

MyShop Django Application

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Deployment URL: <https://AndyWong.pythonanywhere.com>

Abstract

MyShop is a full-featured Django web application that allows users to browse, search, and purchase laptops sourced from an open dataset of 5,000 real products. Once deployed to PythonAnywhere, the app serves dynamic pages using Django's MVC architecture: views query the SQLite database for Product, Cart, Order, and OrderItem models; templates render the HTML along with a responsive CSS design and JavaScript-powered image sliders and charts; static assets (CSS, JS, images) are collected into a single directory and served via a dedicated /static/ URL mapping.

The data import is automated through a custom management command that reads and bulk-loads the CSV, ensuring robust error handling. Unit tests cover the import process, cart operations, and checkout flow, and a one-page PDF report documents the system's ER diagram, architecture, and key screenshots. This end-to-end pipeline—from data ingestion through live deployment—demonstrates strong full-stack capabilities in enterprise software development.

ER Diagram

Product ↔ OrderItem ↔ Order

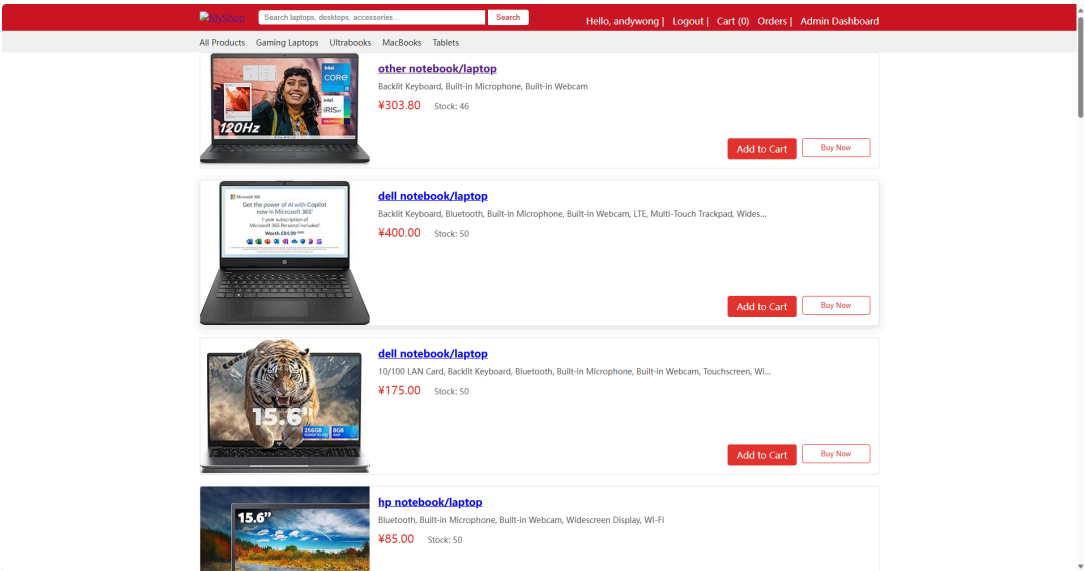
Cart ↔ CartItem

Architecture

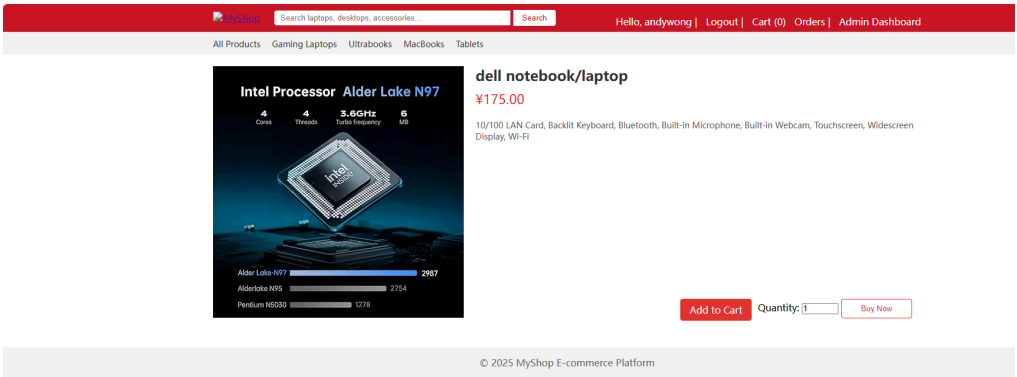
Django MVC on PythonAnywhere

Frontend: Django templates + static files

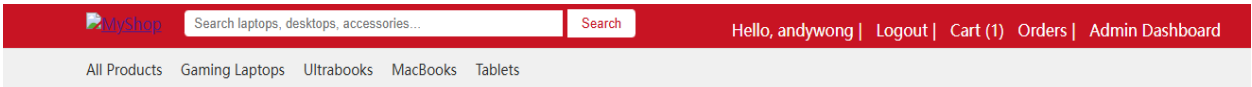
Screenshots



[Homepage]



[Product Detail]



[CartWaitForCheckout]

