

Apartments Maintenance Management System

Abstract of the project

The aim of this project is to develop an Apartment Maintenance Management System that can be used for communication purposes between the secretary and the residents. The motive of this project is to make the process of communication between the secretary and the residents instant and easier. The website provides the tenants with the provision to convey their grievances regarding any problem they might face and also provides them with the contact information for various essential services. The secretary can make general announcements which is conveyed to all the residents. The conversations between various users of the system is also noted for reference and record-maintaining purposes.

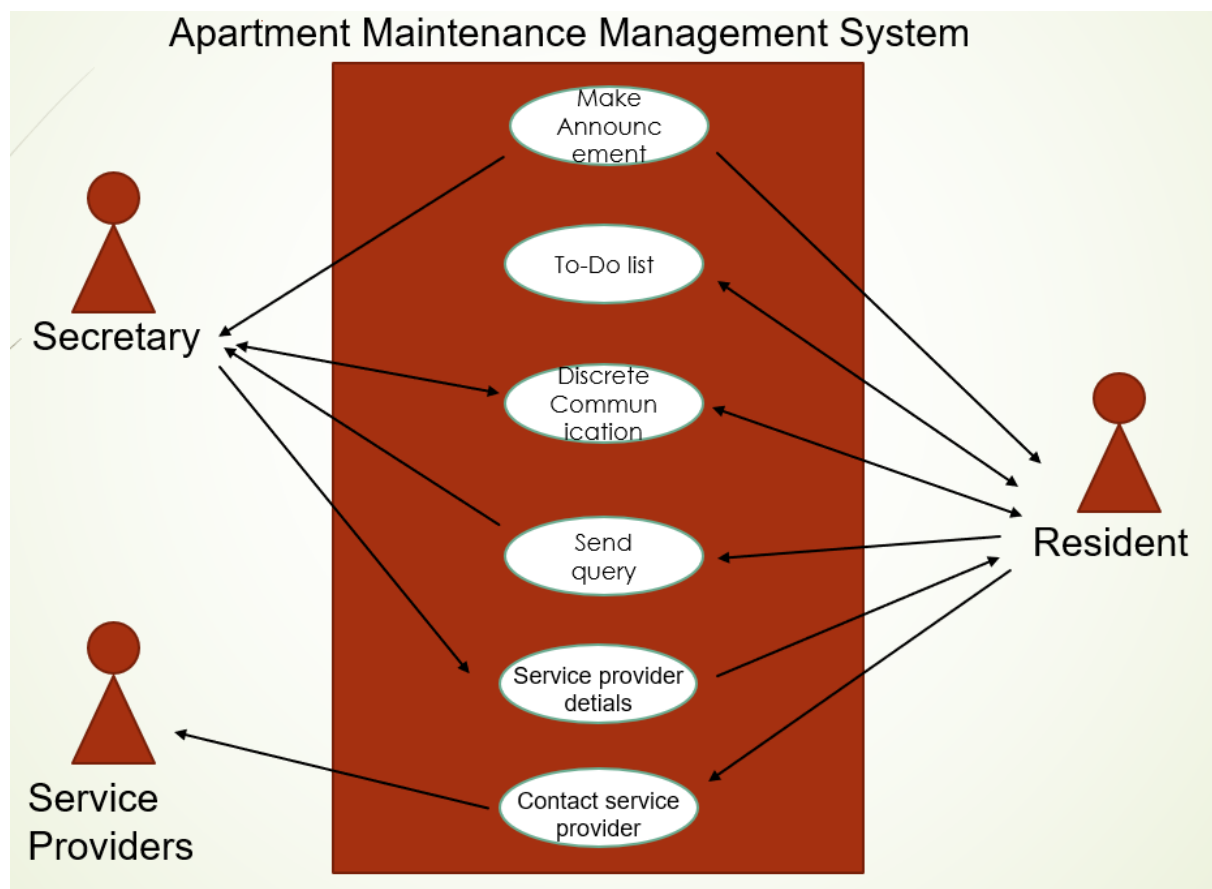
Basic Features:

- Making a common forum for announcements.
- Availability of all users' data in the website.
- Provision to communicate with the secretary and other tenants.
- Enabling a feature for the users to raise their queries.
- Making information about service providers' contact details available to the tenants.

