
* Understanding the compilation process and HOW it works.

Powershell

* Do more of it.

Great language for writing dev ops and doing automated scripts.

PowerShell

Does not use a Console.readline when parsing the | on this. It insteads interprets the right side of the pipe as an object.

Its incredibly powerfull

All variables are predicated with $.

$\_ is the magical iterator for the code

% is the alias for ForEach-Object

? is the alias for Where-Object

The “help” keyword is an alias for get-help