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Society Maintenance System

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Annotation
The Society Maintenance System is a website that helps people who live in societies. It makes things easier by sending bills and tracking payments. This system also helps people talk to each other. It saves time. Makes things clearer. The Society Maintenance System does this with the help of dashboards, online payments and messages on WhatsApp when people make payments. The Society Maintenance System is really good, at making things work better.

Keywords: Society Management, Maintenance Billing, Web Application, Automation, Payment System, Flask, SQLite, WhatsApp API.

Introduction

The Society Maintenance System is a website that helps people who live in societies. It makes things easier by taking care of maintenance bills and keeping track of payments. This system also helps people talk to each other easily.

It saves people a lot of time and work because they do not have to do everything by hand. The Society Maintenance System is also very open and honest so people can see what is going on. It makes things run smoothly with the help of digital dashboards, online payments and messages on WhatsApp when people make payments. The Society Maintenance System is really good, at making things more efficient. The system is helpful for administrators and users.However here is optimized and human-like version:A centralized system is helpful.It has two dashboards: one for administrators and one for users.The administrators use their dashboard to manage the system.The users use their dashboard to interact with the system.The system helps with billing.It automates billing to make it easier.The system tracks payments.It also helps with communication.The system sends messages to users.The administrators can monitor everything from their dashboard.The users can see their information from their dashboard.The system uses web technologies,It also uses APIs to connect with systems.The system is easy to use for administrators and users. The. Users like the system. The system helps administrators and users. It automates tasks to make it easier. The system uses technology. The system is helpful for administrators and users. Here is another version. A centralized system helps administrators and users. The system has admin and user dashboards. The system uses web technologies and APIs. The system is easy to use. Users like the system. The system helps with billing and payments. The system helps with communication. The system is controlled from one place. The administrators manage the system from there. The users interact with the system from their dashboard.1 The system helps administrators and users. The system automates tasks. The system uses technology. The system is helpful. The best version: A centralized system helps

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Proposed AI-Based Solution

The system can be made better with Artificial Intelligence features like

- Predictive analysis to figure out how much maintenance will cost in the future
- Automated reminders that use scheduling to tell people what they need to do
- Checking for fraud when people make payments
- An Artificial Intelligence chatbot that answers questions from residents

The Artificial Intelligence chatbot is really useful for residents who have questions. The system, with Artificial Intelligence features can help with things like figuring out maintenance costs and checking for fraud in payments.

Motivation

- We need to stop making mistakes when we are billing people.
- This will help the people who do the admin work to have time and less things to do.
- We have to make things more clear and keep records.
- The system should let us talk to people away using WhatsApp.

Related Work

Existing solutions have things, like registers and simple software that do not do much on their own. Some systems can handle billing. They do not have communication and payment systems that work together. This project is better because it puts billing, payments and notifications all together in one place, which's the billing and payment platform and it makes the notifications system work with the billing and payment systems.

Research Methodology

We need to take a look at the system limitations. The manual system limitations are what we have to consider. Next we will design the system architecture. The system architecture is very important because it is the system architecture that will help us. We will also design the modules that will be a part of the system architecture, which's the system architecture. We have to develop the frontend of the system and the backend of the system the frontend and the backend of the system. The frontend and the backend of the system are crucial, for the system. Then we have to integrate the payment APIs and the WhatsApp APIs into the system the payment APIs and the WhatsApp APIs. The payment APIs and the WhatsApp APIs have to be integrated into the system, which's the system. We will also design the modules that will be a part of the system architecture, which's the system architecture. We have to develop the frontend of the system and the backend of the system the frontend and the backend of the system. The frontend and the backend of the system are crucial, for the system. Then we have to integrate the payment APIs and the WhatsApp APIs into the system the payment APIs and the WhatsApp APIs. The payment APIs and the WhatsApp APIs have to be integrated into the system, which's the system.

Finally we need to perform testing and validation of the system the system. We need to make sure the system is working properly the system. The system has to be tested and validated to ensure everything is working as it should the system. We will perform testing and validation of the payment APIs and the WhatsApp APIs the payment APIs and the WhatsApp APIs. The payment APIs and the

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Phases of the Project Development

1. Requirement Analysis Phase

The first step is to find out what the system needs to do. We need to know how things work in the society. The main goals and different parts of the system must be clearly defined. The system requirements must be understood properly.

