Open API

Day 1: Introduction to OpenAPI

- Overview of APIs
- Importance of API Documentation
- Introduction to OpenAPI Specification
- 2.1 OpenAPI Structure and Components
- 2.2 YAML vs. JSON for OpenAPI
- 2.3 Defining Paths and Operations
- 3.1 Setup development environment
- 3.2 Define basic paths and operations
- 3.3 Validate and test the OpenAPI document
- 4.1 RESTful API Principles
- 4.2 Naming Conventions
- 4.3 Versioning and Compatibility

Day 2: Advanced OpenAPI Concepts

- Defining Data Types
- Using References and Composition
- Handling Enums and Arrays
- Authentication and Authorization
- OAuth 2.0 and API Keys
- Securing API Endpoints
- Documentation and Testing
- Generating Documentation from OpenAPI
- API Testing with OpenAPI
- Tools and Best Practices
- Add security definitions
- Incorporate data modeling
- Update documentation

Day 3: Implementing OpenAPI in Development

- Using OpenAPI Code Generators
- Generating Server and Client Code
- Language-specific Considerations
- Creating Mock Servers
- Testing APIs with Mock Data
- Integrating with Testing Frameworks
- Case Studies of Successful API Implementations
- Industry-Specific Use Cases