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Road Pits Management System

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Abstract: *One of the major problems faced by developing countries is the maintenance of road condition. Road infrastructure for the society is very important because majority of road accidents takes place due to bad condition of road like pits. Pits are caused due to poor quality and badly maintained roads. The constant movement of the overweight vehicles like trucks is also responsible for these ill roads. These ill quality roads will cause severe damage to the vehicles in terms of tyre and most important thing is the accidents which are caused due to this. An optimal system should be developed to monitor the road condition and analyses for future work. We propose an innovative method to prevent accidents that cause due to road pits. That is road pits management system. People will upload data of damaged road and location obtained from GPS and transferred to road transport authorities. Using the data's obtained more damaged area can be prioritized and damage control can be reduced.[3].*

Keywords: psychological well-being, Instagram users, non-users, mental health, social media, mixed-methods approach, quantitative surveys, qualitative interviews, digital world

I. INTRODUCTION

India is emerging as one of the fastest-developing nations globally, showcases remarkable progress in various sectors. However, its road infrastructure remains a significant area of concern. Despite the prevalence of roads as the primary mode of transportation, many Indian roads suffer from narrowness, congestion, poor surface quality, and inadequate maintenance.

Recognizing pavement distress, such as pits, not only aids drivers in avoiding accidents or vehicle damage but also assists authorities in maintaining roadways. According to the Road Accident Report (2018) by the Ministry of Road Transport and Highways, while 4,726 lives were lost in crashes due to road humps, 6,672 fatalities resulted from accidents caused by pits and speed breakers. Figure 1 illustrates the perilous conditions ofroads with these killer pits. To tackle these challenges effectively, a robust solution is imperative. Such a solution should involve the collection of pit-related data and facilitate collaboration with the road construction department. Through these mechanisms, we can enhance safety, efficiency, and comfort on Indian roads.[3]

II. LITERATURE REVIEW

YEAR	AUTHOR	NAME	DESCRIPTION
2022	Saumya Nashikkar, Nikita Unholi, Preeti Karki, Sonali Chavan	"Road Pit Notifier."	The paper begins by an innovative method to prevent these hazards by using the advanced sensor system. The sensors will be attached to vehicles and from vehicles the data's obtained from sensors and the location obtained by the GPS are transferred to road transport authority by IOT where officials take necessary actions. Using the data's obtained more damaged area can be prioritized and damage control can be reduced.[3]
2019	Gunjan Chugh , Divya Bansal , Sanjeev Sofat	"Road Condition Detection Using Smartphone Sensors: A Survey."	The paper begins by Monitoring the road condition has gain significant importance in last few years. There are various reasons for extending research in this field: first, it will ensure safety and comfort to various road users; second,

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			smooth roads will lead to less vehicle damage and government investment; third, the availability of low cost sensors in Smartphones; fourth, the rapid increase in the rate of Smartphone users.[4]