Software requirements:

- HTML
- CSS
- SQLite
- Python
- Flask

Use case diagram



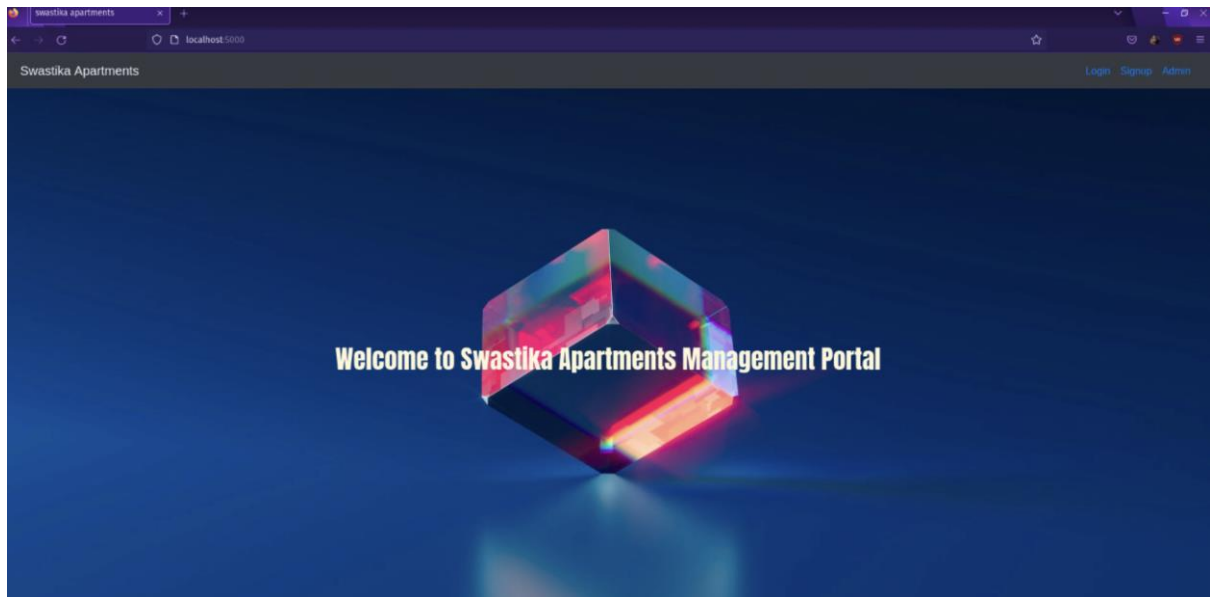
Requirements Specification of the project

Features	Requirement	Description of the Requirement
Home page	Needed a professional UI for the home page	Welcome message displayed on the screen with an attractive background
	Buttons to go to login/registration page	User who wants to register and create an account or login can choose from the available options.
Options	Login page	Login page for the user to login into his/her account.
	Registration page	Registration page for the user to enter his/her details and create an account in the website.

