

Building an eCommerce Platform with Python, Django, FastAPI, and Vue.js

FA-0121 · 2-day

Software Development

Introduction

This 2-day course focuses on building a headless eCommerce platform using Python, Django, FastAPI, and Vue.js. Participants will learn how to create a backend API using Django and FastAPI, deployed on an Ubuntu server, and build a frontend application using Vue.js. By the end of the course, learners will have hands-on experience in creating a full-stack headless eCommerce application that integrates various technologies and frameworks.

Learning outcomes

Upon completion of this course, participants will be able to:

- Understand the architecture of a headless eCommerce platform
- Create a backend API for an eCommerce platform using Django and FastAPI
- Deploy Django and FastAPI applications on an Ubuntu server
- Build a frontend application for the eCommerce platform using Vue.js
- Integrate the Vue.js frontend with the Django and FastAPI backend
- Implement user authentication, product management, and shopping cart functionalities in the eCommerce platform

Prerequisites

Having the following skills will be of great help.

- A strong foundation in Python programming, HTML, CSS, and JavaScript

Familiarity with web development concepts and prior experience with

- Django,
- FastAPI, and \
- Vue.js
- Basic understanding of databases and SQL
- DevOps experience
- Deployment and containerization will be an added benefit
- SDLC will be an added advantage

Training outline

1. Day 1:

2. Introduction to Headless eCommerce Platforms

- Overview of headless eCommerce architecture
- Benefits of headless eCommerce platforms

3. Backend API Development with Django and FastAPI

- Designing the API endpoints for the eCommerce platform
- Implementing user authentication and authorization
- Creating models and serializers for products, orders, and shopping carts
- Implementing CRUD operations for products, orders, and shopping carts

4. Deployment on an Ubuntu Server

- Preparing the Ubuntu server for deployment
- Deploying Django and FastAPI applications on an Ubuntu server
- Configuring web servers (Apache or Nginx) for Django and FastAPI applications

5. Day 2:

6. Frontend Development with Vue.js

- Setting up the Vue.js project for the eCommerce platform
- Designing the user interface components for product listings, shopping carts, and checkout

- Implementing user authentication and registration in the Vue.js frontend
- Connecting the Vue.js frontend to the backend API

7. Integration and Testing

- Integrating the Vue.js frontend with the Django and FastAPI backend
- Testing the functionality and performance of the eCommerce platform

8. Mini-Project

- Applying the concepts learned to create a full-stack headless eCommerce application

9. Next Steps and Resources

- Advanced topics in headless eCommerce platforms
- Exploring other tools and frameworks for eCommerce development
- Online resources and further learning opportunities