

SOCIAL COMPLENTS

Mr.Sandeep Jadhav, Sayali Bhadane, Rina Kumbhar, Kalyani Pawar, Snehal Pawar

1. Professor, Computer engineering, Sanghavi college of engineering nashik, Maharashtra, India
2. B.E Computer engineering Sanghavi College of engineering nashik, Maharashtra, India
3. B.E Computer engineering Sanghavi College of engineering nashik, Maharashtra, India
4. B.E Computer engineering Sanghavi College of engineering nashik, Maharashtra, India
5. B.E Computer engineering Sanghavi College of engineering nashik, Maharashtra, India

ABSTRACT

Complaint registrations for government bodies i.e.: EB, PWD, etc. are offline. The seriousness of the problem is often not known by offline means. Even reporting some of the difficulties to Government departments have ended up in imagination based the manual letter writing at specific timing. A mechanism to accept complaints from citizens 24 × 7 would be the expectation from both the citizens and the government bodies. With number of people using mobile phones is increasing, it has become a need for users to provide on their mobiles, all facilities one is been utilizing on the internet. The proposed system enables and assists citizens to lodge compliant and seek redressed through their mobile phone. It is based on android UI interface system and it emulates the functionality of the web portal based complaint filing system. This application allows the user to complaint against different departments and they can attach a image as a proof, in case of complaining about a instance on that time period itself will helps the user as to capture image from their application itself and allow to complaint.

Keywords: Android, Global Positioning System (GPS), Mobile internet

INTRODUCTION

Android is a software stack for mobile devices that includes an operating system, middleware and key applications. Android is a software platform and operating system for mobile devices based on the Linux operating system and developed by Google and the Open Handset Alliance. It allows developers to write managed code in a Java-like language that utilizes Google-developed Java libraries, but does not support programs developed in native code. The problem in the existing system is it is not possible to visit the particular office for complaining, and it is not possible to provide proof for complain the particular problem in case of complaints forward threu mail also not sufficient enough as to initiate every department. And there is no possibility to find the fake complaints and take action on them. The proposed system based on android UI interface system emulates the functionality of the web portal based complaint filing system.

The users use the mobile phone and do not need to access the web portal interface directly to file their complaint. The user downloads an application onto his mobile phone. The user runs the application on his phone to get a welcome screen. The system allows the user to compose his complaint in 160 characters. In this project the user can take a snap shot of the particular problem i.e.: water leakage, power cable hanging around, tree fall, unsocial activity etc. The application will augment the current position through Global Positioning System (GPS) where the picture is taken. The above augmented picture is sent to the concerned authority. The priority of the complaint would be raised if the numbers of them are considerably more in an area. The map is drawn; here it is colored with red, yellow or green flags respectively ward wise, depending upon the no. of complaints received in an area. Statistical information is maintained such as the no. of complaints received ward wise, no. of them solved, a graph to provide. The pictures are also displayed to the general public on a discussion forum, where they can post their comments. Moreover public can know the status of their complaints. The status will be intimated through the email-id, which the user specify in the complaint page. This application is basically created to help the people to solve the problems which they face in their day-o-day life. It is user friendly application. It takes less time to post their complaints. The main idea is to provide essential, cheap and easy complaint registration redressal system.

OBJECTIVE

The objective of voice of citizen application is to allow citizens to complain regarding the day to day problems like street light, road etc, to the panchayath. Using this system the citizen can just complain wherever the problem is instead of going to panchayath and registering complaint. The panchayath authorities can directly login and access the complaints from citizen and update status. The application also includes various features such as while

registering complaint, the citizen can take a picture and upload location of the place where there is a problem instead of uploading from the gallery.

METHODOLOGY

Android is an operating system and programming platform developed by Google for smartphones and other mobile devices (such as tablets). It can run on many different devices from many different manufacturers. Android includes a software development kit for writing original code and assembling software modules to create apps for Android users. It also provides a marketplace to distribute apps. Altogether, Android represents an ecosystem for mobile apps. Android provides a touch-screen user interface (UI) for interacting with apps. In addition to the keyboard, there's a customizable virtual keyboard for text input. Android can also play multimedia content such as music, animation, and video. Android is designed to provide immediate response to user input. Besides a fluid touch interface, the vibration capabilities of an Android device can provide haptic feedback. The Android platform, based on the Linux kernel, is designed primarily for touch screen mobile devices such as smartphones and tablets. Since Android devices are usually battery powered, Android is designed to manage processes to keep power consumption at a minimum, providing longer battery use.

The SDK includes a comprehensive set of development tools including a debugger, software libraries of prewritten code, a device emulator, documentation, sample code, and tutorials. To develop apps using the SDK, we use the Java programming language for developing the app and Extensible Markup Language (XML) files for describing data resources. By writing the code in Java and creating a single app binary, we have an app that can run on both phone and tablet form factors. It is possible to declare the UI in lightweight sets of XML resources, one set for parts of the UI that are common to all form factors and other sets for features specific to phones or tablets. At runtime, Android applies the correct resource sets based on its screen size, density, locale, and so on. To help developer develop the apps efficiently, Google offers a full Java Integrated Development Environment (IDE) called Android Studio, with advanced features for developing, debugging, and packaging Android apps.