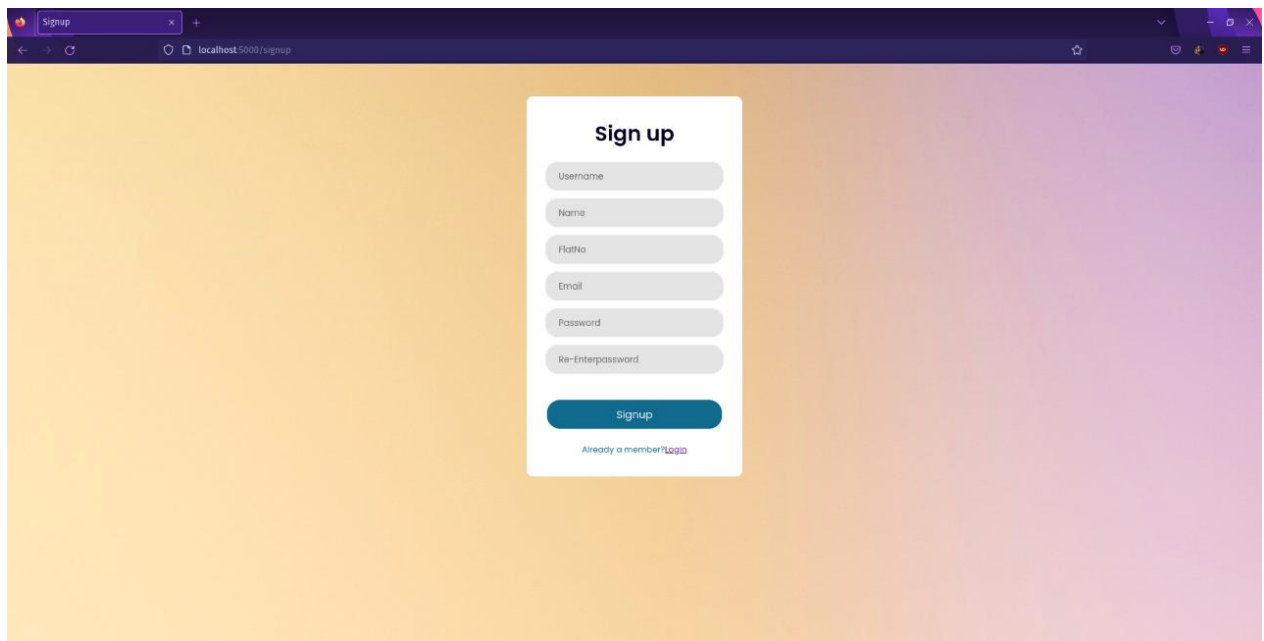
	Admin page	To access various functionalities that can be implemented by the secretary
Database	User login info	Store the login info of the user
	Essential service data	Provision to store and alter the essential service providers contact info by the admin
Security	User verification	Verification of user details by the admin
	Deny login upon wrong login credentials	Verify the entered details with those present in the database
User pages	Various pages to implement user functionalities	A main page with provision to post queries and to view the same, page to read announcements and a page to access contact info of the service providers
Admin pages	Various pages to implement admin functionalities	A main page for the admin with a welcome message. A page for the admin to make announcements, update and manage essential service providers info and a page to access messages sent to them.
Database	Announcement record	Table to record the announcements made by the admin
	Conversation record	Table to keep a record of the various conversation that happened between the users of the portal

Sample screenshots:

Main Page:



User signup page:



