Girls Who Code Week 10

More Practice with Classes and Objects
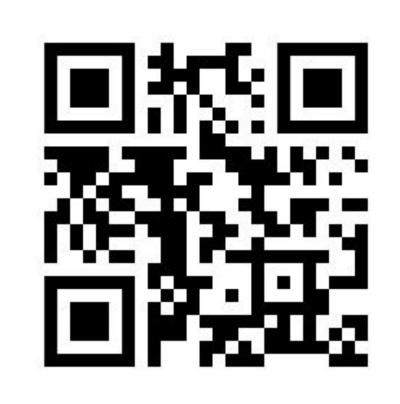
WIT Shout-Out of the Week
Julia Liuson

- Corporate VP of Microsoft's Developer Division
- Leads development for Visual Studio, VS Code, .NET, .NET core framework and developer platform for Microsoft Azure
  - Including all programming languages, runtime, tools for Azure, AI, and mobile//Windows applications
- Began at Microsoft as a software design engineer
- First woman promoted to VP of Engineering at Microsoft
- Received Asian American Executive of the Year award in 2013

Warm- Up

Warm Up

- Write a program in C# Sharp to display the pattern like a triangle

- Ask a user for the number of rows for your triangle

- Use two for loops one for the amount of rows, the second to keep track of the amount of stars per row

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```

Kahoot!

Shapes!

Triangle, Circle, Rectangle

- Create a class for each of the three shapes above.

- The Triangle class should include a method to calculate area

- The Circle class should include a method to calculate circumference and a method to calculate area.

- The Rectangle class should include a method to calculate perimeter, a method to calculate area, and a method to determine if the rectangle is a square.

Shapes Driver Program

Create a driver program that allows the user to select what shape they are making, takes user input for the shape measurements, and prints all attributes for that shape.

```
Mono C# compiler version 4.6.2.0
> mcs -out:main.exe circle.cs main.cs rectangle.cs triangle.cs
> mono main.exe
What shape do you want to make?
Enter 't' for triangle
Enter 'c' for circle
Enter 'r' for rectangle or square
t
Enter a base: 10
Enter a height: 5
This triangle has a base of 10, a height of 5, and an area of 25.
```