

**GWC Level 3
Programming
with C# and
Game Design
with Unity**

Week 1

Katie Tooher and Carmen Seda

Instructor Introductions

- Katie Tooher
 - Junior in Computer Science
 - Likes: Skiing, hiking, video games, reading
- Carmen Seda
 - Junior in Computer Engineering
 - Likes: video games, coding, bingeing TV

Your Turn

- Partner up with the person next to you
- Share 3 things about yourself with your partner
- Your partner will share one of your facts with the class about what they learned about you!

About Girls Who Code

- Founded in 2012 by Reshma Saujani, a US Lawyer and Politician
 - First Indian-American and South Asian American woman to run for US Congress
 - Wrote 3 books
 - Women Who Don't Wait In Line
 - Girls Who Code: Learn to Code and Change the World
 - Brave, Not Perfect
- Mission: to close the gender gap in technology industries (by 2027)



Expectations

Be respectful...

- Keep laptops closed while an instructor is presenting
- Place phones in basket at beginning of class
- Do not interrupt when others are speaking

Create a positive learning environment...

- Mistakes are expected while learning and they help you to grow
 - Don't get discouraged!
- Help your peers when they need it, and don't be afraid to ask for help
- Don't make people feel bad if their code doesn't work
- Don't give up before you try

Installing VS Code

- Pull out your laptops!
- Go to the following website:
 - code.visualstudio.com/download
- Choose the proper downloader for your operating system



Download Visual Studio Code

Free and built on open source. Integrated Git, debugging and extensions.



Installing VS Code

- Once you click the download it will save a .exe file
- Click the file and then press run and then accept the terms and conditions
- Choose where you want the program to be saved
- Check box to “Create Desktop Icon”
- Check box to “Add ‘Open with Code’ action to Windows Explorer file context menu”
- Click Install

Installing .Net Core SDK

- In order to run c# programs we need an extra package on our computers. The Dotnet framework installs a specific compiler that is used to run c# programs
- Go To: <https://dotnet.microsoft.com/download>
- Again Make sure you are in the correct tab for your system: MAC/Windows
- Click the download for the “Build Apps” .net download

Download .NET

Downloads for .NET Framework and .NET Core, including ASP.NET and ASP.NET Core

❓ Not sure where to start? See the [Hello World in 10 minutes tutorial](#) to install .NET and build your first app.

Windows

Linux

macOS

Docker

.NET Core

.NET Core 2.2

.NET Core is a cross-platform version of .NET for building websites, services, and console apps.

❓ **Using Visual Studio for Mac?** Make sure you have a [compatible version](#).

Build Apps ⓘ

Download .NET Core SDK

Adding C# and .NET Core to VS Code

- IF YOU HAVE MAC you need to do a few extra things....
- Press command + space and type in terminal
- Then run this command to download a software that aids other software installation -- "homebrew"

```
/usr/bin/ruby -e "$(curl -fsSLhttps://raw.githubusercontent.com/Homebrew/install/master/install)"
```

- Then once that is done installing run these 3 commands

```
brew install openssl
```

```
ln -s /usr/local/opt/openssl/lib/libcrypto.1.0.0.dylib /usr/local/lib/
```

```
ln -s /usr/local/opt/openssl/lib/libssl.1.0.0.dylib /usr/local/lib/
```

Hello World Program

- Once You've downloaded Visual Studio and .Net Core SDK (software development kit) create a new folder in your documents folder where you will save all your `c#` code.
- Open that folder in VS Code
- Then run the following commands in the terminal:

Terminal

```
~$ dotnet new console -o myApp  
~$ cd myApp
```

Hello World Program

- These commands will have created a new folder for your code. Next run this command to test your code!

```
Terminal
```

```
~$ dotnet run
```

- If it worked you will look something like this!

```
(base) pcp092717pcs:example katietooher$ cd myApp/  
(base) pcp092717pcs:myApp katietooher$ dotnet run  
Hello World!  
(base) pcp092717pcs:myApp katietooher$ █
```

Take-Aways from Today

- We went over classroom expectations
- Met our Peers
- Downloaded and set up our IDE for learning C# and ran our first program -- next week we will go over this code and begin applying and learning c# concepts