2. System Design Phase

Next we plan how everything will look and work together. This includes making a plan for the database. We also create wireframes, for the user interface and user experience. A plan is made for all the modules of the system. The system design is very important.

3. Implementation Phase

The database is. Built using SQLite. We implement the system according to the plan.

4. Testing Phase

We do unit testing to ensure each part of the system works correctly. Then we test the system to see how all parts work together. We also test the payment and notification features to ensure they work properly. The system is tested thoroughly.

- **Flow of the project**

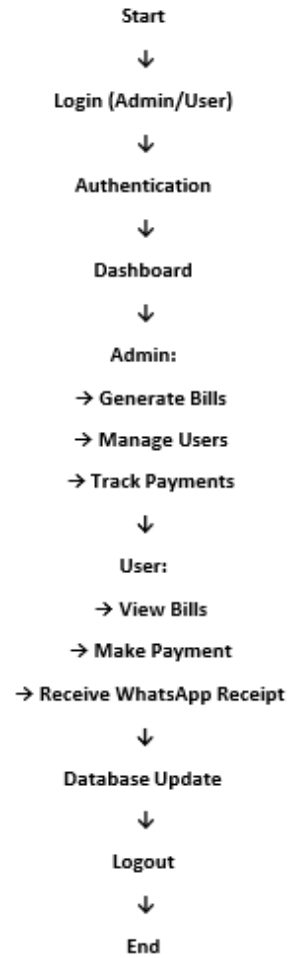

Figure: 1.1 : Workflow of Society Maintenance System Project

Data Preprocessing and Analysis

1. Collecting Information

We need to get information, about the users. This includes user details and billing records. We also have to look at payment history.

2. Data Cleaning

Now we have to clean up the data. First we remove entries. Then we handle missing values.

3. Data Transformation

Next we transform the data. We convert the data into a format. This is where we do text processing, which means we format names and addresses. We also do normalization, which means we standardize data values. This is all part of the data transformation process.

- Bar charts are one way to do this.
- Word clouds are another way.
- Graphs also help to show the data patterns.

Data Analysis

- ✓ I looked at the data. Did some Descriptive Analysis.
- ✓ This involved creating payment summaries to understand the data better.
- ✓ Then I did a Correlation Analysis to see how Payment patterns change over time.
- ✓ Next I did Feature Selection to identify the Important fields.
- ✓ These fields are User ID and Amount.
- ✓ After that I used Visualization to create Graphs and charts.
- ✓ These will be used to make reports easier to understand.

Outcome

- Automated billing and payment systems make life easier.
- This leads to transparency, in our work.
- With manual tasks we save time.
- We also talk to customers on WhatsApp.

Proposed Algorithm

The system uses some classification algorithms. These include:

- Here is what we need to do with the user and billing information.
- We will put the user and billing data into our system. Make sure it is correct.
- Then we will save the user and billing data in our database.
- After that we will make a maintenance bill for the user.
- The user will then pay the maintenance bill.
- We will update the user records.
- Finally we will send the receipt to the user, via WhatsApp.

Proposed Solution

We have a system that's easy to manage. This system has two parts: one for the people who are in charge which we call the admin dashboard and one for the people who use it which we call the user dashboard. The system does a lot of things on its own like making bills keeping track of payments and sending messages. It uses the things from the internet and special helpers called APIs to do all these things. The billing and payment tracking are all done by the system. It also helps with communication. The system is like a tool that makes things easier, for the admin and the user.

A system that is controlled from one place has two types of dashboards: one for administrators and one for users.This system helps with billing, tracking payments. Sending messages.It uses up-to-date web technologies and APIs to work It also tracks payments and communication.This makes it easier for administrators and users. The system uses web technologies. It also uses APIs to connect with systems. The administrators can use their dashboard to monitor everything. users can use their dashboard to see their information. The system helps with communication.It sends messages to users.The administrators can also use the system to track payments.The system is easy to use.The administrators and users can use it easily The system is helpful for administrators and users. The system is centralized. The system helps administrators and users.The system has admin and user dashboards. The system automates billing.The system tracks payments.The system helps with communication.The system uses web technologies.The system uses APIs