III. PROPOSED SYSTEM

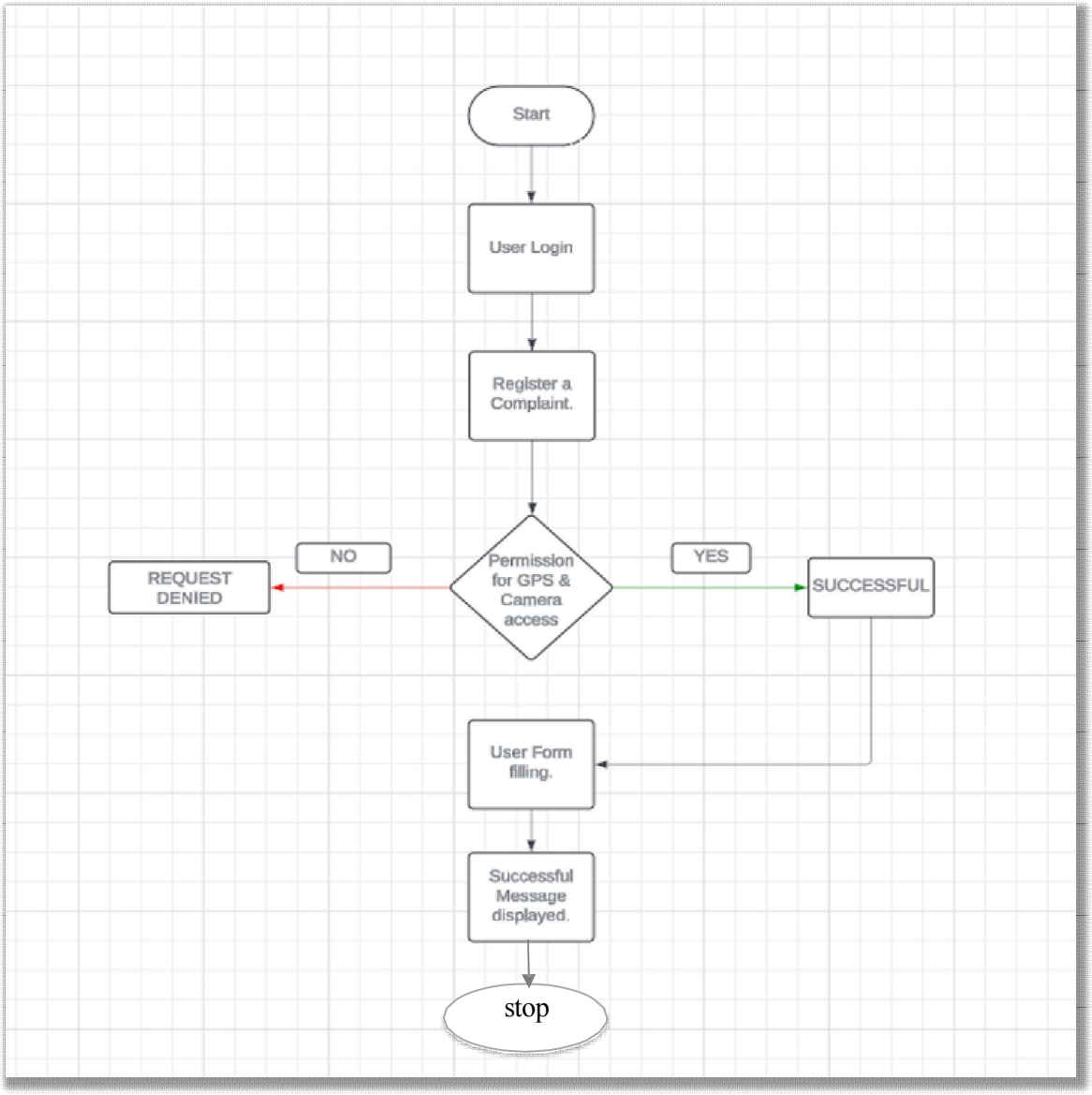

Fig 1: Flowchart

IV. WORKING

Our website is made to help reduce the number of roadpits. Here first the user has to login the system with correct password and user. Then he would be directed to the welcome page of our website.

The welcome page contains various panels. One of the panel contains the GPS camera and get location tab where you can get the location of the image uploaded by the user.

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After this user has to fill the form ,where the user has to fill the information and also here the user has to upload the photo incase he doesn't has acces to gps camera.
Then this photos would be send to the mayor of that particular area and the pits would be repaired