A. Android Stack

Android provides a rich development architecture. There is no need to know much about the components of this architecture, but it is useful to know what is available in the system for the app to use.

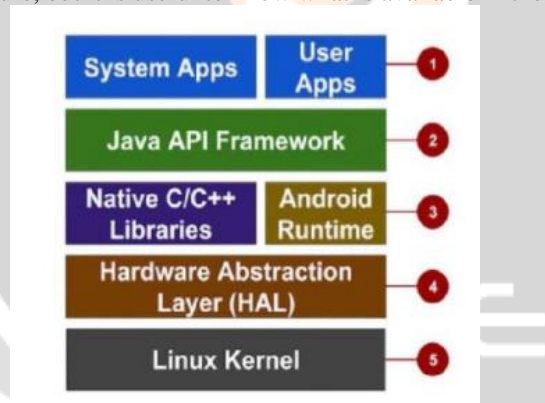


Fig. 1. Overview of Android Stack

1) Apps: User developed apps live at this level, along with core system apps for Email, SMS messaging, Calendars, Internet browsing, or Contacts.

2) Java API Framework: All features of Android are available to developers through application programming interfaces (APIs) written in the Java language.

3) Libraries and Android Runtime: Each app runs in its own process and with its own instance of the Android Runtime, which enables multiple virtual machines on low memory devices. Many core Android system components and services are built from native code that requires native libraries written in C and C++. These native libraries are available to apps through the Java API framework.

4) HAL: The HAL consists of multiple library modules, each of which implements an interface for a specific type of hardware component, such as the camera or bluetooth module. The layer provides a standard interface that exposes devices hardware capabilities to the higher-level Java API framework.

5) Linux Kernel: The foundation of the Android platform is the Linux kernel. The above layers rely on the Linux kernel for underlying functionalities such as threading and low-level memory management

B. Development process

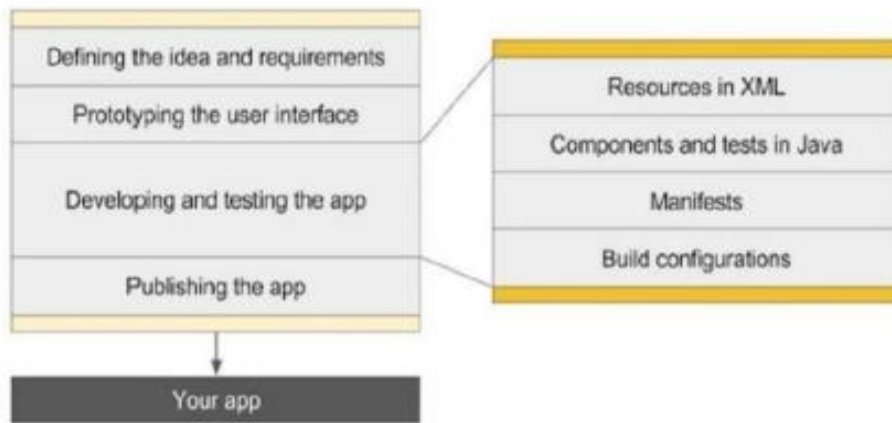


Fig. 2. App Development Process

• Developing and testing the app: An app consists of one or more activities. For each activity we can use Android Studio to do the following, in no particular order:

- i. Create the layout: Place UI elements on the screen in a layout, and assign string resources and menu items, using the Extensible Markup Language (XML).
 - ii. Write the Java code: Create source code for components and tests, and use testing and debugging tools.
 - iii. Register the activity: Declare the activity in the manifest file.
- Define the build: Use the default build configuration or create custom builds for different versions of the app

• Publishing the app: Assemble the final APK (package file) and distribute it through channels such as the Google Play.

C. Workflow

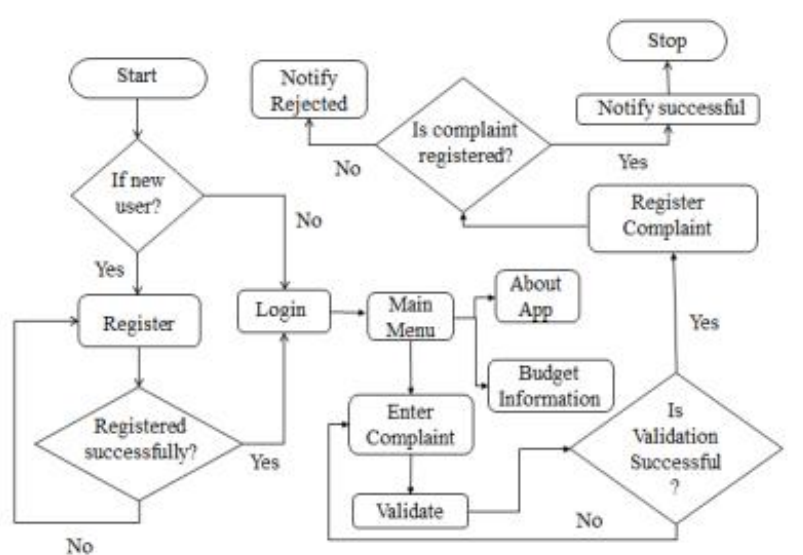


Fig. 3. Flowchart

Fig 3. shows the flow chart for voice of citizen application. In this application, if user is not registered, then user has to register. The register is successful, then user can login to through the login button. Then enter the complaint information and validate the complaint. If complaint is validated successfully, then register the complaint. If the complaint is registered successfully, then user will get the notification that successfully registered. Otherwise, rejected.