Signup

Username

Name

FlatNo

Email

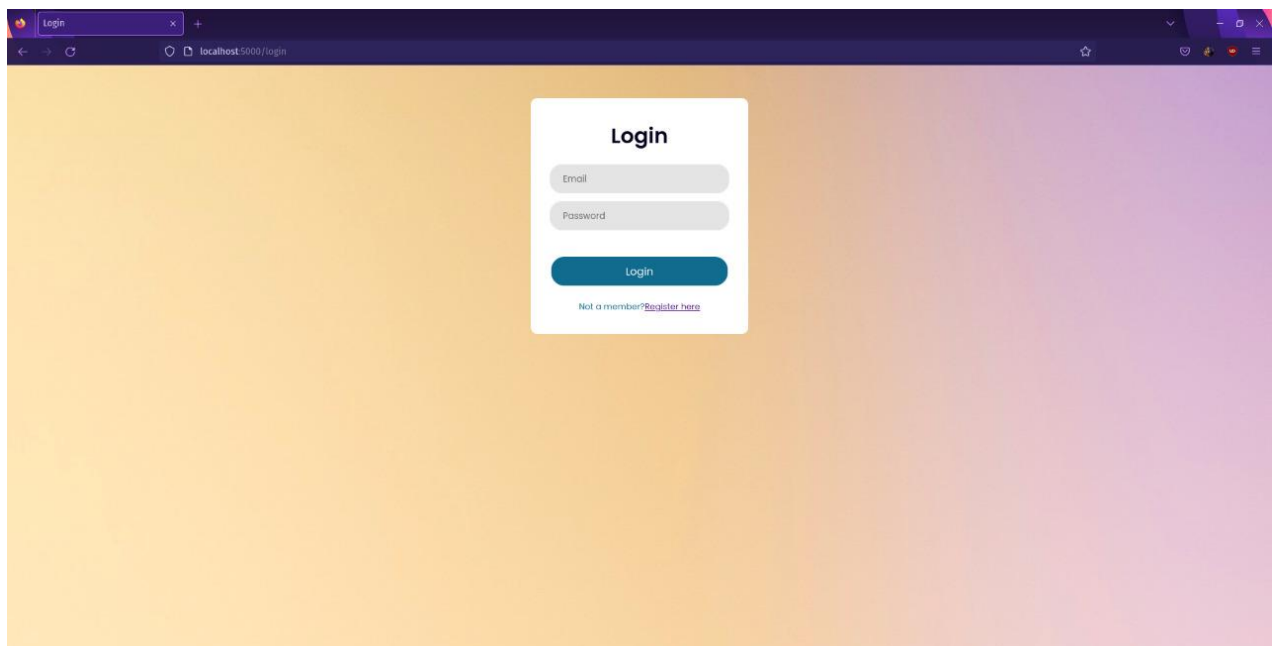
Password

Re-Enterpassword

Signup

[Already a member? Login](#)

User login page:



Login

Email

Password

Login

[Not a member? Register here](#)

User home page:

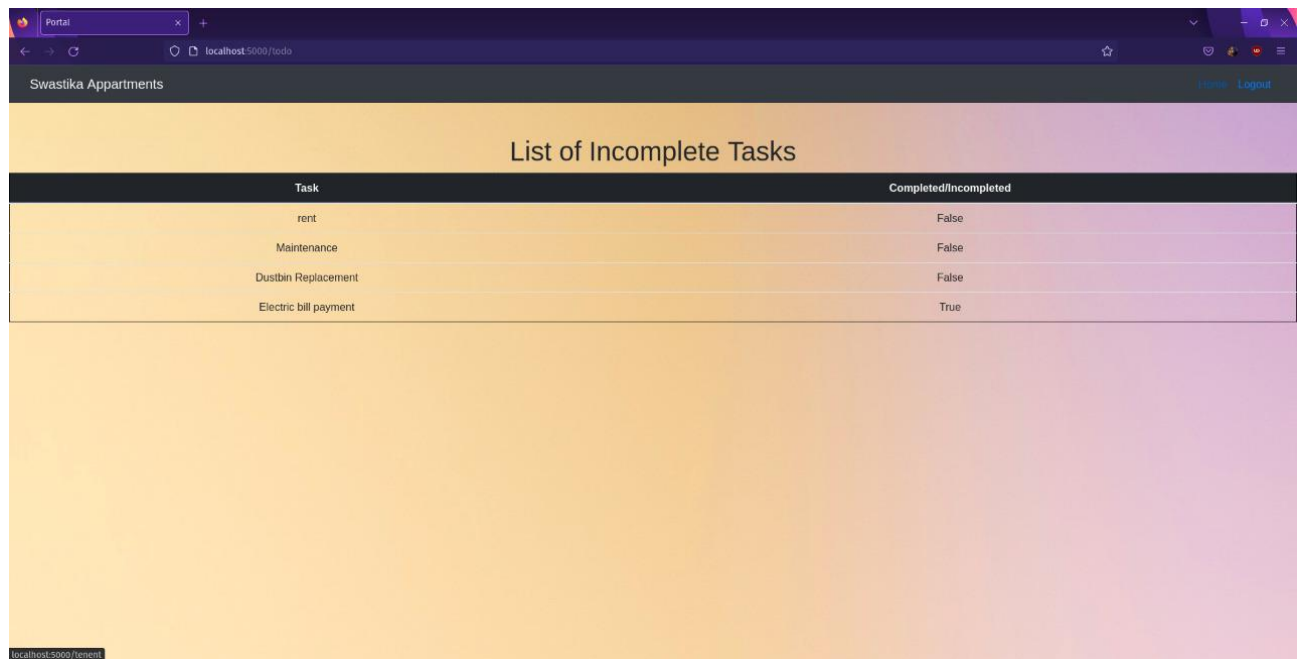
The screenshot shows a web browser window with the address bar displaying 'localhost:5000/tenant'. The page title is 'Swastika Apartments'. The main content area has a light blue background with a white box containing the following elements:

