**Python Daily: Python Crash Course I (LIVE)**

Welcome to Python Daily's Crash Course I! In this course we will learn about the fundamentals of programming with the Python language. Together, we will build various programs and games. This course is for absolute beginners, no coding experience needed.

The goal of this course is to develop a strong foundation in programming within a short amount of time. Further, we will immediately apply the skills we have developed to projects. The idea is to be able to use the skills from the course in our daily jobs and projects to increase our productivity, efficiency, and/or quality.

Further, the knowledge we will gain in this class can be applied to other modern programming languages. Whether you want to use programming to build software, develop websites, manage networks, or perform big-data analytics, they all start with the foundational skills that we will hone in this class.

A word of warning: no one can learn how to program in five sections. The learning process really comes in between each lecture, when we are sitting at home doing the practice problems and/or building the projects of this course. This is when we start applying the concepts introduced in the lectures. Hence, the projects are designed to be difficult and it is through the struggle of figuring them out that we can accelerate the learning process.

Without further delay, let’s learn the fundamentals, let’s get some hands-on experience, and most importantly let’s have a lot of fun in the process!

**What we will learn**

\*Section 1: Getting Started, Variables, Conditionals\*

\* What is Python and how it is used.

\* Basic Variables: Strings, Bools, Ints, Floats.

\* Conditionals: if, elif, else.

\* Importing modules.

\* Project: Rock-Paper-Scissors Game.

\*Section 2: Functions, While Loop\*

\* Introduce: Functions.

\* Global vs Local variables.

\* Introduce: While Loops.

\* Using ```input()```.

\* Project: Guess that Number Game.

\*Section 3: For Loops, Advanced Variables\*

\* Advanced Variables: Lists.

\* Introduce: For Loops.

\* Introduce: List Comprehension.

\* Using ```''.join()```.

\* Using ```range()```.

\* Using ```chr()```.

\* Project: Password Generator.

\*Section 4: Continued Loops and Advanced Variables\*

\* Continue List Comprehension.

\* Advanced Variables: Dictionaries.

\* More Practice problems.

\* Project: Enigma Machine.

\*Section 5: Continue Dictionaries, Try/Except, Final Project\*

\* Continue Dictionaries.

\* Introduce: Try/Except.

\* Advanced Variables: Sets, Tuples.

\* Final Project: File Organizer.

**Prerequisites and Requirements**

No prior programming experience needed. It is good to have the latest version of Python installed https://www.python.org/.Prerequisites and Requirements

**How to Take This Course**

There are several ways to signup for this course. This course is primarily offered through Simpetopia Academy, but any of the following links would work.

--Simpetopia.com

--Eventbrite.com

--Meetup.com

**About the Instructor**

Wen Cai is one of the co-founders of Simpetopia Academy and organizer for Tech DC and NOVA iOS Meetups. Wen has been a developer and cloud engineer, having worked for multiple Fortune 500 tech, consulting, and financial organizations including: Accenture, Government Executive, Atlantic Media, and TD Ameritrade. He enjoys writing in Python, Nodejs, Java, Swift, and Objective-C. He frequently speaks about technology and programming at conventions across the country. Currently, he is building a tech / entrepreneurial community in DC. The goal is to build a network of socially responsible entrepreneurs, developers, and young professionals.

Wen is passionate about using the cloud to build products and solutions that help government and businesses face their challenges in an intelligent and data driven way. Visit Simpetopia.com to learn more.