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Learning Style: On Demand

Technology:

Difficulty: Beginner

Course Duration: 5 Hours

Introduction to FastAPI



About this Course:

Introduction to FastAPI course offers a comprehensive and flexible learning experience for aspiring developers and web enthusiasts. Through this engaging program, learners can explore the fundamentals of FastAPI, a modern and efficient web framework for building APIs with Python. The course is designed to accommodate various learning

styles and schedules, allowing students to progress at their own pace. Whether you're a seasoned Python developer or a beginner with limited programming experience, the course provides step-by-step tutorials, hands-on exercises, and real-world projects to help you master FastAPI's core concepts. With self-paced learning, you have the freedom to revisit challenging topics, accelerate through familiar material, and truly grasp the power of FastAPI in web development.

Course Objectives:

- Understand the fundamentals of FastAPI: By the end of this course, students will have a solid understanding of the core concepts and principles that underpin FastAPI as a modern web framework for building APIs with Python.
- Build RESTful APIs with FastAPI: Students will gain hands-on experience in creating RESTful APIs using FastAPI, including the implementation of CRUD operations, route handling, request validation, and response formatting.
- Utilize asynchronous programming: Learners will learn how to leverage FastAPI's asynchronous capabilities to build high-performance and scalable web applications that handle multiple concurrent requests efficiently.
- Integrate databases with FastAPI: Students will learn how to connect FastAPI applications to databases, allowing them to persist and retrieve data from various data storage systems
- Implement authentication and authorization: By the end of the course, participants will be able to secure their FastAPI applications by implementing authentication and authorization mechanisms to control access to their APIs.

Audience:

This course caters to a diverse audience of aspiring developers and web enthusiasts who are eager to delve into the world of modern web frameworks. Whether you are an experienced Python developer looking to expand your skillset or a beginner with limited programming experience, this course is tailored to meet your needs. If you're seeking a flexible and engaging learning experience, this program will be perfect for you.

Prerequisites:

This course is suitable for a diverse audience with varying levels of experience and backgrounds. It caters to aspiring developers who are keen on learning about modern web development using Python and FastAPI. The course accommodates both seasoned Python developers looking to expand their skill set and beginners with limited programming experience who are eager to delve into web development. No prior knowledge of FastAPI is required, making it an excellent starting point for newcomers to web frameworks. However, a basic understanding of Python programming and general web concepts will be beneficial for learners, enabling them to fully grasp the concepts presented in the course

Course Outline:

This Course Includes:

- Course Introduction
- Lecture 1: What is an API
- Lecture 2: Setting up FastAPI
- Lecture 3: Endpoints
- Lecture 4: Path Parameters
- Lecture 5: Query Parameters
- Lecture 6: Request Body
- Lecture 7: String Validations
- Lecture 8: Numeric Validations + Response Models
- Lecture 9: Handling Errors
- Lecture 10: FastAPI on a server
- Course Summary