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MINI PROJECT REPORT

ON

"ONLINE FIRE REPORTING SYSTEM"

Submitted in partial fulfilment for the requirement of V semester for the Degree of

BACHELOR OF ENGINEERING IN
INFORMATION SCIENCE &ENGINEERING

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2022-2023

DEPARTMENT OF INFORMATION SCIENCE AND ENGINEERING

CERTIFICATE

This is to certify that the Mini Project Report entitled "ONLINE FIRE REPORTING SYSTEM**"** is a bonafide Mini Project work carried out by **BHOOMIKA B S (1DB20IS028) & BI BI FATHIMA (1DB20IS030)** and in partial fulfilment of 5th semester for the Degree of **Bachelor of Engineering in Information Science and Engineering** of Visvesvaraya Technological University, Belgaum, during the academic year 2022- 2023. It is certified that all corrections/suggestions indicated for Internal Assessments have been incorporated with the degree mentioned.

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DECLARATION

We **Bhoomika B S** and **BI BI Fathima**, students of 5th Semester B E, Information Science and Engineering at **Don Bosco Institute of Technology**, **Bengaluru** hereby declare that the project word entitled "**Online Fire Reporting System**" has been carried out by us as a part of course work 18CSL58 – Database Management System under the supervision of **Mrs**. **Chaithra G V** Assistant professor & **Dr. Gowramma G S**, Associative Professor, Department of Information Science and Engineering. Visvesvaraya Technology University, Belagavi during the academic year 2022-2023. We further declare that the report has not been submitted to any other university for the award of any other degree.

Place: Bengaluru

Date:

ACKNOWLEDGEMENT

At the various stages in marketing the mini project, a number of people have given me invaluable comments on the manuscript. I take this opportunity to express my deepest gratitude and appreciation to all those who helped me directly or indirectly towards the successful completion of this project.

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We would also like to thank the teaching and non-teaching staff members of the Department of Information Science and Engineering for their cooperation.

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ABSTRACT

The purpose of the "**Online Fire Reporting System Project**" is to automate the existing manual system with the help of computerized equipment and full-fledged computer software, fulfilling their requirements. It is a comprehensive document that outlines a proposed solution for creating an online system that allows citizens to quickly report fires and receive prompt assistance.

Online Fire Reporting System, as described above, can lead to an error-free, secure, reliable, and fast management system. It can assist the user to concentrate on their other activities rather than concentrate on record keeping. Thus, it will help organizations better utilization of resources. The organization can maintain computerized records without redundant entries. That means that one need not be distracted by information that is not relevant while being able to reach the information.

The aim is to automate its existing manual system with the help of computerized equipment and full-fledged computer software, fulfilling their requirements, so that their valuable data/information can be stored for a longer period with easy access and manipulation of the same.

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CHAPTER 1

INTRODUCTION

The "online fire reporting system" isa web-based application project developed in PHP and MYSQL database. This project provides an online platform for fire department which allows the citizens to submit an ongoing fire incident. The application helps the said department to manage the reports and assign their teams. It has a pleasant user interface with help of HTML, AJAX, JQUERY, JAVACRIPT. This system project also consists of user-friendly features and functionalities.

An online fire reporting system is a project to allow people to quickly and easily report fires to local fire departments. This system will provide an easy-to-use from which will allow people to submit information about the fire, including its location, size, potential cause, and any other pertinent information. Once the form is completed, the information will be sent to the appropriate fire department for immediate investigation.

The system will also be able to track the status of the fire report, and provide updates to the users as necessary. This system will make it easier for people to contact the fire department in the event of an emergency, and will help to ensure that the fire department is altered to the situation in a timely manner.

1.1 AIM

The aim of an online fire reporting system project report is to develop a system that can automate the process of the reporting fires in a more efficient manner. This system will allow users to report fires quickly and accurately, while providing necessary information to emergency services in order to ensure a prompt response. It will also allow local fire departments to analyze data on fires in order to better inform their response and prevention strategies.

