iJRASET
International Journal For Research in Applied Science and Engineering Technology

# INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

**Volume:** 9 **Issue:** VI **Month of publication:** June 2021

**DOI:** https://doi.org/10.22214/ijraset.2021.35605

www.ijraset.com

Call: 08813907089 | E-mail ID: ijraset@gmail.com

International Journal for Research in Applied Science & Engineering Technology (IJRASET)
*ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.429*
*Volume 9 Issue VI Jun 2021- Available at www.ijraset.com*

# Digital Solution for Combat Bribery and Justice Restoration System - Android Application

A. Vamsi Sairam[1], B. Sai Santhosh[2], K. Naveen[3], S. Sateesh Kumar[4]
[1, 2, 3, 4]*B.Tech Student,* [5]*Guide: Associate Professor, Department of Information Technology, Anil Neerukonda Institute of Technology & Sciences, Visakhapatnam, Andhra Pradesh, India*

***Abstract:*** ***The purpose of this project application named "BRIBERY VISION" is a step towards Anti-corruption and to make aware a citizen to complaint against any combat bribery issue faced. This android application based solution contains a feature to make a complaint against corruption. It has FIREBASE OTP authentication facility to authenticate the end user. On successful authentication, complaints can be taken and recorded on database(MYSQL),an unique complaint id is given for future references for complaint, if any multimedia proofs which are required to submit as proofs can be uploaded on the displaying intent, to store these FIREBASE STORAGE facility is used. At the same time administration department also had an application in which same technology stack is implemented and whole design is done through ANDROID STUDIO.***
***Keywords: CORRUPTION; BRIBERY VISION; FIREBASE; OTP; MYSQL; FIRE BASE STORAGE; ANDROID STUDIO***

## I. INTRODUCTION

### A. *Objectives*

The main objective of the project was to create an online portal, where one could post the complaint about government or any other official who possibly asked for bribery by simply making a login through mobile and otp.
Thereafter all details of bribe should be given and proofs of bribe issue can be uploaded if any.Thereafter all further communication and process done through status section in application.

### B. *Motivation*

*1) Law Enforcement*

*a)* According to the Indian Constitution corruption is an illegal thing and under the Indian Penal Code 1860.
*b)* According to IPC section 1988 the prevention of corruption practice should be initialized.
2) *Social Issues:* Examining the bribe practicing scenarios in the social life leads to unexpected problems in daily life of an average earning citizen. Over 80-90% of people are habituated to give corruption, so we need to bring a change in the society by helping them with this platform.

### C. *System Overview*

This BRIBERY VISION application can be decomposed into 3 sections namely: OTP enabled authentication and complaint data, proofs section.
*1) OTP Authentication:* User will be verified through his personal identity called name, mobile number through OTP service provided by firebase authentication schema.
*2) Complaint Data:* All the required data demanded on application should be provided by end user.
*3) Proofs Section:* All multimedia proofs can be uploaded if any and this technology stack is implemented using firebase Storage service.

## II. LITERATURE SURVEY

### A. *EOC Application*

This Eye On Corruption(EOC) application is developed in ACCRA city of GHANA country in AFRICA.It is an android application to identify corruption practices by that country,s corruption regulatory teams. It is the simple and user friendly application to record corruption complaints. Data security technique they are using is encryption.

©IJRASET: All Rights are Reserved

*ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.429*
*Volume 9 Issue VI Jun 2021- Available at www.ijraset.com*

*B. AP Spandhana Portal*

Andhra Pradesh government in India is using AP SPANDHANA to record any issues including corruption. A citizen can complaint in that portal and administration will look into that and actions may be taken accordingly.

Inspiring and analyzing all technical and dataflow from the above mentioned portals EOC and AP SPANDHANA. We make BRIBERY VISION application to record complaints on bribery issues by introducing new unique features from above two(referring to 2.1,2.2) implementations, and the uniqueness is end user can see his status of complaint after complaining in our application. This leads to the implementation of RTI(Right to Information) act 2005 which ensures a citizen to ask information to Government. And next thing is user's personal information will not be revealed at any cost. Using of high level data encryption technique defines data security in application over Internet.

## III. METHODOLOGY

The development system is a android application where users can file a complaint and get their issue resolved. The application will be developed using XML,Android Studio, Java on the front-end and Mysql, Firebase on the back-end. It will allow users to file a complaint using their details. The details of the user will be securely encrypted end-to-end using Caesar-Cipher algorithm.

The administrator of the application will be able to view district wise complaints and can enter the complaint status, download proofs from the database with specific cid of a suer. Users will be able to see their complaint status using the status section mentioned on the application.

