

# Hazard Activator: Android based Hazards Alert and Monitoring System

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**Abstract:-** Hazard is any capacity damage, damage or unfavorable fitness impact of some thing or someone, so we will say that the danger is an unavoidable risk, so prevention of danger is critical fact. In twenty first century clever telephones and records technology have come to be an vital a part of our lives. A new place wherein cellular is beneficial for amassing dangerous records from public place, as they're now no longer without problems handy at any point. Thus, the usage of software, we are able to try and make to be had records associated with the dangerous via Android Application to the numerous agencies like Police, Ambulance Services, Fire Services, etc. A specific characteristic of this app is that message ship to nearest registered person. A cellular software is made to be had to the not unusualplace humans in an effort to replace the dangerous troubles through shooting the image, audio and the geo vicinity of the place and is despatched to the server and knowledgeable to accountable authority. Then the respective authority is answerable for allocating the troubles to their respective personnel after which it's miles solved through those personnel. The notification of the hassle solved is despatched to the cellular of the person and authorities.

**Keywords:** *Android App, Hazard problem, higher authority, Web App*

## I. INTRODUCTION

Hazard Activator App is an android software that's actually beneficial for the individuals who need to do some thing for his or her society. Hazard is any kind of harm, damage or negative fitness impact on some thing or a person and it's far situation with the ability to motive injury, illness, or dying of personnel, harm of property. People who live on in danger area, should compliant concerning danger to unique responsible Authority, to paintings on that threat and remedy threat problems. Now a days cellular and facts generation have grow to be an essential a part of our life. A new location wherein cellular is beneficial for amassing unsafe locations, of public location, facts as they may be now no longer conveniently on hand at any point. Common person first has to sign in on android software. After registration person can login & ship the threat document which incorporates the photo, data, audio of risks location and ship it to the particular authority. People can compliant concerning threat hassle to accountable enterprise the usage of android software. By shooting the photo and the place of the location and is despatched to the server and tell to accountable authority. Then the respective authority is accountable for allocating their respective personnel after which it's far remedy hassle. The notification of the hassle solved is despatched to the person and authorities. The System generates the rankings Negative and Positive on the premise

of labor solved inside quantity of days. Hazard reporting machine is composed modules: 1) Android software 2) Web portal In net portal and android software we're the usage of actual time database firebase. Organization has net portal wherein enterprise ought to sign in first after which roles may be assign to unique enterprise e.g. police, ambulance, hearthplace bridge, Higher authority. Organization can see the proceedings associated with the person on their net portal. Assign the paintings to the unique authority, then authority assigns paintings to their employee. Using this software, we are able to preserve song of the ratio of proceedings registered and problems which might be unsolved.

## II. LITERATURE SURVEY

In hazard reporting system design two main modules:

A. Android Application

B. Web portal Both are use firebase database

[1]. After accumulating facts, that facts is saved into android utility for each customers and government and an internet utility the use of JSP and servlet for government with firebase as backend [7]. The facts captured from android might be proven on Google Maps the use of Google Maps API v3. Then System ship person chance compliant to an business enterprise i.e. net portal. According to compliant machine set obligation to unique branch and branch set worker to paintings on that compliant in time limit [1]. A consumer utility that permits a person to document an incident, in addition to provide area and different applicable records concerning to incidence. Based on document despatched through the consumer utility, the server utility makes a decision which reaction group to dispatch to the document's area [2]. This machine will assist to remedy the social trouble of person. We offer the platform to person to ship their trouble to government with a purpose to offer the answer of problem which ship through person withinside the image/video format. We are the use of firebase database as a backend for document technology which enhance the fine of machine [3]. User want to seize actual time pics of dangerous gadgets with their area and sync it with the server. The facts captured from android might be proven on Google Maps the use of Google Maps API v3 [4]. This machine will assist government to mark the place with extra no of issues. This app will ship notification and messages consistent with danger level [5]. Here, additionally introduce an internet-primarily based totally GIS (Geographic Information System) machine to accumulate the sector facts from clever phones. If system of fixing complained is taken long term

length than end result additionally now no longer given good. People did now no longer have any concept approximately his compliant status. Compliant system additionally take extra time first we had to shop for compliant shape then fill, all system is an excessive amount of hard. So have a look at all trouble concerning chance compliant and remedy trouble issues [6]. Giving interest in this trouble we are able to broaden chance reporting machine. This utility solves all preceding troubles and remedy chance trouble fast.

