Python Workshop Syllabus

Xavier Computer and Coding Club 2078

Contents

Aims of the Syllabus

We the Club members while designing this syllabus had the following aim that would make the individuals stand out among others and build up a great career.

1. Make students a programmer with knowledge of algorithm, flow chats and so on.
2. Let students know, knowing a programming language is not only enough to be a programmer.
3. Increasing problem solving habits and develop habits of computational thinking.
4. Provide roadmap for various IT sectors such as Data Science, Web-app Development.
5. Providing registered members with best resources for programming and many more.

Syllabus Contents

PHASE 1 (LEARN THE SEA)
1. What is programming and why program?
2. Programming Languages
3. Code editor, IDLE, IDE
4. Computational Thinking
5. Algorithm

PHASE 2 (GET INTO THE SEA)
1. Python at a glance
2. Mathematical Expressions
3. Identifiers and Constants
4. Variables And Data types
5. Conditionals
6. Iterations
7. Lists

8. Tuples

9. Dictionaries

10. Modules

11. Functions

PHASE 3 (BUNK OFF THE SEA)

1. Git and GitHub

2. Use the git bash

3. Choose a code editor

4. Manipulating strings

5. File Handeling

6. Web-scrapping

7. Pattern matching

8. Emails with python

9. Using Images

10. Controlling Keyboard with GUI automation

PHASE 4 (GET TO THE SHORE)

1. HTMl and CSS

2. Intro to GUI

3. Tkinter Basics

4. Make Calculator with Tkinter

5. Django Basics

6. Portfolio website with Django

6. Making a simple profile based system with Django

Resources

1. freecodecamp.org

2. coursera.org

3. udemy.com

4. hacr.io

5. sololearn.com

6. upskillcourses.com

7. codeconquest.com

8. w3schools.com
9. freecodecamp.org (YouTube)
10. edureka (YouTube)
11. Codewithharry (YouTube)
12. Geekyshows (YouTube)