

Courier Management System using Django

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Abstract : Built using Python, Django and SQLite3, Courier Management System is a robust software application that optimizes courier operations. It offers users an intuitive interface to create, track(Basic) and deliver courier packages with real-time updates. Administrators can effectively manage and monitor operations, assign couriers and create clear reports. The system uses SQLite3 for data storage and uses Django capabilities for web development, versatility of Python. The courier management system ensures efficient resource allocation, minimal errors, higher customer satisfaction and informed decision-making for administrators.

Keywords:-Courier management system,Django,SQL lite3, web development, versatiliy

I. INTRODUCTION

A courier operating system, or CMS, is a piece of marketable software that enables management easier. The content management system (CMS) automates the planning and optimization of the following tasks Courier scheduling,Examining the performance of couriers.

The main thing of the management system is to track courier details like date of shipment and client. It tracks all the information about the courier, the biller, the client and the courier. Since the proposal is entirely designed for an executive position, only the director has access. The control system project will have different modules. The login section will have a login installation for admin and for the staff,clients. He takes all the details while taking orders from clients i.e, who place orders and all details about the customer like his name etc. During the process, the system will provide a Unique ID for your products. Over this id, customers will be able to monitor their products from any position using

Internet. After entering the order details like ID, it will display the product status within 1 minute.

II. LITERATURE REVIEW

Currently, courier management is done manually or using classical software that lacks modern features and functionalities. The existing system is prone to errors, delays, and miscommunication, which results in poor customer satisfaction.

Disadvantages: High error rate , Delay in processing , Less User Friendly , Communication Problem

The proposed Courier management system aims to eliminate the deficiencies of the existing system by providing a modern, effective and efficient solution.

This system uses the power of Django and other modern technologies to provide end-to-end solutions that meet the needs of customers and administrators. The advantages of our system are: modern and efficient software, end-to-end control, Python framework for better performance, easier for users and administrators

III. PROBLEM STATEMENT

The problem at hand is to create a courier management system using Python, Django and SQLite3.

The system is designed to solve the problems of managing and tracking the quality of the courier service. It includes a webbased application that allows users to submit and track delivery requests, manage inventory, and increase delivery efficiency.

The system will use relational database management system, specifically SQLite3, to store and manage required data. This includes information about customers, delivery personnel, delivery requests, inventory, and deliveries.

The project will focus on creating an intuitive way for customers to submit shipping requests and track their shipments, and an admin interface to manage the entire process.

By using the delivery management system, this project focuses on the above research questions and clarifies the views, finally provides an easy solution to the problem and improves the delivery services.

IV. METHODOLOGY

MODULES

User Management: Allows customers and administrators to register, log in, and manage their accounts.

Order Management: Allows customers to place orders, track shipments, and receive notifications on delivery. Allows administrators to manage orders, assign shipments to couriers, and generate reports.

Courier Management: Allows administrators to manage couriers, assign deliveries, and track their performance.

Payment Management: Allows customers to make payments online and view their transaction history.

Reporting: Provides administrators with tools to generate reports on orders, shipments, and payments.

ARCHITECTURE

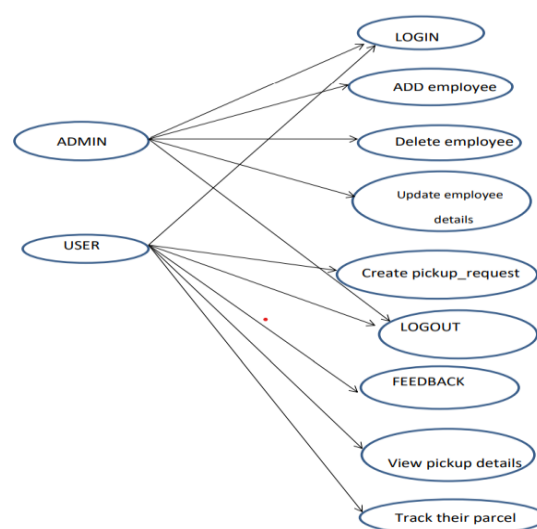


Figure 1 : architecture

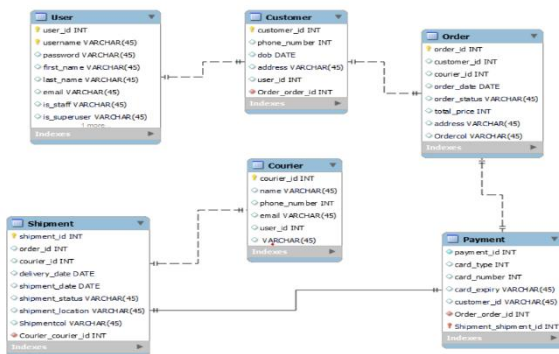
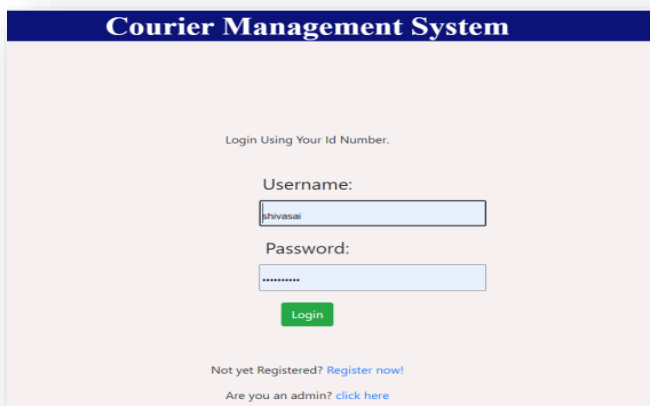


Figure 2 : Object oriented uml diagram

V. EXPERIMENTAL RESULTS



Courier Management System

Login Using Your Id Number.


