

Document Submission

System name: Smart Complaint Management System

In Compose Camp App Submission Guidelines there is three options for choose application areas in that I have choose 1st option which is based on college or university application.

➤ Problem Statement

Designing a system for the Municipal bodies and provide a mobile platform for citizens to lodge complaints about a variety of civic services, it's a smartly managing complaints (relating to municipal services).

➤ Proposed Solution with screenshots

This application is related to the SMC, in that basic complaints are resolve that citizen can post or register complaint.

We can say it's a smart because there is no manual process, just citizen have to upload the image of complaint problem and complaint register successfully.

Screenshots:

➤ Splash Screen

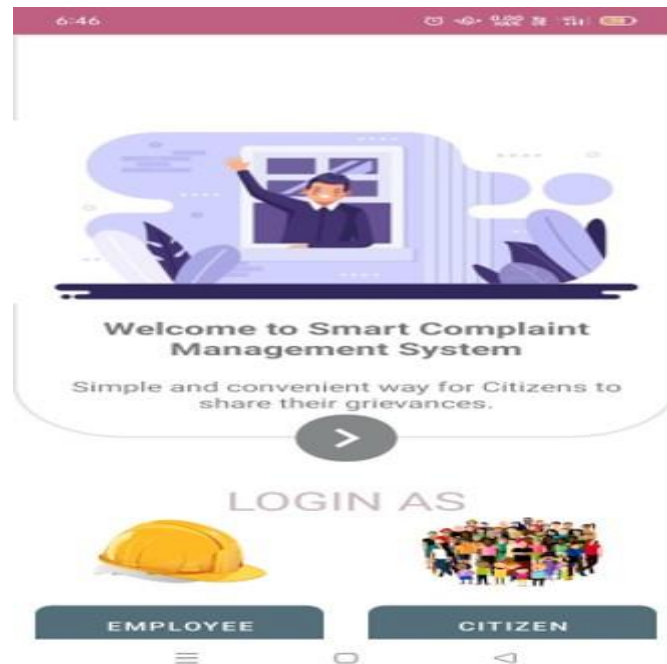


Description:

It's the first screen that the user sees when opening the application, and it stays visible while the application or actual screen is being loaded.

Document Submission

➤ Home Page



Description:

It's the home screen that the user sees after the splash screen, here they can select the user type and be propelled accordingly.

➤ Citizen Signup

A mobile app screenshot of the citizen signup form. At the top, a status bar shows the time 6:52. Below is a small illustration of a city skyline. The form consists of several input fields: "Username" with the value "bhumiparekh", "Email" with the value "bhumiparekh2808@gmail.com" and a character count of 11/15, "First Name" with the value "Bhumi", "Last Name" with the value "Parekh", "Password" with masked characters and a visibility toggle icon, and "Confirm Password" with masked characters and a character count of 9/15. A large "SIGN UP" button is at the bottom. At the very bottom are three navigation icons: a hamburger menu, a home icon, and a back arrow.

Description:

The screen consists of the Username, Email, First Name, Last Name, Password, and Confirm Password fields that have to be filled by the citizen to register himself. If registration is successful the citizen is redirected to the login page.

Document Submission

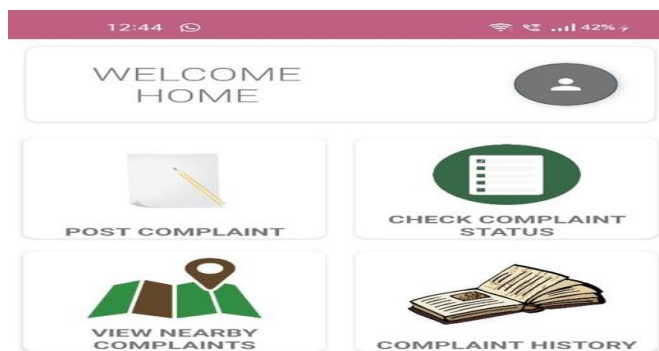
➤ Citizen Login



Description:

The screen shows the username and password field to authenticate the citizen and if the credentials are valid the citizen is propelled to the citizen homepage.