### III. SCOPE OF THE PROJECT

The undertaking entitled "Monitoring and Reporting Hazards Using Android Application" is a device via way of means of which we will offer extra offerings to society, criticism towards danger hassle to precise department.

### IV. EXISTING METHOD

The current technique is pretty antique and does now no longer employ the abilities supplied via way of means of the contemporary era of clever phones. This technique is primarily based totally on paper paintings which takes a lot effort and time of not unusual place humans. The gift gadget includes excessive diploma of human interference. In the prevailing technique the man or woman is predicted to touch the government and offer facts approximately the threat gift thru android software and additionally humans do now no longer have any primary platform in current gadget wherein they could file all their issues. All those issues triumph over in proposed gadget.

### V. PROPOSED SYSTEM

In current method, human beings do now no longer have any important platform in which they are able to record all their troubles. So legal branch does now no longer apprehend the precise trouble and their area. In Proposed machine, we're growing one important platform in which all troubles may be said with their area to respective departments. The purpose of the machine is to ship the photos or audio associated with difficulty to the respective departments of the governments. We are sending this the use of the internet offerings and android device.



Figure 01

This structure suggests usual description of our device. We want at the least one android cell tool and a devoted server to host the software. Dedicated Server is used to save the information. Dedicated server need to have firebase established on it to address the database part. In threat reporting device layout fundamental modules: 1) Android Application. 2) Web Portal.

A Common User with Android software Common Users makes use of Android software to document the problem. Before reporting, Registration to dangers reporting device is have to and that registration is accomplished with the aid of using the use of android phones. After being part of device, User can login to the device and might ship dangers

document which comprise Geo-Spatial information like image, text, audio, video together with region records. The document incorporates geospatial information meaning the Data together with the geographic component. This way that the information set have region records tied to them consisting of geographical information withinside the shape of coordinates, address, city, or ZIP code. B. Web portal the use of MongoDB Web portal used on the Organization side, because the customers accomplished corporation contributors additionally should sign in to gate authenticate. After registration assign roles to each department. as an instance Police, News Paper, Higher Authority etc. display all of the proceedings of customers, Identify every grievance. After identity assign paintings to worker in line with grievance. After running alternate the popularity of the grievance and notify to the person each time. All matters this is notifications of problem, graph technology and fantastic poor rankings are accomplished with the aid of using net portal. and android software is used to provide the affirmation withinside the shape of image.

### VI. DESIGN AND IMPLEMENTATION DETAILS

Modules and their Functionalities 1) Android software & GUI a) Android software for person: -Firstly person registration is must. In registration shape of person wherein the person may be crammed all of the info and after filling the element the person login identity and password may be created. - After login person noticed menu listing withinside the User inbox wherein the alternatives are to be had that's what form of issues ship the person, trouble is solved or now no longer and what number of reviews the person may be ship. - If person desires to ship the risk document then the person will ship their troubles or trouble withinside the layout of picture or video with the name and picture/video description to the precise departments. In my document alternative person document records is to be had. - In the solved risk document alternative there are solved reviews which become solved with the aid of using that specific department. -Also password change, logout alternatives are to be had for person efficiency. The GUI is utilized by the person to document an coincidence and a number of the to be had alternatives are proven in Figure 02. indicates the login shape of person side. After login person may be ship their troubles or trouble to the system.

### VII. SYSTEM FEATURE

- System should support android based smart phone.
- System should have internet connection.
- System should properly interact with the server.

### VIII. TECHNICAL SPECIFICATIONS

#### A. Advantages

1. Central platform to report issues
2. Saves time
3. To mark the area with more number of issues
4. Encourage people to report issues and authority to solve issue to get hall of mark

- 5. Stop corruption involved in concerned authority
  - 6. Central platform for reporting issues.
  - 7. Geographical view of issues.
- B. Disadvantages
- 1. Internet connectivity is compulsory to transmit the data.
  - 2. Android phone is required.
- C. Applications
- 1. This application can be used by people to report their problem to the government authority.
  - 2. To survey the areas where maximum number of issues are there.
  - 3. Increase awareness among people and let them have a sense of responsibility.
  - 4. Concerned authority will work efficiently. This application can be used by government to check the issues in the territory

