

# Aquarium and Petshop Management System

## Abstract:

The Advanced Aquarium and Pet Shop Management System is a sophisticated web-based application developed using the Python Django framework. This project is designed to offer a comprehensive and streamlined solution for efficiently managing virtual aquariums and pet shops, facilitating the organization and care of a diverse range of aquatic life and pets. The system incorporates various features, including pet inventory management, user authentication, search and filtering, and advanced functionalities tailored for administrators, dealers, customers, and delivery personnel.

In addition to the standard user roles of Admin, Dealer, Customer, and Delivery Man, this project introduces innovative technologies to enhance user experience and overall system functionality. Noteworthy features include email verification for user and dealer logins, payment integration for seamless transactions in the main project, and the implementation of machine learning in the Product Showcase for a more interactive and engaging display.

Key functionalities for each user role are as follows:

### Admin:

Notifications and Alerts: Admin receives real-time notifications and alerts during the delivery of aquariums and pets.

Settings and Configuration: Admin can customize system settings and configurations for optimal performance.

Security and Data Privacy: Emphasis on maintaining high-level security and data privacy standards.

### Customer:

Notifications and Alerts: Customers are notified during the shipping process, ensuring transparency and timely updates.

Feedback and Reviews: Users can provide feedback and reviews for purchased pets and aquariums, contributing to a community-driven platform.

### Dealer:

Order Notifications: Dealers receive immediate notifications containing order details and shipping information when a customer places an order.

Order Fulfillment: Dealers efficiently prepare and package products for shipping based on received orders.

Customer Queries: Dealers can engage with customers using a chatbot to address queries related to pets, aquarium availability, and specifications.

Feedback and Reviews: Dealers have access to customer reviews and ratings, enabling them to make informed decisions and enhance their products and services.

Product Showcase: Utilizing virtualization and machine learning, the system showcases aquariums with fish in a captivating and accurate manner, enhancing the overall product presentation.

### **Delivery Man:**

Login and Authentication: Provide a secure login system with authentication mechanisms to ensure that only authorized delivery personnel can access their accounts.

Profile Management: Allow delivery boys to update their profile information, including contact details, profile picture, and vehicle information.

Order Details: Display order details including delivery address, items, payment status, and special instructions from customers.

Delivery Confirmation: Allow delivery personnel to mark orders as delivered.