➤ Citizen Home Page



Description:

The screen shows the functionalities that the citizen can avail of. This is the home page for a citizen from where they can navigate to screens for posting complaints, checking complaint status, viewing nearby complaints, and viewing complaint history.

Document Submission

➤ Complaint Form

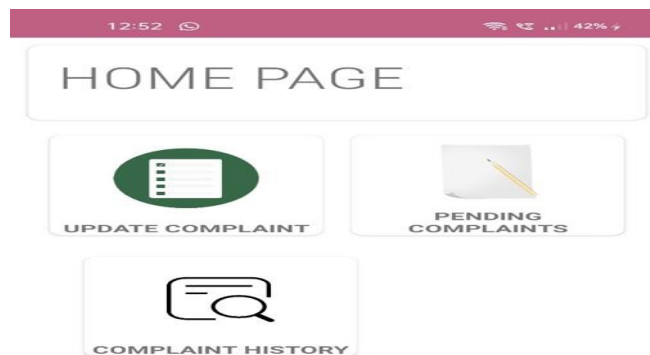


The screenshot shows a mobile application interface for submitting a complaint. At the top, a status bar displays the time 12:47, signal strength, and 42% battery. The title 'Complaint Form' is centered, followed by the instruction 'Add Photo Of Scene Relevant to the Complaint'. Below this is a photo upload area showing a picture of a pothole and a camera icon. A text field labeled 'Description' contains the text 'pothole near janta nagar society.' with a character count of 33/100. Below the text field is a category selection dropdown menu labeled 'Select Category' with 'Roads and Footpaths' selected. At the bottom is a dark blue 'REGISTER' button.

Description:

The screen above is where a citizen can post a complaint in the application, which consists of a Description field and Category selection field, and an Image Field.

➤ Employee Home Page



The screenshot shows a mobile application interface for an employee's home page. At the top, a status bar displays the time 12:52, signal strength, and 42% battery. The title 'HOME PAGE' is centered. Below the title are three buttons: 'UPDATE COMPLAINT' with a green circular icon containing a document, 'PENDING COMPLAINTS' with a yellow circular icon containing a document and a pencil, and 'COMPLAINT HISTORY' with a blue circular icon containing a magnifying glass over a document.

Description:

The screen shows the functionalities the employee can avail of. This is the home page of an employee from where the employee can update the complaint, view the complaint history, and check how many complaints are pending.

Document Submission

➤ There are three users that uses the system or application:

Citizen: Citizen can post a complaint using just capture image and select complaint category after that click on register button the unique id is generated and based on that they can view their complaint status (complaint is resolve or not, or still pending.)

Employee: employees can update complaint status like: complaint resolve, pending.

Admin: Admin manage all things: like they can view reports of complaint is how many resolves, pending etc.

➤ Functionality & Concepts used

Functionality:

- **Post complains:** allows citizens to take a photo through the mobile's camera, verify complaint details and finally register the complaint.
- **Check complaint status:** allows citizens to check the status of their complaint/s using the complaint ID.
- **View nearby complaints:** a screen allowing citizens to view complaints in their vicinity.
- **Update complaint status:** Employees can update status (completed, extended days to resolve, etc.) on the complaints assigned to them.
- **Biometric authentication:** Employing biometric(fingerprint) authentication for the mobile application as a faster way for the user to authenticate himself/herself and promptly access features the former wanted to use.
- **Employee Registration:** Employees can register themselves in the system by filling up the registration form and waiting for approval from the admin.

➤ To solve above functionalities, I have used following concepts:

Name	
Project management and planning	Jira, GitHub
Versioning Control	Git
Testing tools and frameworks	Katalon, JMeter
Databases/Data storages	Sqlite3
Programming languages	Python, kotlin
Frameworks	Django
IDE	Android Studio, VS code

Application Link & Future Scope

<http://smartcomplaintmanagementsystem.herokuapp.com/smc/analytics/>

➤ Future Scope:

Document Submission

- This system is limited to Surat city only but in future its available for all over India and make it as a smart that everyone can easily use and understandable.
- This system is currently work on just few categories like roads and footpath, Garbage and Collections, Streetlights but in future this system support all SMC category complaints based on that citizen can post complaint.
- This system is based on image classification but currently it classifies only potholes but in future updating is done with the help of machine learning concepts.