Day #1

Course Syllabus

Introduction

* Welcome
  + What is this Course?
  + How often will we meet?
    - Saturdays from 1 – 5 (2 hour Lab)
    - Tuesday from 6 – 8
    - Thursdays from 6 - 8
  + When will it end?
    - September 12th, 2020 – Graduation
    - What happens after the course ends?
      * Recruiters
      * Direct Contacts with Companies
      * Oracle Certification (Fee $240 to Oracle)
  + What materials will I need
    - Computer (HP/Dell – 8/16gbs RAM, 80gbs HD, Windows 10 OS)
    - Books – Totally Free
* Zoom Etiquette ­­
  + Mute your sound (on entry)
  + Video on, no spy’s (on entry)
  + Please use your “Real Name” for our Attendance Reports, which you want on your Certificate of Completion.
  + How and when to use Chat
  + Raise your hand if you have questions
  + Headphones work best
  + **Agile Teams (4 -5 Members) Breakrooms --** Help Each Other
  + NO Zoom Bombing!!!!!
  + File sharing
  + Screen Sharing and Remote Control
  + I need a break Symbols
* Who am I?
  + How did I become a Software Engineer and Why?
  + How long have I been in the industry?
  + Where did I go to school?
  + Who is on the USI team?
    - **Roxanne Earnest** – IT Administration and Support
    - **Dr. Colleen Birchett** – The Dean of Student Development and Communications
* Why is this Field in such High Demand?
  + Salaries for Software Engineers – Glassdoor,
* Who is right for this type of Career?
* Why Now – Post COVID-19
* Getting Experience (The Contact Tracing Software Development Project)

# Think like a Computer Scientist the book.

* Passing out your books.
* I HIGHLY recommend staying three chapters ahead of where we are in class.
* We will be in this book until July.
* There will be Exercises and Examines (Open Book)

TIME CHECK – Break

Day #2

A Class Act

1. House Keeping
   1. Git Hub – Repository for Code | Books | Documents | Videos
   2. Accessing Git Hub – using your password
   3. Attendance
   4. Stay ahead by reading at least one chapter ahead of the class
   5. IDE configured? DrJava, JDoodle and Jvdroid (Google Play Store)
2. The anatomy of a Class / Object
   1. Data Members
   2. Methods
   3. Objects
3. More about Strings
4. Escape Sequences
5. Formatting Code
6. Deeper Dive into Methods
7. Introduction Projects
8. Vocabulary
9. Exercise

Day #3

Embracing the Braces

1. **House Keeping**
   1. Emails – Instructors email **ibirchettsr@gmail.com**
      1. We must have your email in order to give you access to our GitHub account and Class Videos.
      2. To send out important information about the class, and changes to schedule from time to time.
   2. IDE configured Issues?
      1. DrJava (Windows/Mac)
         1. Mac: <https://people.cs.umass.edu/~elm/Teaching/121_S12/drjava-mac.html>
         2. Windows: <http://www.drjava.org/>
      2. JDoodle -- <https://www.jdoodle.com/>
      3. Jvdroid (Google Play Store)
   3. Accessing class videos via my Google Drive.
2. **GitHub**
   1. Creating local git directory – c:\usi-git
   2. Cloning the Software Engineering Training repository
   3. Downloading the Desktop Git app.
   4. Editing code/documents etc…
   5. Committing Changes
      1. What is the master branch?
      2. Creating your own branch. first initial, last initial, task, example: ib-helloworld.
      3. Requesting a review – Pull Request
      4. Merging the code. (I will be the gatekeeper initially)
3. **Understanding Static vs. Instantiated Classes** 
   1. HelloWorld.java
   2. What is ‘new’?
4. **Understand Scope**
   1. Class Scope
   2. Method Scope
   3. Conditional Scope (if condition)
   4. Iteration Scope (For loops, while loops)
5. Exercise
   1. Create a text file using sublime text 3, with your full name, email address and Facebook URL link.
   2. Name the file <your name>\_Contact\_Info.txt
   3. Read **Chapter 2** of Think like a Computer Scientist.