

Day 17

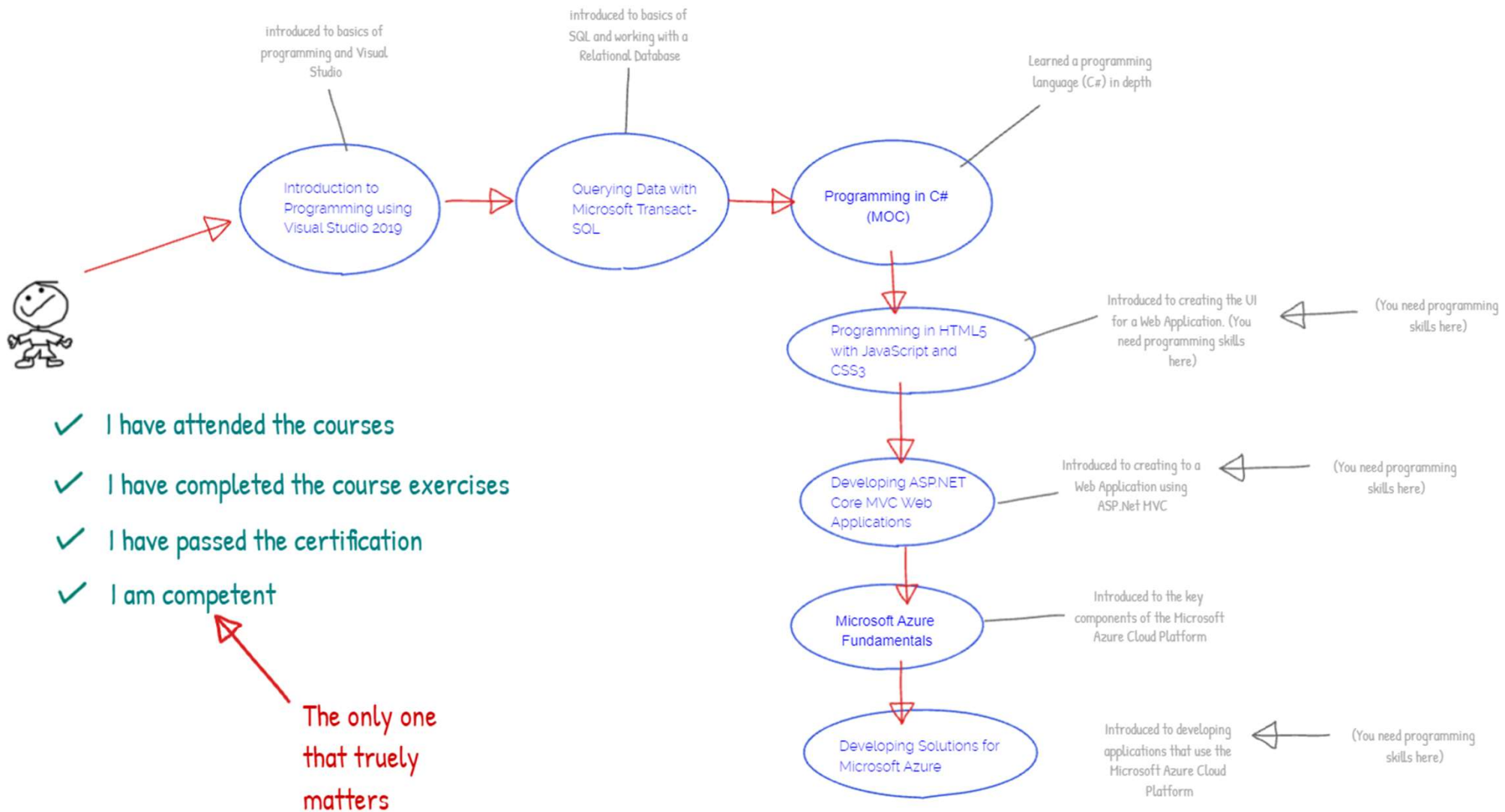
The one link you need to remember

<https://ddls.to/20483>

Ready?