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- The system uses web technologies.The system uses APIs
- Users like the system.The system helps administrators and usersThe system is helpful
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Main Parts of the Healthcare Detection System

Authentication Module

- Admin Dashboard
- User Dashboard : Billing and Payment
- Billing Module
- Payment Gateway

Notification System : Notification System using WhatsApp API

Steps of Data Preprocessing:

- Data Collection
- Data Cleaning
- Data Transformation
- Data Integration

- Feature Selection

RESULT EVOLUTION AND ANALYSIS

- The system makes things more efficient.
- It helps reduce mistakes and makes users happier.
- This system also helps with billing.
- It keeps payments secure.
- It does a job of managing records compared to doing things manually.

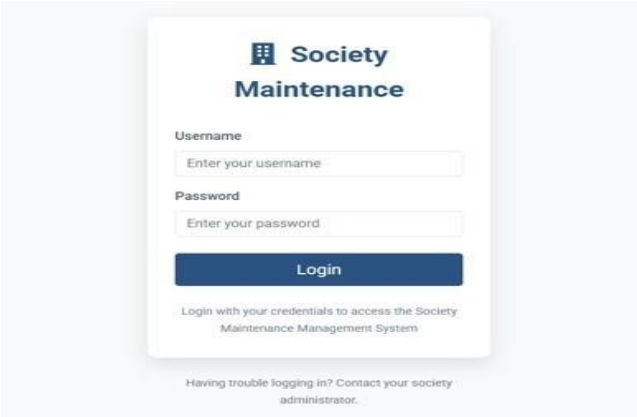

Figure 1: User Login Interface of the System

The picture shows the Login Interface of the **Society Maintenance System Project** or Web Application. This is where people who have signed up can get into the system by putting in their email address and password. The login page looks really nice with a theme and a special box in the middle where you can log in. This page has spaces where you can put in your email and password and a button that says Login. When you click this button the system checks your information to make sure it is correct. If everything is okay you can then use the Society Maintenance System Project and all its features, such as checking if newss real looking at it closely and using the dashboard.

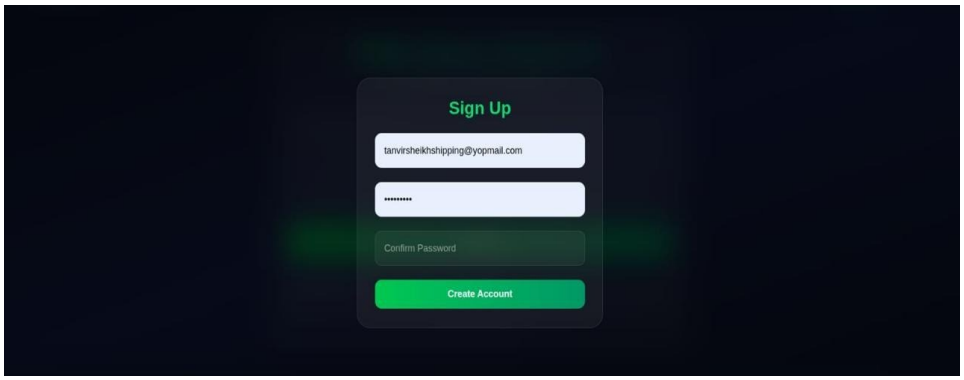

Figure 2: User Registration (Sign Up) Interface

The picture above shows how new users sign up to use the system. This is where people can create an account and get access to the system. The design of the system is easy to use. It looks clean. It has a background that makes the form easy to see on the system. When users are done filling in all their details they click the Create Account button to complete the sign up process for the system. Their details are then added to the system. After users have signed up for the system they can log in to the system using their email address and password for the system. The sign up part of the system is important for keeping user information safe and secure for all users of the system. It also makes sure that only the right people can use the system. The system keeps track of who's using the system and

what they are doing on the system. Only people with an account can use the system. Only people with an account, for the system can use the system.The sign up part of the system is important for keeping user information safe and secure for all users of the system. It also makes sure that only the right people can use the system. The system keeps track of who's using the system and what they are doing on the system. Only people with an account can use the system. Only people with an account, for the system can use the system.

