KOENIG SOLUTIONS · COURSE OUTLINE

Sanic Python: Async APIs & WebSockets

Learn to build asynchronous web applications and APIs with Sanic, from routing and WebSockets to deployment.

3 Days
DURATION

21
TOPICS

COURSE OVERVIEW

This course introduces the Sanic web framework and asynchronous programming, covering environment setup, request handlers, routing, template rendering and static file handling. It then addresses application components such as forms, authentication, sessions, cookies, WebSocket support, RESTful APIs, testing and error handling. Finally, it covers advanced topics including security practices, CORS, performance optimisation, scaling strategies, deployment options such as Nginx and Docker, and integrating Sanic with databases like MongoDB and MySQL.

WHO THIS COURSE IS FOR

- **Python Developers**
- **Backend Developers**
- **API Developers**
- **Web Developers**
- **DevOps Engineers**

LEARNING OBJECTIVES

- Explain asynchronous programming concepts within Sanic
- Configure a development environment and build a Sanic application
- Implement request handlers and routing in Sanic
- Apply template rendering and static file handling
- Develop forms, authentication and session handling in Sanic
- Implement WebSocket support for real-time applications
- Build RESTful APIs and test Sanic applications
- Apply security practices and deploy Sanic applications

COURSE SYLLABUS

21 Topics

DAY 1 Introduction to Sanic and Asynchronous Web Development

TOPICS

- Introduction to Sanic web framework
- Setting up a development environment (Python, virtual environment)
- Installing Sanic and creating a simple “Hello World” application
- Overview of asynchronous programming in Sanic
- Request handlers and basic routing in Sanic
- Asynchronous Request Handlers and the Sanic Event Loop
- Template rendering with Sanic
- Handling static files and media with Sanic

DAY 2 Sanic Application Components and APIs

TOPICS

- Working with Sanic’s template engine (if applicable)
- Forms and form handling in Sanic
- Sanic authentication and user sessions
- Handling cookies and secure sessions
- Sanic WebSocket support for real-time applications
- Building RESTful APIs with Sanic
- Testing Sanic applications (unit testing with Sanic Testing)
- Error handling and logging in Sanic

DAY 3 Advanced Sanic Topics and Deployment

TOPICS

- Sanic security best practices
- Handling Cross-Origin Resource Sharing (CORS) in Sanic
- Performance optimization and scaling strategies
- Sanic deployment options (Nginx, Docker, etc.)
- Integrating Sanic with databases (e.g., MongoDB, MySQL)

WHAT IS INCLUDED

Everything You Need to Succeed

- Koenig course material for every module
- Delivery by certified instructors and subject matter experts
- Hands-on exercises throughout the course
- Course completion certificate from Koenig

ABOUT KOENIG

Who We Are

Established in 1993, Koenig Solutions is a globally recognised training provider with 35+ technology partnerships, 5,000+ training programmes and a network of certified instructors and subject matter experts, supporting individuals and enterprise teams worldwide.

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