Do this every day BEFORE the class starts (takes about 15 minutes)
(<http://ddls.to/everyday>)

1. Launch Lab01.
2. Login to Lab01 as **Admin**.
3. While in the Lab01 environment,
 - i. run **cmd.exe** from the Windows Start button.
 - ii. Run the command **git clone --depth 1 <https://github.com/Mark-AI/CT/CAD-2.git> C:\Users\Admin\Desktop\MarksFiles**
 - iii. Navigate to **C:\Users\Admin\Desktop\MarksFiles\setups**, then right-mouse click **bootstrap.cmd** and **run as administrator**
 - iv. While it's running, Sign in to Visual Studio on the Lab Environment. You can use any Microsoft account.
 - v. When the script end it reboots the Virtual Machine. That's necessary.
 - vi. Save the lab. (the save link is at the top right of the screen in the dropdown menu)



Referencing DLL's

Console App

UnderstandingAssemblies > ConsoleApp > bin > Debug

Name	Date modified
ConsoleApp.exe	7/26/20
ConsoleApp.exe.config	7/26/20
ConsoleApp.pdb	7/26/20
Cuber.dll	7/26/20
Cuber.pdb	7/26/20

4. build

```
class Program
{
    static void Main(string[] args)
    {
        Console.WriteLine("type a number");
        int number = Convert.ToInt32(Console.ReadLine());

        Console.WriteLine($"The cube of {number} is {Cuber.MathOps.Cube(number)}");
        Console.ReadLine();
    }
}
```

MathOps (class library)

UnderstandingAssemblies > Cuber > bin > Debug

Name	Date modified
Cuber.dll	7/26/20
Cuber.pdb	7/26/20

1. build

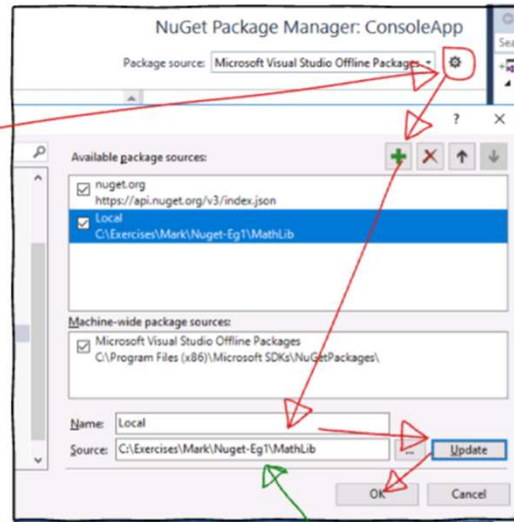
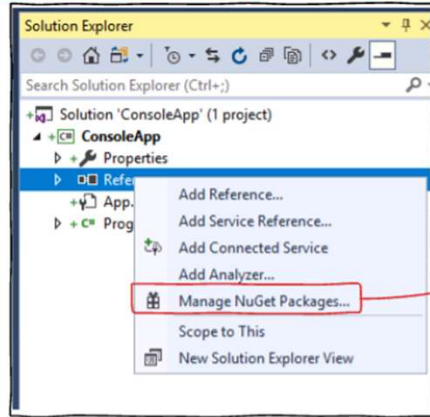
```
namespace Cuber
{
    public class MathOps
    {
        public static int Cube(int x)
        {
            return x * x * x;
        }
    }
}
```

2. Add reference

3. Calling

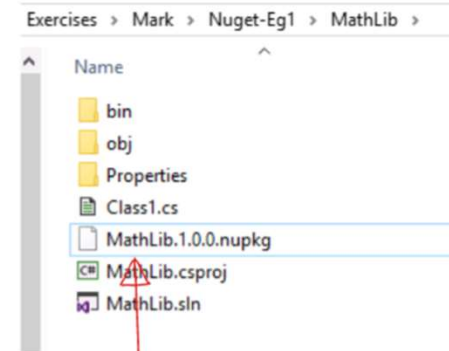
Nuget Packages

Console App

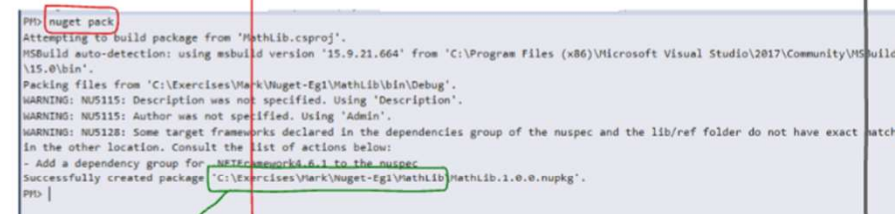


```
static void Main(string[] args)
{
    Console.WriteLine("Type a number");
    int number = Convert.ToInt32(Console.ReadLine());
    int result = MathLib.MathOps.Cube(number);
    Console.WriteLine($"The cube of {number} is {result}");
    Console.ReadLine();
}
```

