Republic of the Philippines
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COLLEGE OF COMPUTER STUDIES

Zyntra: A Sustainable E-Commerce Platform for Electronics and Gadgets

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I. Project Overview

Zyntra is an online e-commerce software program created for the online retailing of electronics and gadgets while fulfilling the concept of environment-friendly consumption. The site is an online store where customers buy, sell, and ship environment-friendly electronics like refurbished laptops, environment-friendly electronics, and eco-friendly electronics.

It is built with **Flask and Python**. The project exhibits the capability of tech to ensure sustainability by allowing convenient shopping, empowering the vendor, and providing rapid delivery, all while making environmentally friendly choices.

II. SDG Alignment

The project is also aligned with the United Nations Sustainable Development Goal SDG 12: Responsible Consumption and Production.

- **Aims**: Achieve sustainable consumption and production patterns.
- **Relationship**: Zyntra encourages customers to purchase and sell reused, eco-friendly, and power-efficient devices by minimizing e-waste and contributing to the circular economy.
- **Additional Impact**: It even contributes to SDG 13: Climate Action, since environment-friendly electronics and improved delivery routes reduce carbon footprints.

III. Objectives

- To utilize Python Flask to develop and implement a functional e-commerce web application for devices and electronics.
- To encourage environmentally responsible technology use.
- Separate systems, using roles of Buyer, Seller, Admin, and Rider, should be used for efficient, organized platform management.
- To encourage responsible consumption and to increase awareness of the environmental impacts of e-waste.
- To demonstrate, through practical use, how digital innovation further advances the Sustainable Development Goals (SDGs).

IV. Features and Functionalities

1. Buyer Features

- Register and log in as a buyer
- Browse and search for products across categories
- View detailed product descriptions and sustainability ratings
- Add items to cart and checkout securely
- Track orders and delivery status
- Rate and review products

2. Seller Features

- Register and manage a seller account
- Add, edit, and delete products for sale
- Manage inventory and pricing
- View sales performance and customer feedback

- Receive notifications for new orders

3. **Admin Features**
    - Manage all users (buyers, sellers, riders)
    - Approve or verify seller accounts
    - Oversee transactions and order status
    - Generate sales, delivery, and activity reports
    - Manage website content and monitor sustainability compliance

4. **Rider Features**
    - Log in and view assigned deliveries
    - Access customer details and delivery addresses
    - Update order status (Picked Up, Out for Delivery, Delivered)
    - View delivery history and track performance

V. Expected Outcome

The project will develop an effective e-commerce web application with four interrelated user roles namely Buyer, Seller, Admin, and Rider. Zyntra will encourage the sustainable consumption of electronics with an effective streamlined process of buying, selling, and delivery. The platform will encourage users to take ecologically responsible decisions while proving the capability of technology to sustain the environment.

VI. Conclusion

Zyntra: A Sustainable E-Commerce Platform for Electronics and Gadgets will showcase how digital innovation and environmental responsibility can work together. By aligning with **SDG 12: Responsible Consumption and Production**, the project not only demonstrates technical skills but also advocates for the reduction of e-waste and the promotion of sustainable online commerce.