### IX. RESULT

**CASE 1:** User going to register in the "HAZARD ACTIVATOR" application.

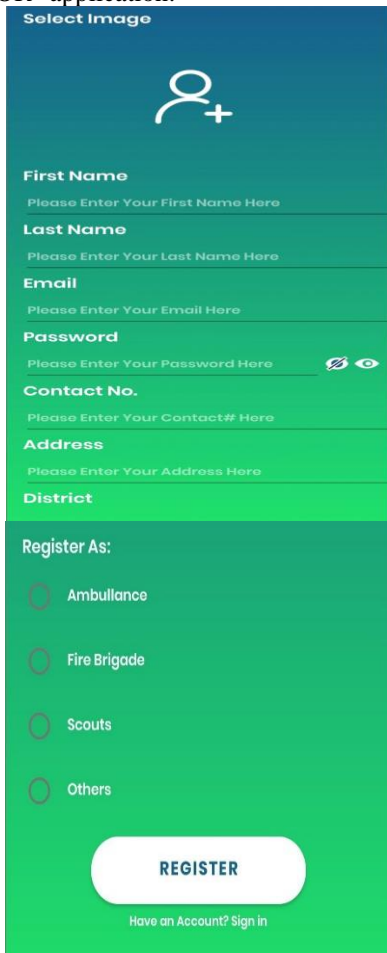


Figure 02 User Registration Screen

**Result:**

In this case, first of all if the user wants to use the hazard activator application and wants to use all functionalities so that user will do have to register yourself. Otherwise, user can't login without register and also according to the authentication.

**CASE 2:** User going to login to use the functionality of "HAZARD ACTIVATOR" application.

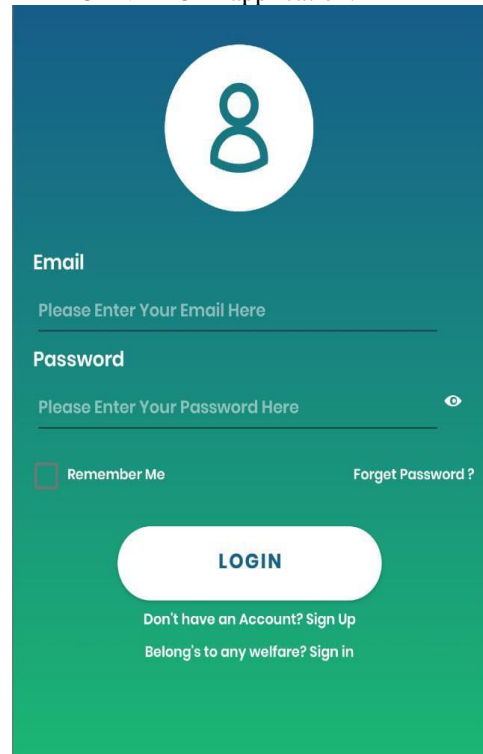


Figure 03 User Login Screen

**Result:**

In this case, if the user wants to use the hazard activator application and wants to use all functionalities so that user will have to login yourself. if the user forgets the password so user can recover own password through email verification and user data will save in firebase database.

**CASE 3:** User Enable the location for Detect current location in "HAZARD ACTIVATOR" application.

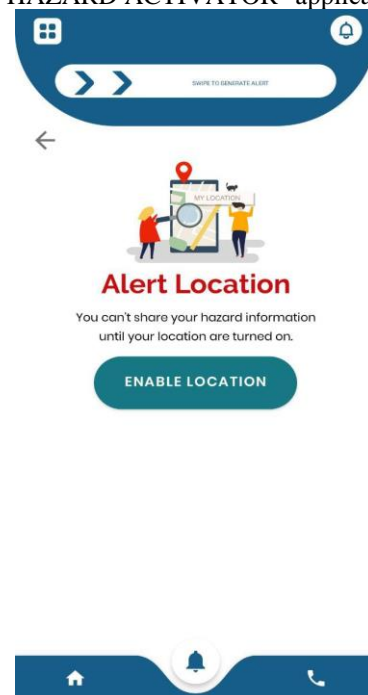


Figure 04 Location Enable Screen

**Result:**

In this case, if the user wants to generate an alert from the hazard activator application. So, user should enable their current location for accessing the hazard location correctly which help welfare organizations.

**CASE 4:** User generate an alert when any hazard occurs in "HAZARD ACTIVATOR" application.



Figure 05 Generate Alert Screen

**Result:**

In this case, user can generate an alert when he/she see any hazard occur and alert will notify nearest peoples and welfare organization so they reach hazard location quickly.