## IV. PROBLEM SOLUTION AND DESIGN

1) *Authentication Section:* In this section the user authentication will be processed by capturing users name and mobile number, after entry of above credentials OTP sent to the entered mobile then enter that OTP and click on proceed button given below and the technology stack used here is the google's FIREBASE AUTHENTICATION schema in which firebase in built methods and classes will be called and the otp sending responsibility is with firebase.
2) *Complaint Registration Section:* In this user has to enter the valid details asked there in the display and by clicking on submit button it will validate the details by detecting repeating same characters more than 3 consequently and retaining the fake history of complaints and previous active complaints of that particular user and then further processing will be done.
3) *Data Security Section:* To secure the data entered by user it will be converted to encrypt format using CEASER CIPHER, an encryption algorithm and then it will be stored in particular database(MYSQL).And while decrypting at admin side or user side then decryption of data is done using the same algorithm. This ensures data security. So that attackers cannot understand the data transmitting.

4) *Data Base Implementation*

a) *MYSQL:* Mysql is using to store the text type of data and it will be stored in form of tables. Data inserted will be arranged in rows and columns in the table so that retrieval, updation and insertion can be done by writing and executing queries.
b) *FIREBASE:* Firebase is using to store the multimedia data of the application which will be processed using firebase storage facility. So the multimedia data processing operations will be done using this database.

5) *Complaint Tracking Section:* This tracking feature is used to know the status of complaint registered by the user.User can track it through using their credentials as complaint id and aadhar number while registering. So real time actions taken by admin can be seen in the status feature of application called "BRIBERY VISION".

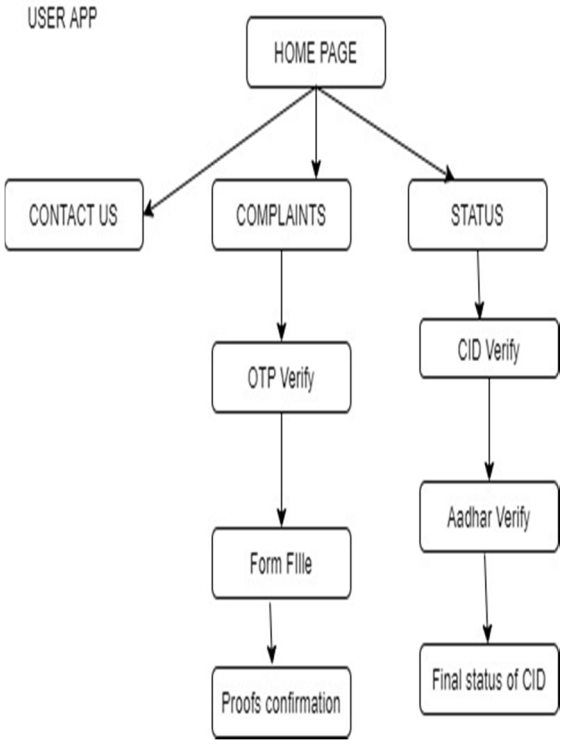
6) *Flow Chart*

a) *User App*

First, the users visit the home page of the app.
The user will verify OTP and file a complaint by selecting desired details.
Then the user visits the page having complaint form filling.
Then the user has to upload proofs and confirm the proofs.
Aftet that, the cid is generated for the user and user can check the status of the complaint in the status section.

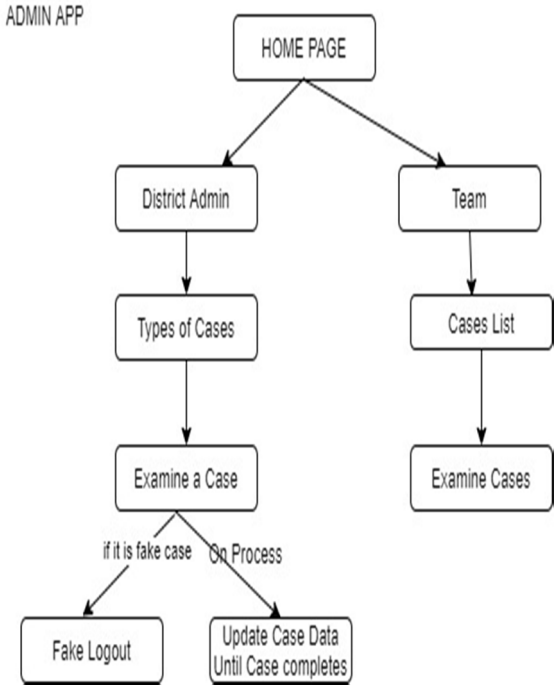
©IJRASET: All Rights are Reserved

*ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.429*
*Volume 9 Issue VI Jun 2021- Available at www.ijraset.com*




*b) Admin App*

First, the admin visits the home page of the application.
The district wise admins can able to login to their districts and can view the complaints respectively.
The admin should see the cases list which displays all cid's of the cases.
Now admin can examine the case and mark it as fake or to process the case,
If it is fake it will automatically logout of application. Otherwise the admin must update the case data until it closes.

