
CTR-502 Python advanced

Overview

About This Course

Basic Python knowledge

Audience Profile

For full stack developers. For Python programmers.

At Course Completion

At the end of the course the participants will know all Web development with Python and API integrations with the most popular API services in the market.

Course outline

Function Decorators:

- Understanding and creating decorators
- Using decorators for logging, timing, and security

Context Managers:

- Understanding context managers and the with statement
- Creating custom context managers

Generators and Coroutines:

- Understanding generators and the yield statement
- Creating custom generators and coroutines

Concurrent Programming:

- Threads and the threading module
- Processes and the multiprocessing module
- Asynchronous programming with Asuncion

Network Programming:

- Socket programming
- Sending and receiving data over the network
- Implementing client-server applications

Regular Expressions:

- Understanding and using regular expressions in Python
- Parsing and manipulating text data using regular expressions

Advanced Data Structures:

- Deques
- Priority Queues
- Tries
- Graphs

Database Integration:

- Connecting to relational databases
- Performing CRUD operations using SQL Alchemy
- Using NoSQL databases like MongoDB

Web Development:

- Understanding web development concepts
- Creating dynamic web applications using Flask
- Serving and consuming RESTful APIs

Project:

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- Designing and building a complex project using the advanced concepts learned throughout the course.