Username:

Password:

Not yet Registered? [Register now!](#)

Are you an admin? [click here](#)

Figure 3 : User login interface



COURIER MANAGEMENT SYSTEM-REGISTRATION

*NOTE Username is your Id Number

Username: Required. 150 characters or fewer. Letters, digits and @/+/!_ only.

Email:

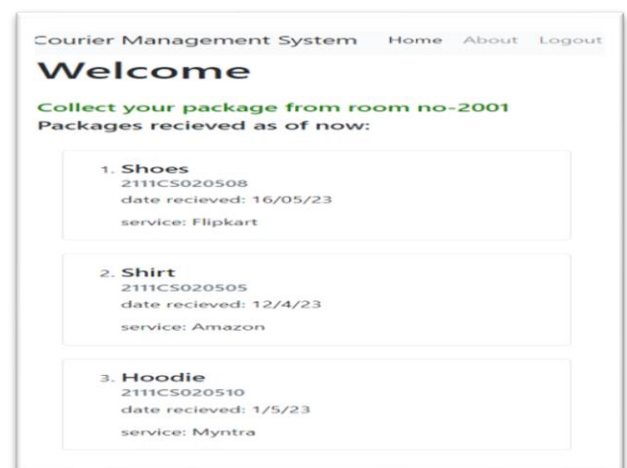
Password:

- Your password can't be too similar to your other personal information.
- Your password must contain at least 8 characters.
- Your password can't be a commonly used password.
- Your password can't be entirely numeric.

Password confirmation: Enter the same password as before, for verification.

Already have an account? [Sign in](#)

Figure 4 : New registration interface



Courier Management System Home About Logout

Welcome

Collect your package from room no-2001

Packages recieved as of now:

- Shoes**
2111CS020508
date recieved: 16/05/23
service: Flipkart
- Shirt**
2111CS020505
date recieved: 16/4/23
service: Amazon
- Hoodie**
2111CS020510
date recieved: 1/5/23
service: Myntra

Figure 5 : Home page

VI. CONCLUSION

In summary, a courier management system built with Django and SQLite3 can be a powerful tool for handling shipping and logistics. With Django's powerful framework, developers can build web applications that allow users to track posts, manage posts, and generate reports. SQLite3's lightweight database management system provides speed and data savings, making it ideal for small presentation management systems. Some of the key messaging management features that come with User authentication and control to ensure that only authorized users can access sensitive information. Integrate with external services such as maps and geolocation APIs to improve delivery methods and predict delivery times. Automatic alerts and notifications to notify customers and employees of changes in posts.

VII. FUTURE WORK

Improve the user interface by adding more user interaction features. For more information on the ad campaign, go to the home page. Donate food to the house every week/day. Added different payment methods like PayPal, Cash, Gift Cards and allowed to store payment detail

s.
Using chatbots and external services
Using multiple authentication and role-based controls to secure data
Integration with third-party service providers to extend the service and domain of the system.

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VIII. REFERENCES

- [1] Samuel Dauzon, Aidas Bendoraitis, Arun Ravindran. Django: Web development with Python Learning Path 2016 Packt Publishing.
- [2] Learn Web Development With Python. By Fabrizio Romano, Gaston C. Hillar, Arun

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Their depth

Ravindran, Fabrizio Romano, Gaston C. Hillar, Arun Ravindran · 2018

[3] Django Design Patterns and Best Practices By Arun Ravindran, Arun Ravindran · 2015

[4] Django for APIs Build web APIs with Python and Django By William S. Vincent, William S. Vincent · 2022.

[5] Beginning Django Web Application Development and Deployment with Python By Daniel Rubio, Daniel Rubio · 2017

[6] Django for Beginners, Build Websites with Python & Django By William S. Vincent, William S. Vincent. 2020

[7] Python Web Development with Django Jeff Forcier, Paul Bissex, Wesley J Chun, Jeff Forcier, Paul Bissex, Wesley J Chun · 2008

[8] The Definitive Guide to Django Web Development Done Right By Adrian Holovaty, Jacob Kaplan-Moss, Jason Gilmore, Adrian Holovaty, Jacob Kaplan-Moss, Jason Gilmore · 2007.

[9] Web Development with Django Learn to Build Modern Web Applications with a Python-based

FrameworkBy Ben Shaw, Saurabh Badhwar, Andrew Bird, Bharath Chandra K S, Chris Guest, Ben Shaw, Saurabh Badhwar, Andrew Bird, Bharath Chandra K S, Chris Guest · 2021.

[10] Django 2 by ExampleBuild Powerful and Reliable Python Web Applications from ScratchBy Antonio Melé, Antonio Melé · 2018