**CASE 5:** User phone directory in "HAZARD ACTIVATOR" application when any hazard occurs.

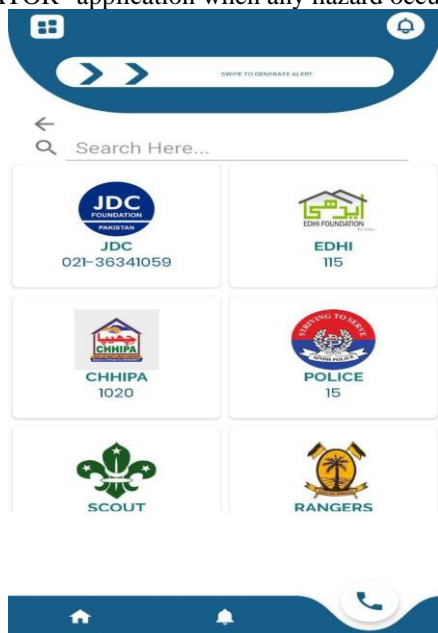


Figure 06 Phone Directory Screen

**Result:**

In this case, user can quickly access all the welfare services phone numbers so they can call for the hazard activator application.

**CASE 6:** Web portal dashboard of "HAZARD ACTIVATOR" application.

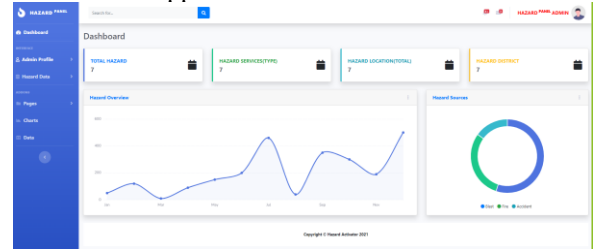


Figure 07 Web Portal Dashboard

**Result:**

In this case, admin will access this web portal of hazard application. In dashboard with show all hazard occur data and also show through graph.

**CASE 7:** Web portal dashboard data of "HAZARD ACTIVATOR" application will show in graph.

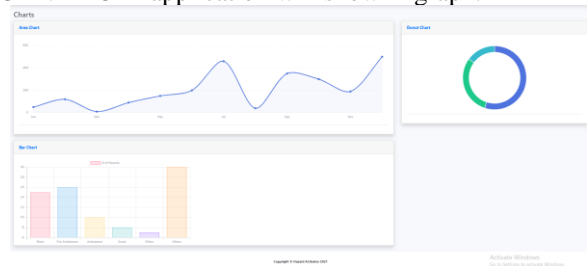


Figure 08 Web Portal Data Graph

**Result:**

In this case, admin will access all the data of hazard occur in form graph will show clearly data in percentage that how much percent data will happen in each district and how much percent data will occur in each service.

**CASE 8:** Web portal dashboard data of "HAZARD ACTIVATOR" application will be search through search option.

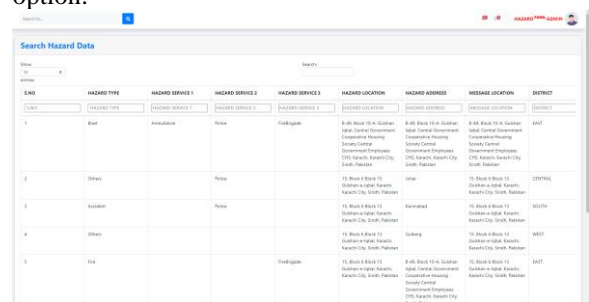


Figure 09 Web Portal Data Searching

**Result:**

In this case, admin will access all the data of hazard occur and it will search all the through filter and how they want to search data like hazard service wise or location wise or district wise.



## X. CONCLUSION

This device will assist to resolve the social issues of person. By the usage of this device the government withinside the metropolis or global will paintings properly. We offer the primary platform to person to ship their lawsuits to specific government for you to offer the answer of lawsuits ship via way of means of person withinside the shape statistics, photograph and audio format. System takes short movement concerning risky regions and resolve risks problem. We are the usage of firebase database as a backend for document era which improve the first-class of device. They have set with a few unique functions: person makes use of android app for gathering Data. After gathering statistics, that statistics is saved into android application. Then System ship person chance compliant to an organisation i.e. internet portal. According to compliant device set duty to specific branch and departmental set worker to paintings on that compliant. If organisation entire paintings in time. System ship message to not unusualplace person and generates high quality poor costs on his paintings.

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