- Greeting: 'Hello, natarajan' followed by 'Flat No: q1'.
- Section Header: 'Post your Queries'.
- Form: A white box with a text input field labeled 'Enter your message here:', a 'Select image:' label with a 'Browse...' button and 'No file selected.' text, and a 'To:' label with a dropdown menu.
- Button: A blue 'Post Query' button at the bottom.

User to-do list:

The screenshot shows a web browser window with the address bar displaying 'localhost:5000/admin/todo/'. The page has a navigation bar with links: 'Admin', 'Home', 'User', 'Service', 'Announcement', 'todo', and 'To do'. The main content area has a light blue background with a white box containing the following elements:

- Section Header: 'Change status of task for any tenant.'.
- Form: A white box with a 'Select the email of the tenant' dropdown menu showing 'nati@gmail.com', and four checkboxes: 'Rent', 'Maintenance', 'Dustbin Replacement', and 'Electric Bill'.
- Button: A blue 'Change Status' button at the bottom.



User announcement access page:

Swastika Appartments			Home Logout
Announcements From Admin			
Id	Message	Date and Time	
1	hello	2022-11-23 11:07:20.322104	
2	sdfkglk	2022-11-23 11:23:24.482815	
3	lskfdjgkj	2022-11-23 11:28:39.363627	

User essential services contact info access page:

Swastika Appartments

[Home](#) [Logout](#)

Acquainted Service Providers For your Apartment









Id	Name	Occupation	Phone Number	Email
1	Kumar	Plumber	8653421475	kumarkp@gmail.com
2	Prabhu	Plumber	8865988417	prabhup@gmail.com
3	Senthil	Carpenter	7894561232	senthilcarp@gmail.co
4	Vivek	Painter	7319648252	vivek@gmail.com

Admin home page:

Admin	Home	User	Note	Service	Announcement
Welcome Admin!					









Admin page to access user info:

Admin	Home	User	Note	Service	Announcement
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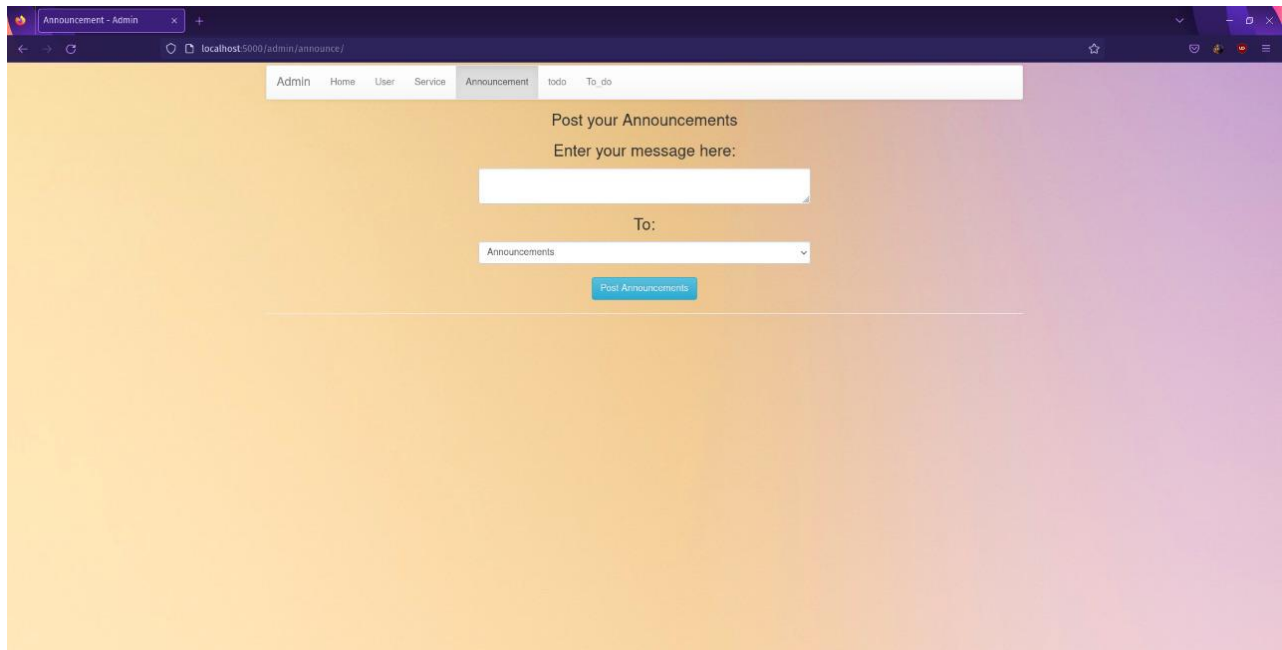
List (4)	Create	With selected▼				
<input type="checkbox"/>		Email	Password	Name	Username	Apno
<input type="checkbox"/>	 	admin@gmail.com	sha256\$Lhp6Pxr39BR1znTS\$aebdffe669de7e239765ccdc1401cf9be7e19aaeddd9b66b249b93bc0e8aa619	admin	admin	f1
<input type="checkbox"/>	 	nat@gmail.com	sha256\$CMapUToVz3uA7b1H\$3684eef1c515c08c8ba55239d426aee03111d0353a8369c46a618bf57c127028	nat	nat	f2
<input type="checkbox"/>	 	prasanna@gmail.com	sha256\$UKippdwMFTqqjm6H\$2b11df11d7b675dae46f55c141b107fab96c415542e9064b682ee5b585cd0397	prasanna	pro	f2
<input type="checkbox"/>	 	mugi@gmail.com	sha256\$Nda1plwxFVCZdSV\$f8dc63f70b41c09b8c71baf45ddcb58947f018904e9c7672eb9b215fd7a71ed7	mughilan	mugi	f4

Admin page to manage essential services contact info:

Admin	Home	User	Note	Service	Announcement
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List (4)	Create	With selected▼			
<input type="checkbox"/>		Name	Occupation	Phno	Email
<input type="checkbox"/>	 	Kumar	Plumber	8653421475	kumarkp@gmail.com
<input type="checkbox"/>	 	Prabhu	Plumber	8865988417	prabhup@gmail.com
<input type="checkbox"/>	 	Senthil	Carpenter	7894561232	senthilcarp@gmail.co
<input type="checkbox"/>	 	Vivek	Painter	7319648252	vivek@gmail.com

Admin announcement posting page:



The screenshot shows a web browser window with the address bar displaying 'localhost:5000/admin/announce/'. The browser tab is titled 'Announcement - Admin'. The page has a navigation bar with links: Admin, Home, User, Service, Announcement (highlighted), todo, and To do. The main content area has a light orange background. It contains the text 'Post your Announcements' and 'Enter your message here:' followed by a text input field. Below this is a 'To:' label and a dropdown menu currently showing 'Announcements'. At the bottom of the form is a blue button labeled 'Post Announcements'.

Announcement - Admin

localhost:5000/admin/announce/

Admin Home User Service Announcement todo To do

Post your Announcements

Enter your message here:

To:

Announcements

Post Announcements

Conclusion

The project was undertaken with the aim of making the process of communication between the apartment secretary and the tenants easier and to make access to various services like plumbing and carpentry readily available. The requirements specified were met and an operational prototype of the Apartment Maintenance Management was developed successfully.

References

- www.geeksforgeeks.com
- www.tutorialspoints.com
- www.stackoverflow.com
- www.youtube.com