Course Project : E-Shop WebApp (Python+Flask)

Introduction to Software Engineering for Engineers

Team

CodePanda;

To gain end-to-end knowledge of web app design and development

Aarathi

Bachelor's in Electrical and Electronics Engineering

Test Automation for Automotive Infotainment Systems

- **Languages: Python, C++**
- **DB: PostgreSQL**
- **Tools: QGIS, Squish, Jenkins, Jira, Git, Crucible, Artifactory, Confluence, Tableau**
- **Interests @ OVGU: Machine Learning & Data Mining**

Aneesh

Bachelor's in Electrical and Electronics Engineering

Software Support, Application Lifecycle Management

- **Languages: Python, C**
- **Embedded Systems: VHDL, System Verilog, SoC**
- **Tools: Vivado, Xilinx IDE, Vitis HLS, Booksim, Keil MDK, IAR Embedded Workbench**
- **Interests @ OVGU: FPGA & SoC**

Supriya

Bachelor's in Electronics and Communication Engineering

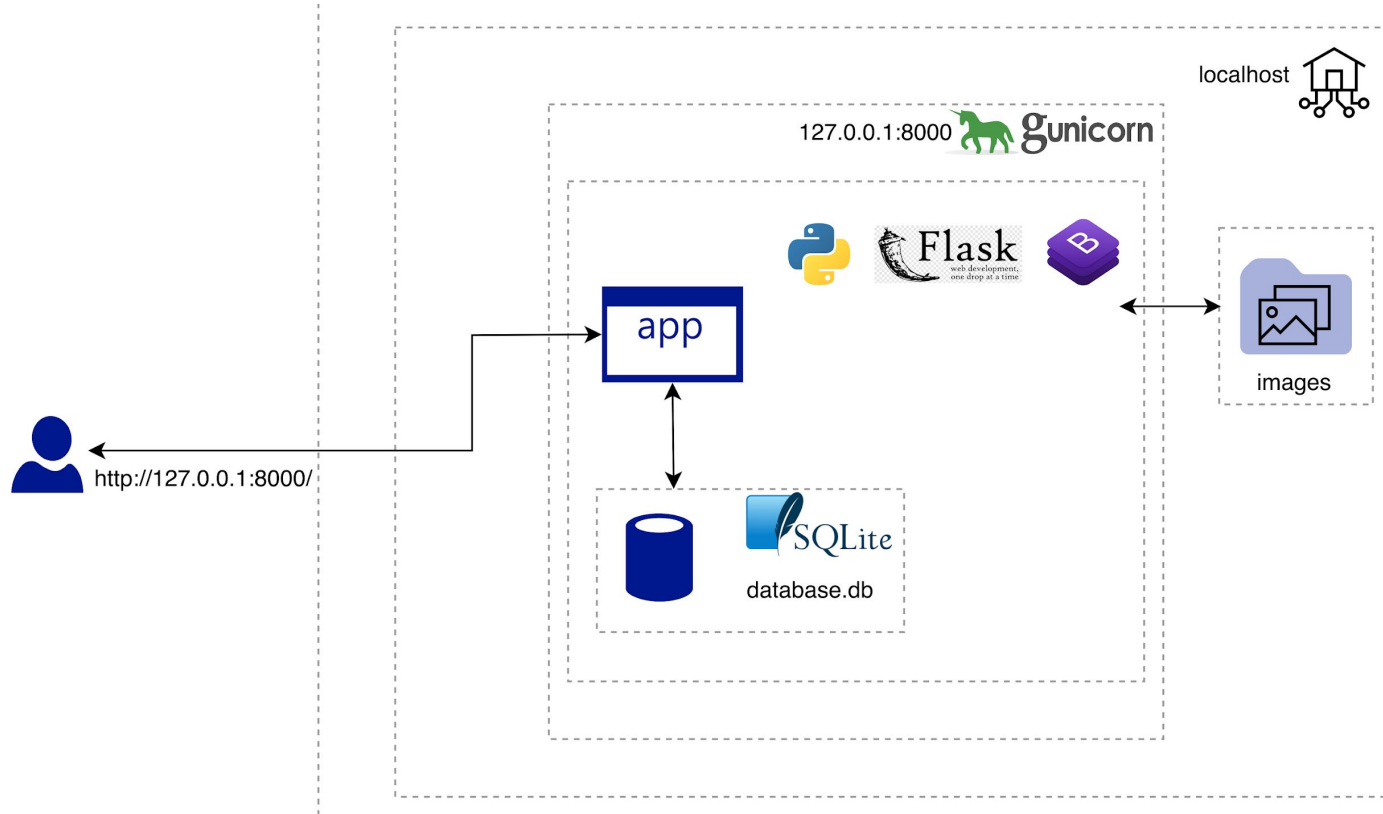**DevOps Engineer, Application Operations Engineer**