V. HARDWARE AND SOFTWARE RERQUIREMENT

Software Requirements

- Visual Studio Code
- Chrome

VI. RESULT

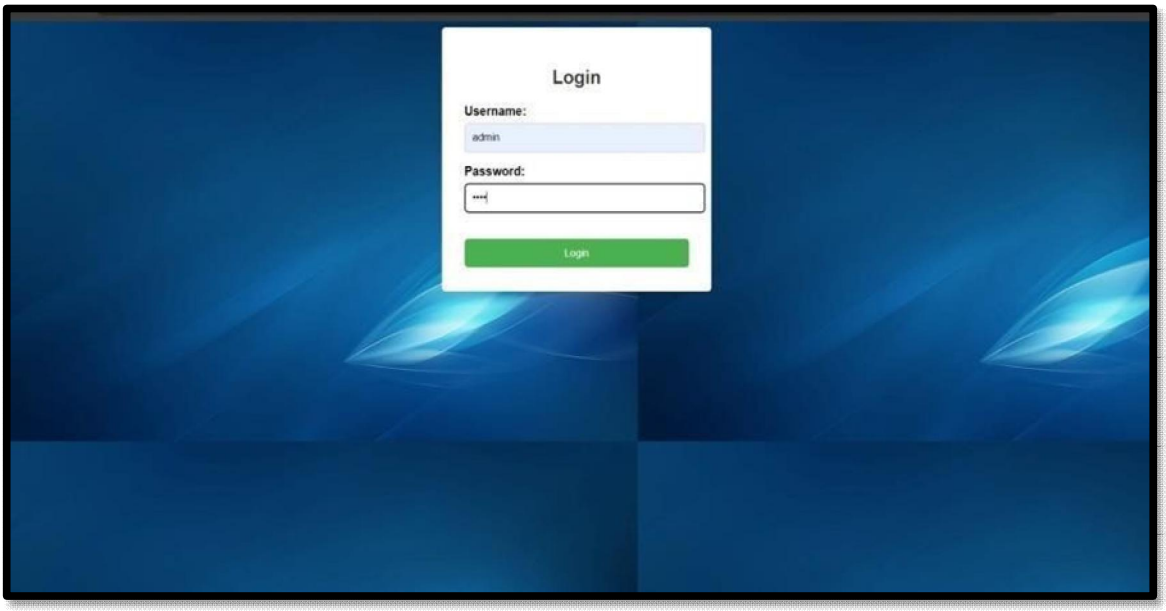

Fig 1. Login Page