class library

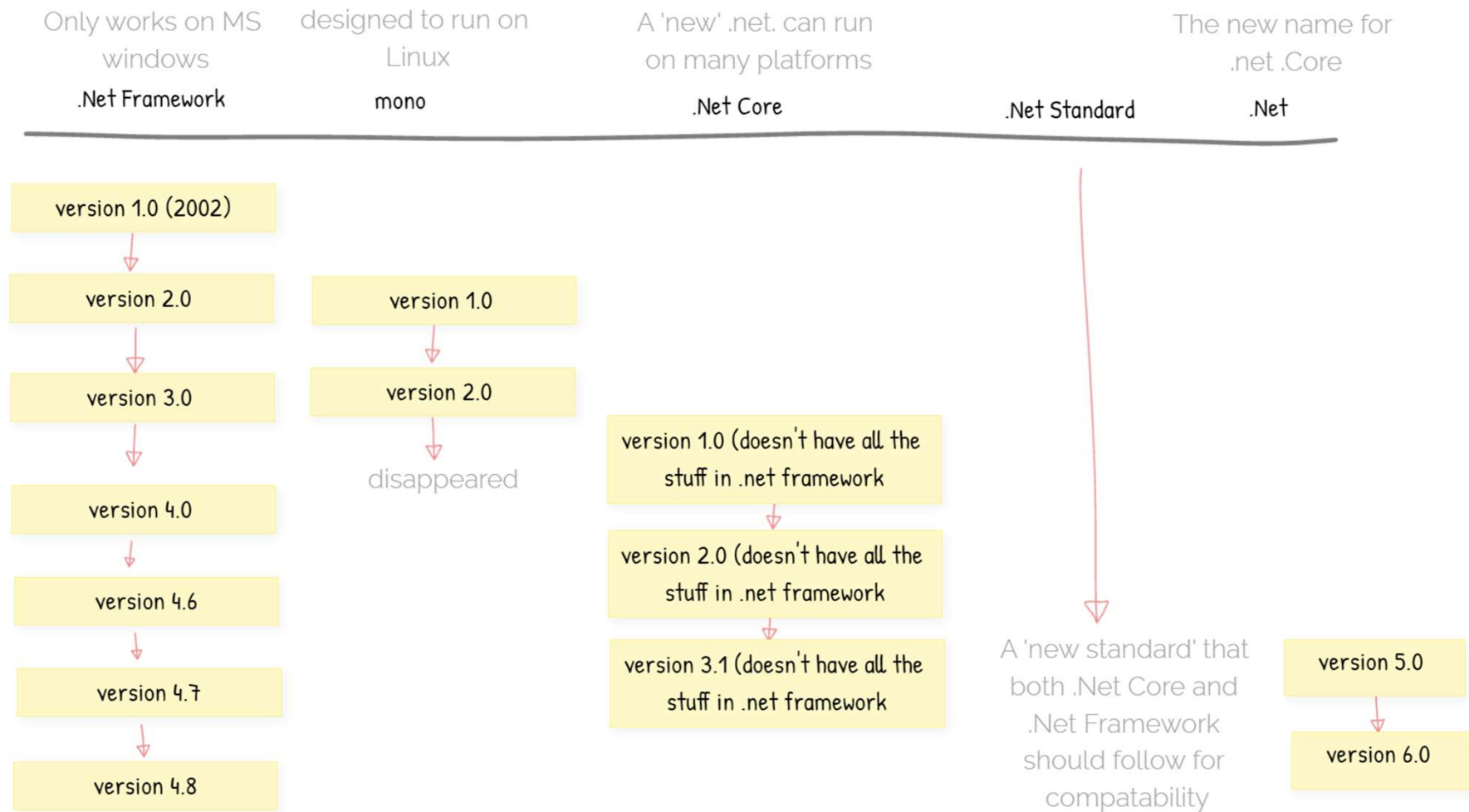


1.nuget pack



```
namespace MathLib
{
    public class MathOps
    {
        public static int Cube(int x)
        {
            return x * x * x;
        }
    }
}
```