- **Languages : Java, Python, Shell**
- **Cloud & DevOps Tech : GCP, Docker, Kubernetes, Terraform, Jenkins**
- **Interests @ OVGU: Machine Learning & Data mining**

E-Shop

AntiQKraft is an eCommerce platform to buy and sell antique art and artifacts across a wide range of categories

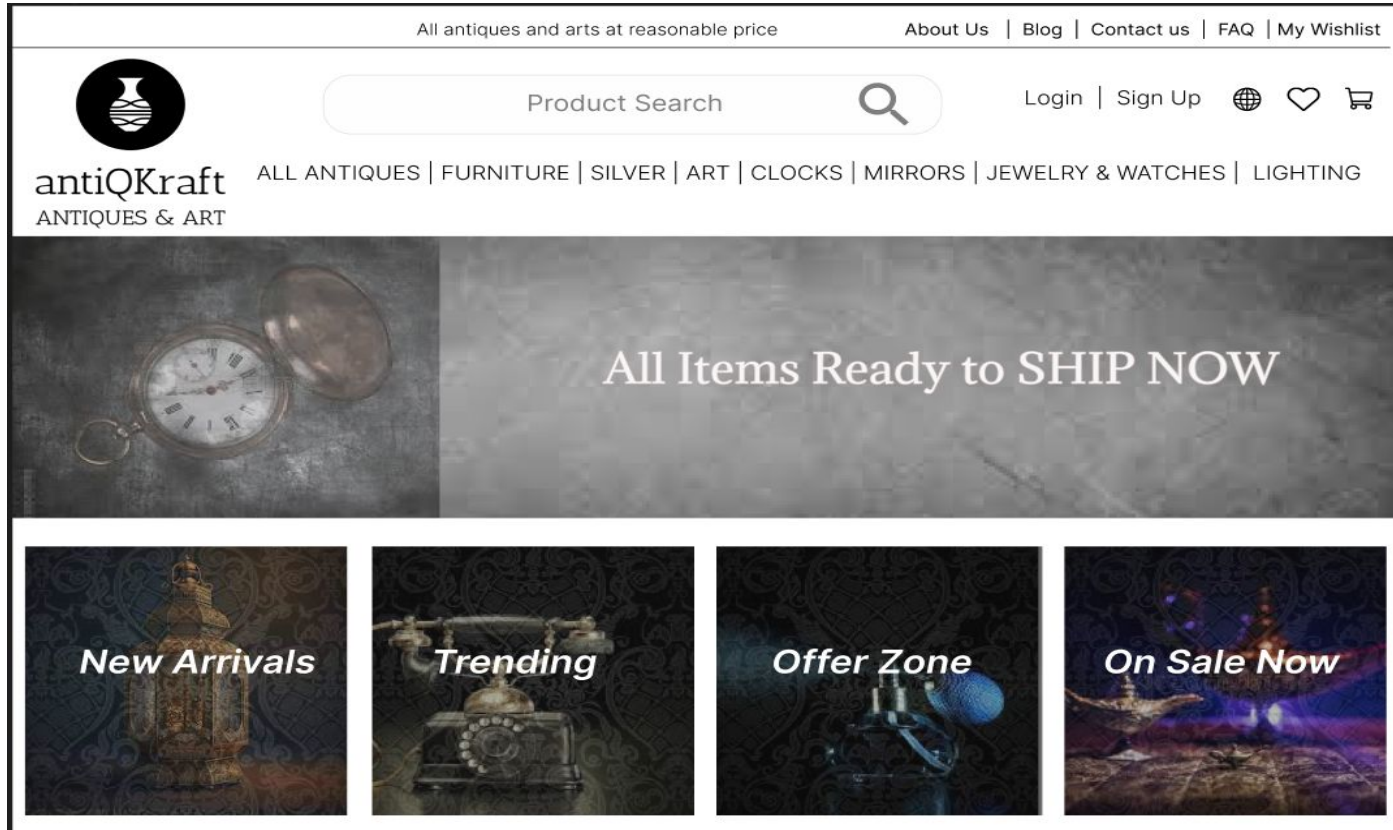# Architecture & Technology Stack

Code Repository & Directory Structure

```
antiKraft-eshop/
├── backend                  // Business logic and DB CRUD operation
│   ├── controller.py
│   └── model.py
├── images                   // Product images uploaded by seller, can be moved to cloud storage
│   └── dummy.png
├── static                   // CSS, images and other static content
│   ├── logo
│   ├── team-logo
│   ├── Architecture.drawio
│   ├── Architecture.png
│   └── homepage.png
├── templates                // UI - htmls
│   ├── homepage
│   ├── product-page
│   └── base.html
├── tests                    // Test cases
│   └── test.py
├── LICENSE
├── README.md
├── antikraft-app.py
├── requirements.txt         // Pre-requisites to be installed
└── schema.sql               // Sqlite database schema
```

Link here - https://code.ovgu.de/ulos69uq/antikraft-eshop

Wireframe

Link here -
https://www.figma.com/file/lTzeFelvqgNDr5T4Rf2iuD/Untitled-2?type=design&node-id=0%3A1&t=qHoMnsUV7lsfaW4J-1

Requirement Analysis

Home Page

Header - Logo, Search Bar, Login button/Profile button, Cart
Navigation Bar – Category, Dropdown with sub-categories
Banners
Offer tiles

Login Page

Username
Password
Login Button
Registration

Profile Page

Reward
Post ad
Post offers

Category Page

List of Product – Product tiles

Product Page

Images
Description
Price
Stock
Add to Cart
Reviews

Register Page

First Name, Last Name
Username – Email Address
Password, Confirm Password
Phone Number, Address