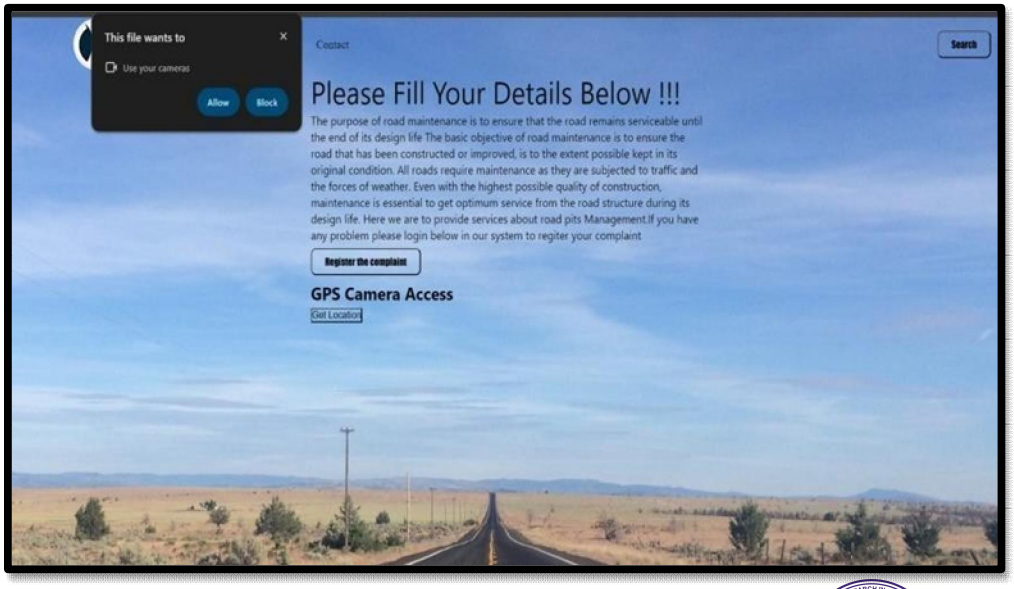

Fig 3:- GPS_Camera_Access

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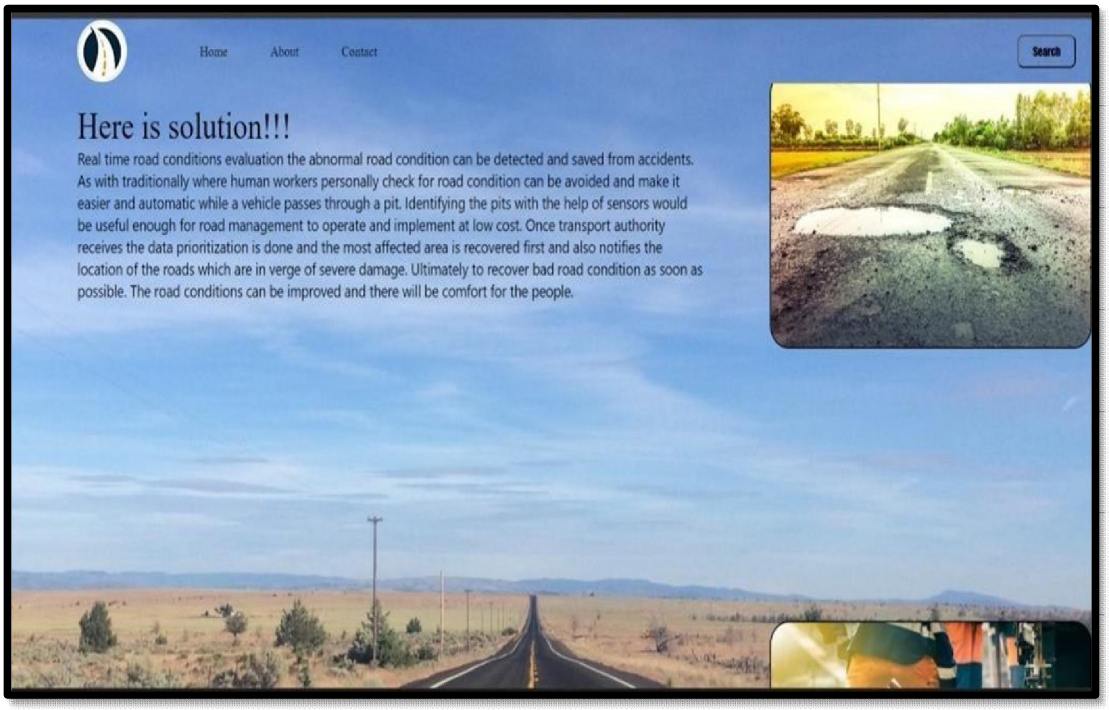

