## PYTHON GUIDE

Are you trying to learn Python but aren't sure how to go about it?

Let's do a checklist: Have you succeeded in doing the following things in Python?

- Have you managed to download python to your computer?
- Have you managed to run a hello world script?
- · Have you learnt Python Basics?
  - O Have you learnt how to find the complexity of a script?
  - o Have you learnt variables and scope of a variable?
  - o Have you learnt keywords and operators?
  - o Have you learnt about statements and indentation?
  - o Have you learnt how to make comments and documentation?
  - O Have you learnt Control Flow?
    - Looping
      - · While
      - For
    - Conditions
    - Break, continue, pass
  - O Have you written a script that manages to do something? (Check for palindrome, Fibonacci sequences, etc.)

- O Have you learnt how to use modules and libraries?
- O Have you learnt how to make libraries?
- O Have you learnt how to install packages using **pip**?
- O Have you written codes that contains methods?
- O Have you written codes that contains classes?
- O Have you leant how to do exception handling?
- · Have you written codes that contain functions?
  - o Parameter, Argument
  - o \*args and \*\*kwargs
  - o Yield
  - o Generators
  - o Lambda
  - o Decorators
- Have you learnt constructors and destructors?
- Have you learnt inheritance?
- Have you learnt encapsulation?
- · Have you learnt RegEx?
- Have you learnt collections?
- Have you learnt Python Intermediate?
  - O Have you learnt metaprocessing?
  - o Have you learnt abstract classes?
  - o Have you learnt multithreading and multiprocessing?
  - O Have you learnt about sockets?
- Have you written codes that consists of multiple files referencing one another?

- Have you used codes with web framework?
- · Have you learnt working with JSON files?
- Have you learnt working with CSV files?
- Have you learnt how to store data in database?
  - o Offline
  - o Web
- · Have you learnt how to make executable files?
- Have you learnt Python GuI toolkits?
- Have you learnt how to make cross platform applications?
- Have you managed to make bots using automation libraries?
- Have you learnt how to do web testing?
- Have you learnt how to use important modules like os, time, sys, math, numpy, scipy, etc.
- Have you learnt how to put spreadsheets data in dataframe?
- Have you learnt data visualization?
- Have you managed to integrate the steps mentioned above into one project and create an application?

{Additional: Try ML in Python}