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

Week 1

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 the 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

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

⑦ 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.

⑦ **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