Fig 4:- Main_page

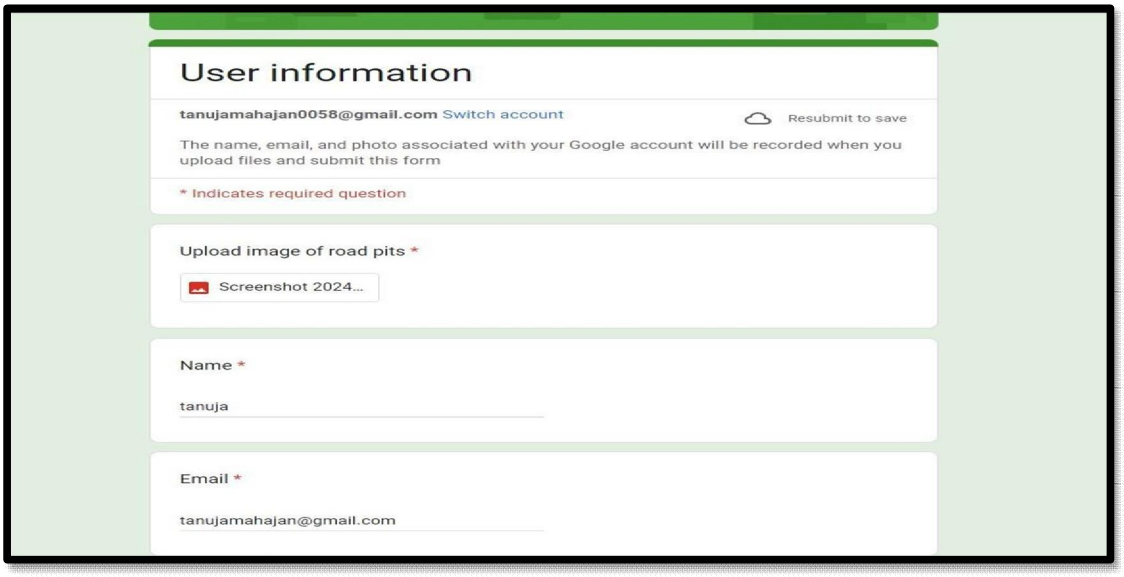

Fig 5:- User Information Data

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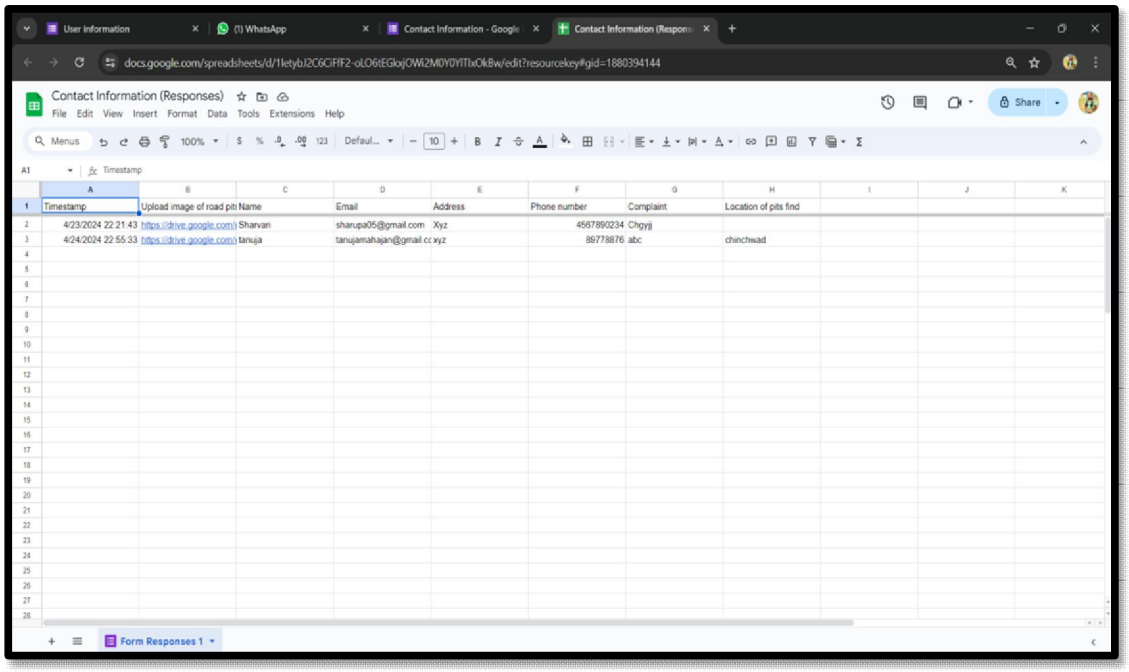

Fig 6:- Stored Data sheet

VII. CONCLUSION

In conclusion, image steganography is a powerful and evolving technique that plays a crucial role in secure communication and data protection. By embedding secret information within the pixels of an image, steganography provides a covert channel for transmitting sensitive data without arousing suspicion. This method has proven effective in various applications, including digital watermarking, copyright protection, and confidential communication.

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