Project Plan - Epics

E-Shop Business & Logo

Sprint Planning

Technical Design

Code Baseline

Wireframe

Home Page

Seller Services
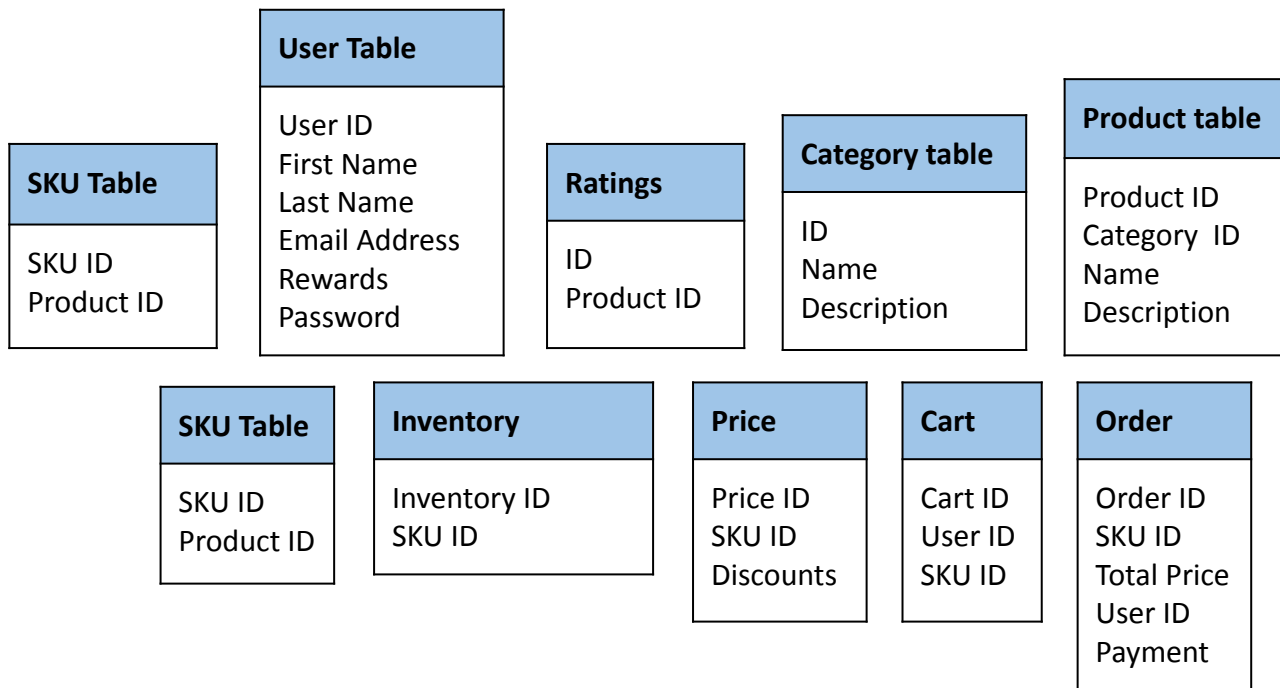
DB Schema Design

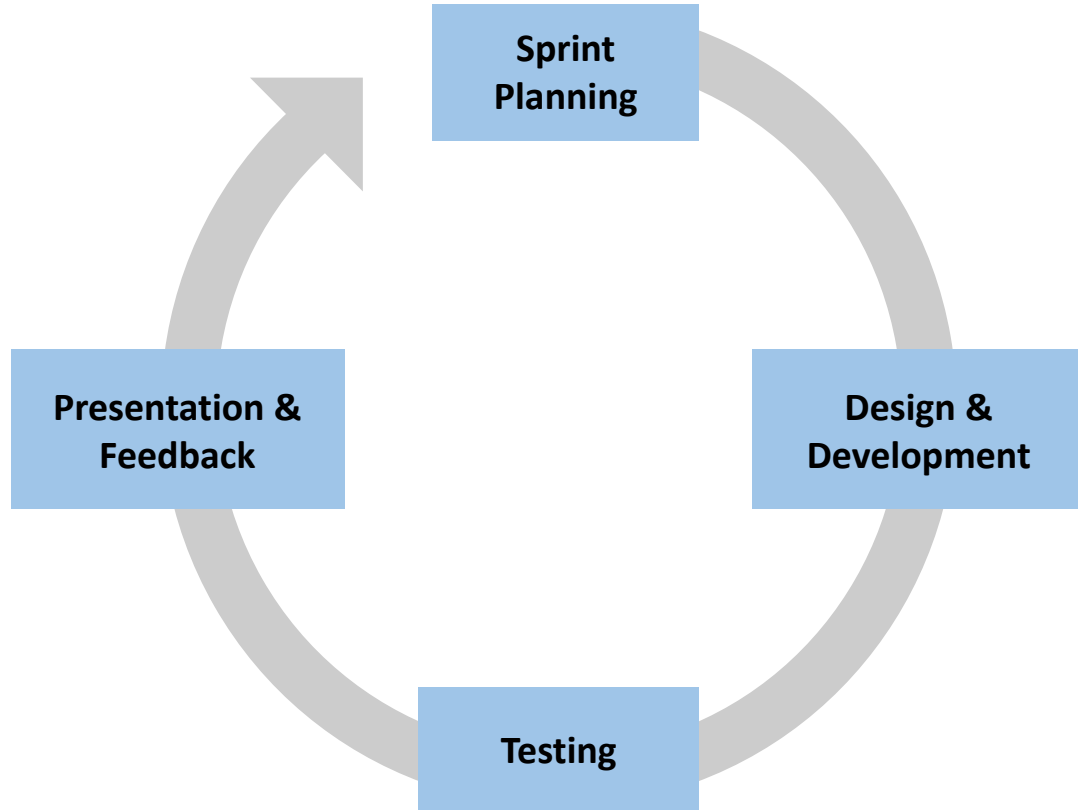Product Catalog

Category Page

Product Page

Cart & Checkout

User Account

Ratings

Schema Analysis

SKU Table

SKU ID
Product ID

User Table

User ID
First Name
Last Name
Email Address
Rewards
Password

Ratings

ID
Product ID

Category table

ID
Name
Description

Product table

Product ID
Category ID
Name
Description

SKU Table

SKU ID
Product ID

Inventory

Inventory ID
SKU ID

Price

Price ID
SKU ID
Discounts

Cart

Cart ID
User ID
SKU ID

Order

Order ID
SKU ID
Total Price
User ID
Payment

Project Management

Sprint Plan

Thank You!