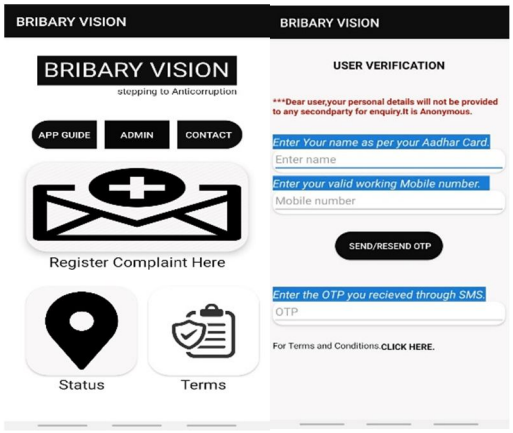



©IJRASET: All Rights are Reserved

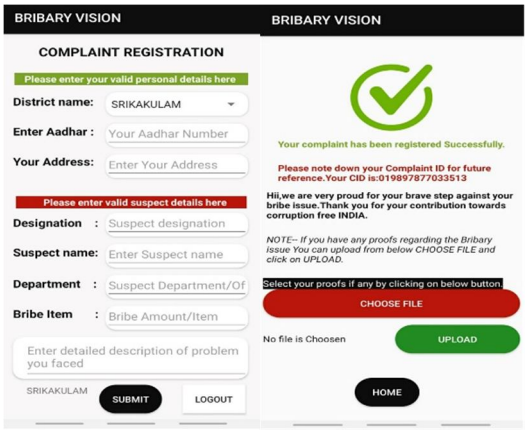
## V. RESULTS

### *A. User side Application*

The presentation of user app's home page.



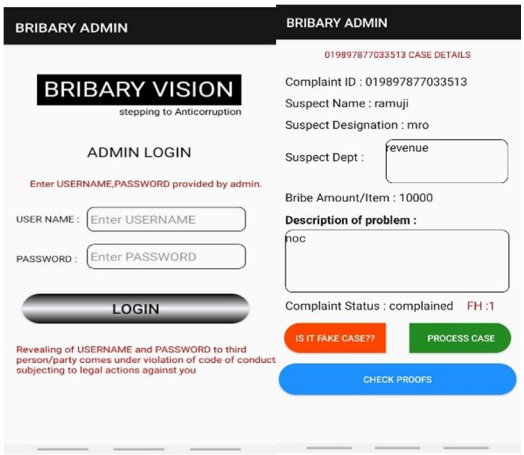

Then to complain a case go to register provide authentication details and after get authenticated.Provide the issue details as demanded.




If any proofs regarding the bribe practice can be uploaded from choose file and upload buttons.

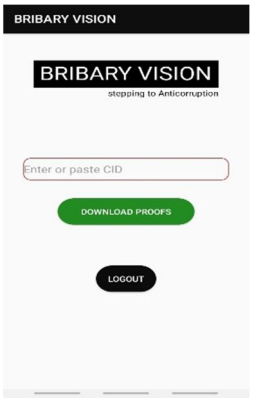
### *B. Admin side Application*

Admin can see the complaints by using credentials of admin.




©IJRASET: All Rights are Reserved

Admin can also examine the proofs submitted by victim.




## VI. CONSLUSION

By this application normal users can report the issue of corruption to the higher authorities and make complaints against the officers belongs to the respective departments and we can achieve our goal to reduce the bribes as much as possible.