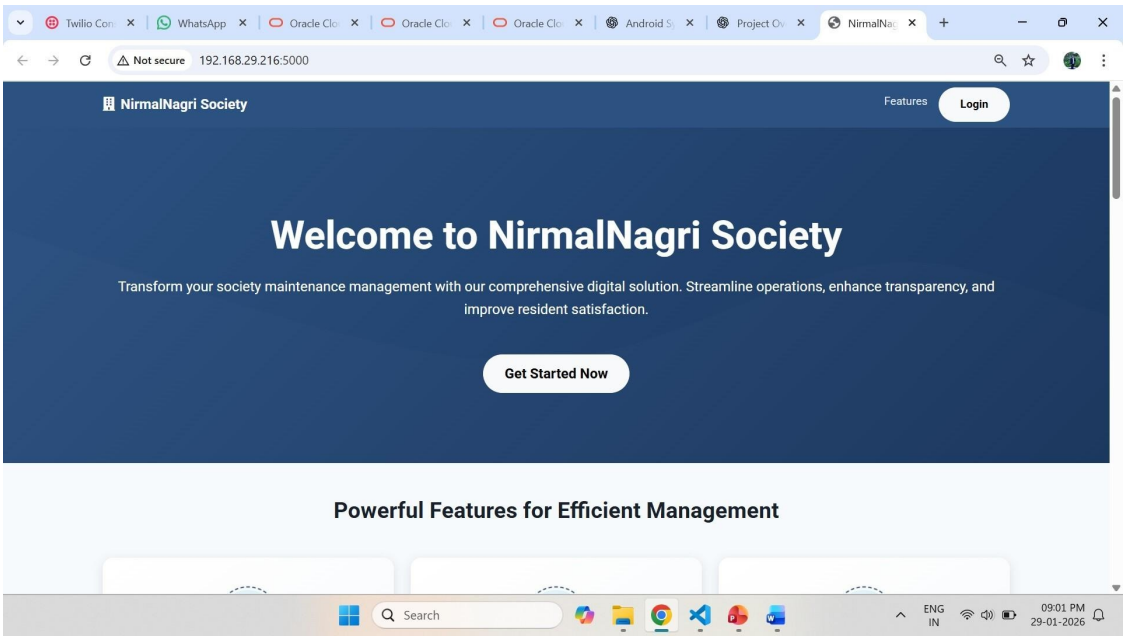

Figure 3: Home Page Interface

Website Name: NirmalNagri Society Header Section: The navigation menu has an option for Features. There is a Login button at the right corner. Main Banner: The large title says "Welcome to NirmalNagri Society". The subtitle reads: We are changing how society maintenance is managed with a solution. There is a "Get Started Now" button. The heading says: "Powerful Features, for Efficient Management". More features are listed below.

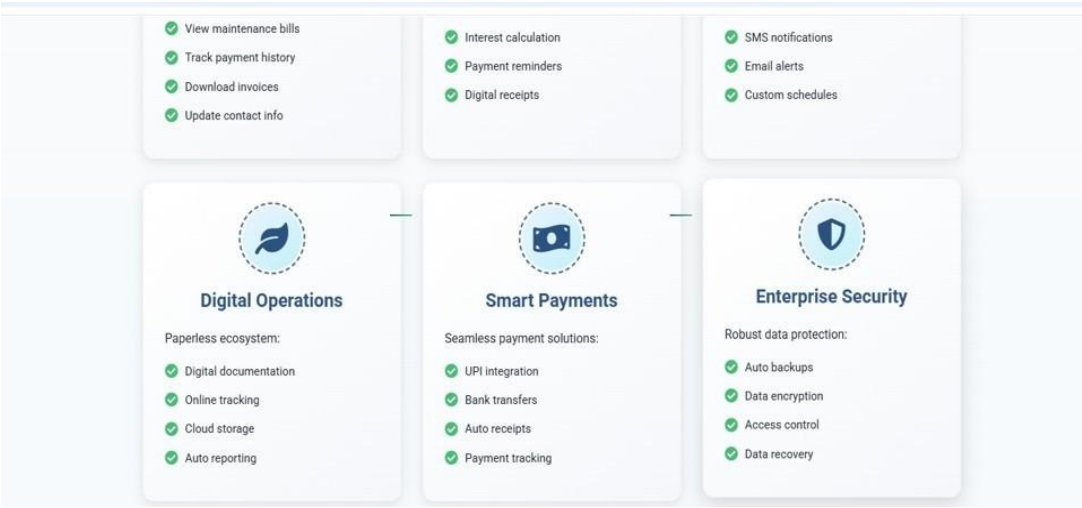

Figure 4: System Features Page

The Society Maintenance System has a page that shows what it can do. It is easy to look at and understand. This page talks about the Society Maintenance System and its main parts like Digital Operations, Smart Payments and Enterprise Security.

