GoCode Prework

Week 4

Hello GoCode Students, welcome to week 4 of the GoCode pre-work.

The tutorials below will help you get a basic proficiency with SQL and get you to install Sublime text.

We will also revisit Python in a quick assessment. Make sure you are able to pass the assessment, if not, go back to pre-work week 2 and complete all the exercises that were assigned.

1) Intro to SQL (6+ hours)

Sql is an important skill to know and is used to extract/save data into a database. We will cover more advanced concepts in class, but it is a good idea to get your hands wet with some basic SQL syntax.

Almost every web app uses a SQL database as its data store. SQL is also heavily used in data analytics and big data applications. Most interviews will involve some SQL questions.

Work through sections (0-3): Sql Tutorial

(If you are confused, the reference tab on the left hand side contains examples and explanations. If you need more reading, email us!)

Assess yourself:

- What does a select statement do?
- How do you select multiple columns from a table?
- What is a "where" clause used for?
- Complete this guiz: http://sqlzoo.net/wiki/BBC QUIZ

2) Sublime Text install

Different developers like to use different file editors. What's important for the course is that you master ONE editor. We require all students to use Sublime Text 2. Please download and install Sublime Text 2 here: http://www.sublimetext.com/2

The more comfortable you are with an editor - the faster you'll be able to code and get on your way to becoming a code ninja.

Assess yourself:

- Can you open and create files using Sublime?
- Can you edit HTML and CSS in Sublime?
- What is the shortcut key to search for a new file?
- What is the shortcut key to do a 'find and replace'?
- Open a directory in Sublime

Hints: CMD+T and CMD+SHIFT+F are very useful shortcuts!

3) Python Assessment (5+ hours)

Getting up to speed with Python is the number one goal of your pre-work. If you are unable to do the challenges below, please re-visit pre-work week 2. Our on the ground Python curriculum moves fast, so it's important you get up to speed.

First, complete the all remaining exercises of CodeAcademy Python, aside from the "Advanced Topics in Python" and "Classes": http://www.codecademy.com/en/tracks/python

The key parts are for loops, functions, arrays and list manipulation.

Assess yourself:

- What happens when you try to add an integer with a string (e.g. 1 + "string")?
- Use a for loop to iterate through an array of integers 1 10 and print out all the odd numbers
- Create a function that takes in an integer and returns whether it is greater than 5 or not.

- Create a function that takes a string ("Hello) and returns the string with all "e" characters stripped ("Hllo"). This stackoverflow example may be helpful: http://stackoverflow.com/questions/355959/how-to-delete-a-character-from-a-string-using-python
- What does the return statement inside a function do?