

Tornado

Day 1: Introduction to Tornado and Asynchronous Programming

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

Day 2: Tornado Web Application Components

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

Day 3: Advanced Tornado Topics and Deployment

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