Things to be covered in DS1:

**Session 1- Introduction (slide deck only)**

What is Data Science?

Introduction to Jupyter Notebook

**GitHub**

Create an account and download desktop client (pre session)

* How to upload (push) and download (pull) for your own repositories and the importance of writing a readme
* Version control and its importance
* Forking

**Session 2- Python Basics (Slide deck & Notebook)**

By the end of this session apprentices need to be able to:

Section 1- Python basics (print, define variables and the different types of data)

Section 2- Lists & Dictionaries, how to add and remove data and reference (0 index)

Section 3- Writing loops (for, while and try-except)

Section 4- Converting data types and list comprehensions

Section 5- Functions- how to write and call

**Session 3- Pandas Basics (slide deck and notebook)**

By the end of this session apprentices need to be able to:

Section 1- Intro to pandas (difference between a series and a list, pull from DS2)

Section 2- Write and call a dataframe, show how to do manually, using a dictionary, head, tail, shape, etc

Read in data (read\_csv)

Section 3- Referencing a dataframe (loc and iloc)

Section 4- Manipulate a dataframe (column names, drop, inplace, reindex, set\_index, adding columns, etc)

Section 5- Filtering and sorting

Section 6- Lambda functions and apply