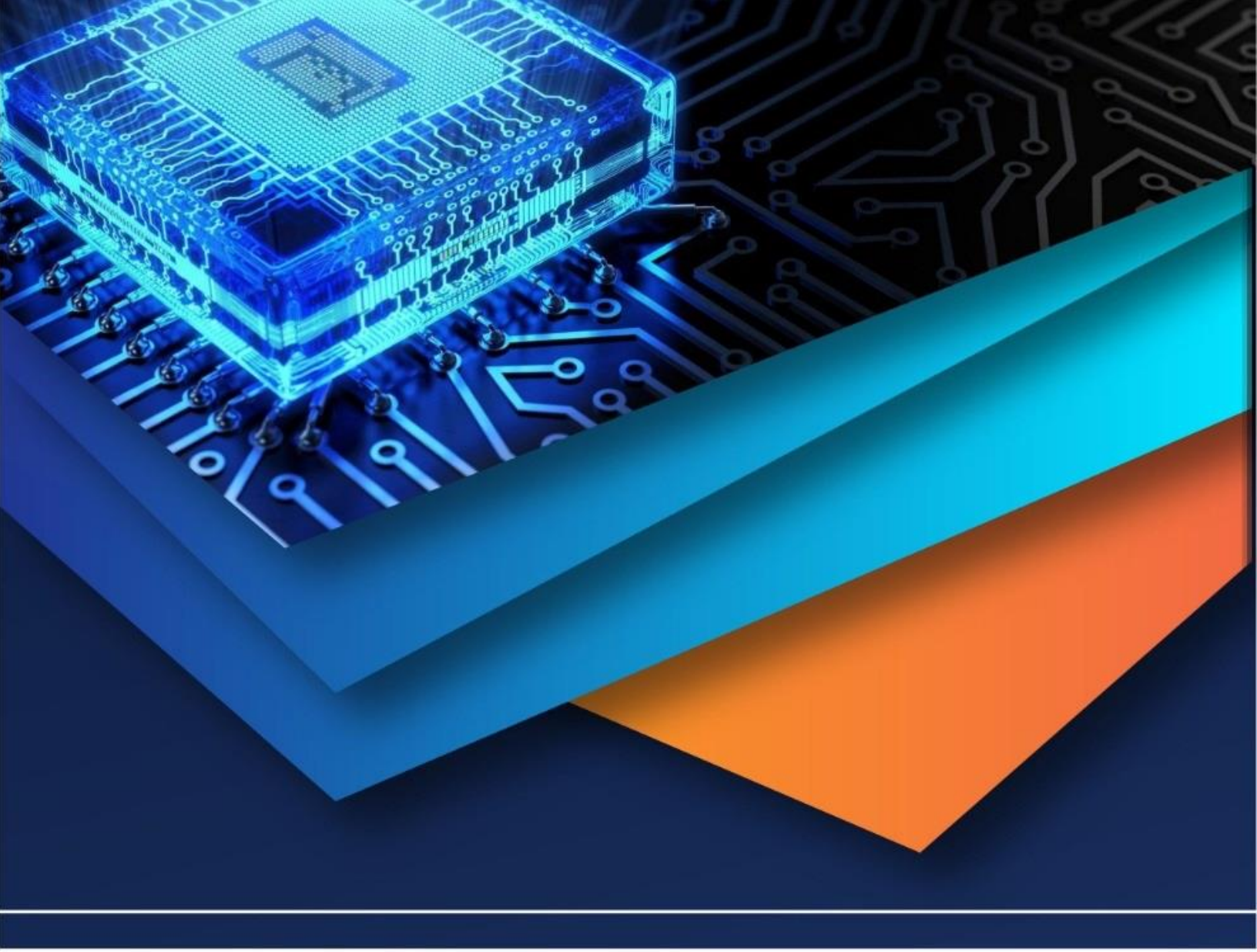
In future we can also develop doing analysis on a particular employee on his/her corruption possibility. By this we can predict the possibility of corruption and we can prioritize the cases which seems fast solution.

We are successful in designing user friendly application to common man to file their complaints on corruption.

## REFERENCES

[1] An-Enhanced-Vigenere-Cipher-For-Data-Security **http://www.ijstr.org/final-print/mar2016/An-Enhanced-Vigenere-Cipher-For-Data-Security.pdf**
[2] A Study of Caesar Cipher and Transposition Cipher **https://doi.org/10.1166/asl.2018.11130**
[3] Application of Firebase in Android App Development-A Study **http://dx.doi.org/10.5120/ijca2018917200**
[4] Research paper on corruption **http://epitomejournals.com/VolumeArticles/FullTextPDF/56_Research_Paper.pdf**
[5] BUREAU OF POLICE AND RESEARCH DEPARTMENT
[6] SMART INDIA HACKATHON 2020.
[7] mysql reference **https://www.researchgate.net/publication/271910489_Doing_database_design_with_MySQL**
[8] App Eye on Corruption https://www.eocapp.org/home/

©IJRASET: All Rights are Reserved



10.22214/IJRASET

45.98

IMPACT FACTOR: 7.129

IMPACT FACTOR: 7.429

# INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Call : 08813907089 (24*7 Support on Whatsapp)