**Introduction to Programming**

**What is programming?**

* The process of developing and implementing various sets of instructions to enable a computer to do a certain task.
* Basically, it’s a way to tell a computer what to do in a way that both you and the computer can understand

**Why do we do it?**

**Different Languages**

* There are many different ways to program a computer. Although all of the basics are the same, there are many different programming languages:
  + Java
  + C, C#, C++
  + Python
  + HTML
  + Swift
  + JavaScript
  + jQuery
  + .NET
  + Objective C
* <https://en.wikipedia.org/wiki/List_of_programming_languages> - there are many programming languages, but only a few are widespread
* The main differences between programming languages are just their syntax – kind of like the grammar computers use

**Object Oriented Programming**

Object Oriented programming is programming that relies on classes and objects. Most programming languages are object oriented. We will get into more of what this means later on.

**Introduction to Java**

For these lessons, we are going to be using Java. Java is object oriented and is one of the most widespread languages in use. It can be used to create computer apps, web apps, some phone apps, and most other programs. Learning Java is a good way to introduce other languages. These lessons teach the basic concepts of programming, just using Java syntax. If you finish these lessons and want to learn the basics of another language, it won’t be too hard. Most of the basics are similar in every language.

**Projects**

After each lesson, there will be some recommended projects. The projects help to make sure that you know everything you need to from this lesson:

Don’t forget, you can always ask and answer questions on the website, and if that doesn’t help, bring your questions to our next meeting.