Python

Coding for Beginners

Agenda

- Concept of Programming
- Python Introduction
- Application of Python
- Course Syllabus
- Jupyter Notebook
- Q & A

Concept of Programming

What Is Programming?

Programming is using a language that a machine can understand in order to get it to perform various tasks. Computer programming is how we communicate with machines in a way that makes them function how we need.

A program is a group of logical, mathematical and sequential functions grouped together. When they are grouped, these functions perform a task. Each programming language focuses on different types of tasks as well as gives commands to the machine in different ways.

Popular Programming Languages are,

Python, Java, C, C++, Visual Basic, Java Script, Go, Ruby, Perl

Python Introduction

Python is a <u>high-level</u>, <u>interpreted</u>, <u>general-purpose</u> programming language. Its design philosophy emphasizes code readability with the use of significant indentation.

Guido van Rossum who is the founder of python programming language released its first version in 1991 and its current version is Python 3.

Python is ranked as the #1 popular programming language around the world based on two most popular programming language rating agencies.

Tiobe-index, Pypl.github.io

It's known for its code readability, easy to learn, cross platform support and a strong community with large amount of libraries available in pypi.org

Founder : Guido van Rossum

Application of Python

Python is the most popular programming language exist today due to its various applications such as,

- Automation & Server less computing
- Artificial Intelligence & Machine Learning
- Big Data & Data analytics
- Image Processing
- Game Development
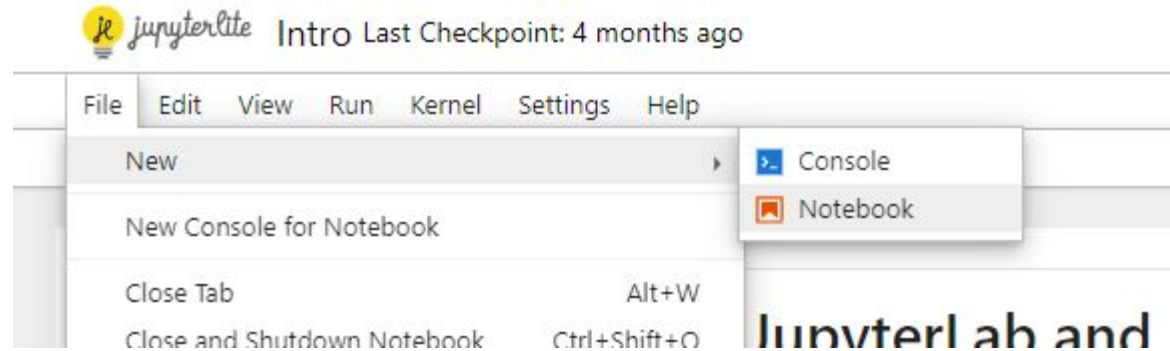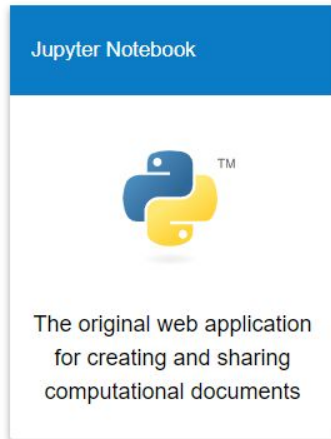- Business applications & Software Development

Course Syllabus

- ★ Hello World !!
- ★ Integers, Strings & Variables
- ★ Operators
- ★ Conditionals
- ★ List
- ★ Loops
- ★ Code Challenge 1
- ★ Functions
- ★ Dictionaries
- ★ Files
- ★ Modules
- ★ Code Challenge 2
- ★ Classes
- ★ Code Challenge 3

Jupyter Notebook

1. Click on https://jupyter.org/try
2. Select Jupyter Notebook
3. On the new Page File ➜ New ➜ Notebook

Collaborative Programming

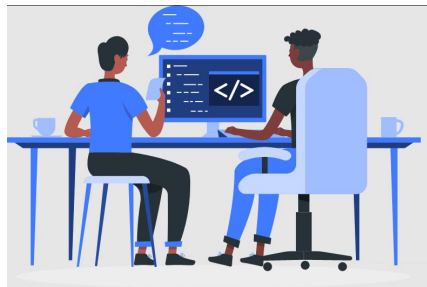Let's Create an account in GitHub

1. Click on https://github.com/signup
2. Enter Details and create an account
3. You may require a code
4. Share user id for project access

Setting up GItHub Repo Locally

git clone https://github.com/ajay291491/PeepalGrovePython.git
git branch
git checkout <username>
git branch

Committing code to Repo

git add HelloWrold.py
git commit -m "commiting hello world program"
git push

Q & A