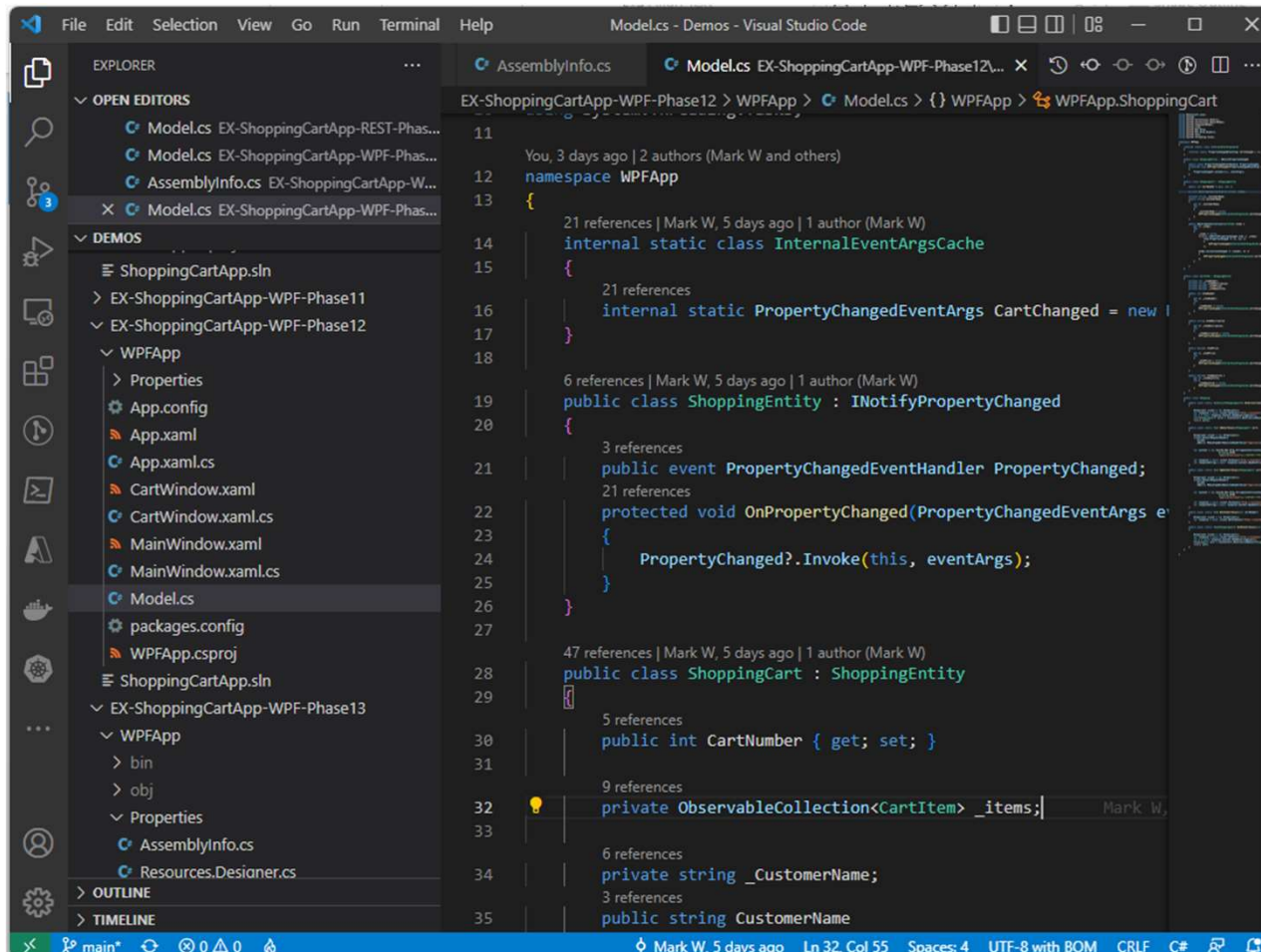
There is more than one '.net'



.Net Core (.Net)

- `dotnet new`
- `dotnet build`
- `dotnet run`

VS Code



Course Outline

- Module 1: Review of Visual C# Syntax
- Module 2: Creating Methods, Handling Exceptions, and Monitoring Applications
- Module 3: Basic Types and Constructs of Visual C#
- Module 4: Creating Classes and Implementing Type-Safe Collections
- Module 5: Creating a Class Hierarchy by Using Inheritance
- Module 6: Reading and Writing Local Data
- Module 7: Accessing a Database
- Module 8: Accessing Remote Data (I'm replacing this with a better module)
- Module 9: Designing the User Interface for a Graphical Application
- Module 10: Improving Application Performance and Responsiveness
- GIT
- REST + WPF + Sharpen C# Skills
- Config Files
- .Net Framework Vs .Net Core Vs .net standard Vs .Net
- VSCode Vs Visual Studio
- Nuget
- Module 11: Integrating with Unmanaged Code?
- Module 12: Creating Reusable Types and Assemblies?
- Module 13: Encrypting and Decrypting Data?

- App.Settings Config

Assemblies

- Assembly metadata
- dll Vs exe
- referencing

.Net History

Dotnet core with VS2017

- Simple Console Application (doesn't work with VS2017 because VS2017 only supports Version <3)...Could update VS2017 -> takes X minutes.

VSCode

- dotnet new
- dotnet build
- dotnet run
- using VSCode
- extensions
- creating a solution with multiple projects

nuget (.net Framework)

- nuget pack
- Package contents
- nuget spec
- Accessing packages
- NuGet.Org

nuget (.net (core))

- nuget pack
- Package contents
- nuget spec
- Accessing packages
- NuGet.Org

- To do on your lab01 VM

- Set git global config

`git config --global user.name "fred"`

`git config --global user.email fred@work.com`

- Clone the exercises repo