D. Architectural Specification

Fig 4 shows the architecture for the voice of citizen application. In this architecture we open the application at the beginning.

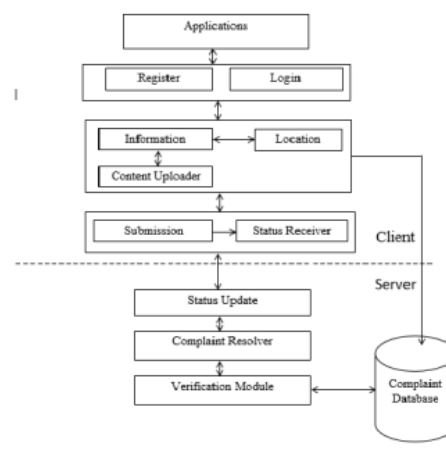


Fig. 4 . Architecture of the app

After opening the application login page will be displayed in which the citizen can login if already registered, if not, should register in order to raise complaint about the issue. After logging in, the citizen should take the picture which will be related to water-leakage, sewage, road or street-light maintenance.

The picture should be uploaded with the information related to that problem and it will be stored in the complaint database. All the uploading things will be done in the client side. In server side, the complaint that is stored in the database is verified by the grampanchayat authorities to take further actions to resolve the problem. After resolving the problem by the panchayat, the status of complaint will be updated to the client.

RESULT AND DISCUSSION

The application helps people to raise their voice against the difficulties faced by them in day -to- day life. Whenever an issue is faced by person living in their area, they register the complaint through the app by providing the necessary information. The user is provided with an option to upload the photo of issue faced by them in their locality and also get the location from the GPS module. The complaint is then forwarded to higher authorities of municipality or village panchayat. Once the higher authorities know about an issue, they send the information to concerned people for further action. With the help of the app, the complaint status will be tracked by the registered people.

The features of the proposed solution are:

- i. The proposed mobile app automatically specifies the exact location and there is no need for user involvement.
- ii. The photos picked from the gallery or google photos could not be uploaded in the application because its image uploading feature enables the user to send only the snap shot which was captured on the spot

CONCLUSION

These days technologies grow enormously. By this rapid development, lots of good things could be sowed which in return yields positive changes to the society one such try is this application which enables in destroying the evil things and making minor positives impacts on society. It is not possible for anyone to change the society in a day or by using these kinds of mobile applications, all the mischiefs or illegal activities could only be solved by one's own inner self.

Each and every person in the society should analyze the things they are doing, they should just get into it and has to properly analyze whether the things they do are right or wrong. Even the law and order need to be changed to a lot that's because only when punishments become sever the things happening against law could be controlled. Thus, this proposed application helps the people to control such things to some extent.

REFERENCES

- [1] Bhuvana Sekar and Jiang B.Liu. "Location Based Mobile Apps Development on Android Platform". Proc of IEEE. 2014. pp 2148-2153.
- [2] Vishesh K. Kandhari and Keertika D. Mohinani. "GPS based Complaint Redressal System". Proc of IEEE. 2014. pp 51-56.
- [3] Vanathi.P, Abakan, Sivaranjani.E, Suruthipriyanga.R and Sailaja.L. "ANDROID APPLICATION FOR COMPLAINING AGAINST THE SOCIAL ISSUES". Proc of IEEE. 2017.
- [4] Zhilong Yang, Yong Wang, Yongquan Yang and Zhiqiang Wei. "Research and Design of a Real-time Interactive Application Development Model Based on the Android Platform". Proc of IEEE. 2013. pp 132-135.
- [5] Siti Umami Masruroh, Ilham Saputra, Nurhayati. "Performance Evaluation of Instant Messenger in Android Operating System and iPhone Operating System". Proc of IEEE. 2016. pp 1-6.
- [6] Google Developer Training, "Android Developer Fundamentals Course Concept Reference", Google Developer Training Team, 2017.
- [7] Erik Hellman, "Android Programming – Pushing the Limits", 1st Edition, Wiley India Pvt Ltd, 2014.
- [8] Dawn Griffiths and David Griffiths, "Head First Android Development", 1st Edition, O'Reilly SPD Publishers, 2015.
- [9] J F DiMarzio, "Beginning Android Programming with Android Studio", 4th Edition, Wiley India Pvt Ltd, 2016. ISBN-13: 978-8126565580. .