

# Python Programming for Non-CS Students

From Basics to Data Analysis

# What are we doing today?

- Logistics and Overview
- What is Python (apart from a snake)?
- Basics
  - Statements
  - Strings
  - Operators
  - Variables

# Class Logistics

- Every Thursday, 5PM to 6PM.
- Same room unless we outgrow it.
- Material (code examples, slides) will be uploaded to -  
<https://github.com/hacksoc-manchester/coding-classes>
- Important announcements will be through the Facebook Page  
(<https://www.facebook.com/hacksocmcr/>) and the course mailing list, sign up  
here - <https://www.hacksoc.com/signup>

# Overview

11 sessions in total.

Demo fair after 11 sessions. Invite friends and family to show off what you have built. Food and drinks on us!

First 5 sessions will cover an intro to programming.

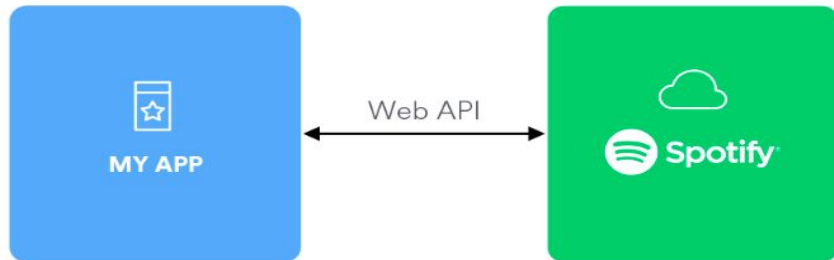
Rest of the sessions are on specific topics:

- Using other people's code
- Interacting with the web
- General good practice
- Data analysis

# Web API

**Note:** By using Spotify developer tools, you accept the [Spotify Developer Terms of Service](#).

Based on simple REST principles, the Spotify Web API endpoints return JSON metadata about music artists, albums, and tracks, directly from the Spotify Data Catalogue.



Web API also provides access to user related data, like playlists and music that the user saves in the **Your Music** library. Such access is enabled through selective authorization, by the user.

The base address of Web API is <https://api.spotify.com>. The API provides a set of **endpoints**, each with its own unique path. To access private data through the Web API, such as user profiles and playlists, an application must get the user's permission to access the data. **Authorization** is via the Spotify **Accounts service**.

## APIs and Web Requests

which physic did i toil all too grossly,  
of happy you nor falls under the master;  
o absence seem'd it fears no form form,  
you would i break of the darling buds of.

of brass are my head where our fashion an,  
stars of thy book of small glory to swear,  
what wealth some child of the painter must die.  
the fierce thing replete with that bears it.

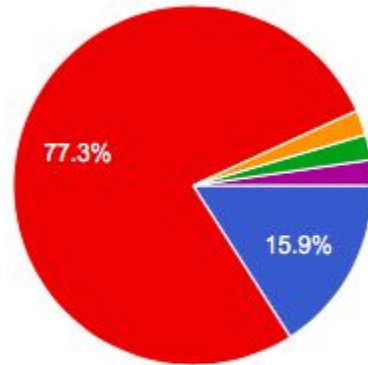
seems your feature incapable of such seems seeing for,  
in his spoil of trust and,  
blood make me soon to thy days are bright,  
in your worth held and i swear to wait.

beauty tempting her poor retention could with a,  
and the treasure of may be.

Web Scraping and HTML



# Is it for me?



- My course requires it
- I was curious about programming
- I want to develop on my existing Python knowledge
- Both of the above
- I want to learn Python



On to some coding now



Give us Feedback!



If you enjoyed this, check out GreatUniHack, our 24h hackathon that's free to attend (also has free food and drinks for the entire weekend), requires no programming experience and allows you to meet people from across the world!