This page shows the things about the Society Maintenance System like not needing papers being able to track things online paying securely with UPI and bank transfers getting receipts automatically and keeping data safe with encryption and backups. The Society Maintenance System helps people see how it makes things easier keeps money transactions safe and makes managing the society simpler. The Society Maintenance System is good, at making things more efficient. The Society Maintenance System also helps with securing transactions and managing the society.

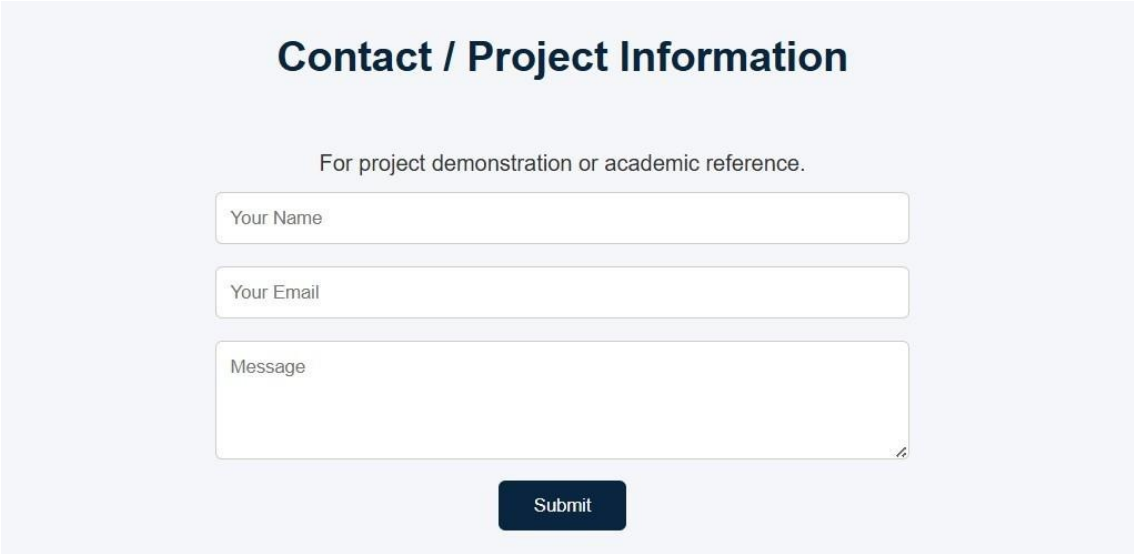

Fig : 5 Contact Us Page

The Contact Us Page is where you can talk to us, the people.This page helps you ask questions give feedback or requ, est help with the system.

- The **Contact Us Page** has a form that you can fill out with your name, email address what you want to talk about and your message.

The system saves your request so we can look at it and get back, to you.You will also see our email address, phone number and other ways to get in touch.The Contact Us page is easy to use and looks nice.There are icons and pictures that make it look professional and related to healthcare.You can use it on a computer or a phone.The Contact Us Page helps you get in touch with us directly so we can help you with any problems.The Healthcare Disease Detection System developers are here to help you through this page.The Contact Us Page makes it easy for you to get support.

Conclusion

The Society Maintenance System makes maintenance work easy. It does this by using computers to do the work. This way the Society Maintenance System is efficient and easy to understand. The Society Maintenance System also helps people talk to each other better. The Society Maintenance System reduces the amount of work that people have to do by hand. This is very helpful, for the Society Maintenance System users.The Society Maintenance System is really good at making maintenance work easy to do on computers. This makes maintenance operations work better and people can see what is going on. The Society Maintenance System also helps a lot by cutting down on work that people have to do by hand. It makes it easier for people to talk to each other. The Society Maintenance System is very useful, for the people who use it because it makes things simple and easy to understand.

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