Existing System

The existing system is a manual system. It requires a lot of file work to be done. It is a time- consuming system. All personal information is maintained manually. Any search requires so much effort manually.

Proposed System

The proposed system has the following requirements:

1. System needs to store information about new entries of Blogs.
2. System needs to help the user to keep informed of Comments and find them as per various queries.
3. System needs to maintain quantity records.
4. System needs to keep a record of New Categories.
5. System also needs a search area.
6. It also needs a security system to prevent data.

1.2 OBJECTIVES OF THE PROJECT

The main objective of the online fire reporting system project is to provide a centralized platform for citizens to report any fire-related incidents to the fire department, thereby allowing the fire department to respond quickly in order to minimize property damage and casualties. The platform will provide real-time monitoring of the fire incidents and their status, allowing the fire department to plan their response and allocate resources more efficiently.

1.3 SCOPE OF THE PROJECT

The scope of an online fire reporting system should include features that allows users to enter details about fires such as locations, date, and time, type, size, and cause. The system should also provide a way to track and manage reports, provide alerts to relevant personnel, and generate reports for future analysis. Users can also track the fire incident reporting status. Admin will be the user of this project who can control the whole website. Dashboard: In this section, the admin can briefly view information about fire incidents.

1.4 ADVANTAGES AND DISADVANTAGES

ADVANTAGES

- This project provides an online platform for Fire Department which allows the citizens to submit an ongoing fire incident.
- This application helps the said department to manage the reports and assign their teams.
- It has a pleasant user interface which helps of Bootstrap Framework and Admin LTE Template.
- This system also allows for greater accuracy in tracking and analyzing fire data, which can be used to identify potential causes, determine trends, and plan for better public safety.
- Other advantages include improved communication between responders and citizens, more efficient use of resources, and improved record keeping.

DISADVANTAGES

- It includes cost, security risks, and compatibility issues.
- Cost is the major factor, as this system require software, hardware, and other resources to be purchased and maintained.
- Security risks are also a concern, as confidential information may be vulnerable to hacking or other malicious activities.

1.5 SURVEY OF TECHNOLOGIES

Survey of the technology is an important part for project proposal. This is because, at this point in time, not too Many detailed designs of the system, making it difficult to access issues like performance, costs on (on account Of the kind of technology to be deployed) etc. a number of issues have to be considered while doing a technical analysis.

- Understand the different technologies involved in the proposed system:

Before connecting the project, we have to be very clear about what are the technologies that are to be required for the development of the new system.

- Find out whether the organization currently possesses the required technologies:
- Is the required technology available with the organization?
- If so, is the capacity sufficient?

CHAPTER 2

SYSTEM REQUIREMENMTS AND SPECIFICATIONS

SYSTEM ANALYSIS

To develop an online fire reporting system, a few basic system requirements will be needed. This includes, a web server, a database server, a web-based user interface, and a mobile application for reporting and tracking fires. The web server should be able to handle large data volumes, the database should be secure and reliable, and the user interface should be intuitive and user friendly. Additionally, the mobile application should be able to process location-based data and provide real-time information on the fire. Security features should also be included to ensure data accuracy and privacy.

2.1 Programming language

PHP

- (MYSQL, Informix, Oracle, Sybase, Solid, Generic ODBC, etc.)
- PHP is an open-source software PHP stands for PHP: Hypertext Preprocessor
- PHP is a server-side scripting language, like ASP
- PHP scripts are executed on the server
- PHP supports many database
- PHP is free to download and use.

MYSQL

- MYSQL is a database server
- MYSQL is ideal for both small and large applications
- MYSQL supports standard SQL
- MYSQL compiles on a number of platforms

CSS

- Cascading Style Sheets (CSS)
- Simple mechanism
- Easy for adding style (e.g., fonts, colors, spacing) to Web documents.
- Quicker development time.
- Easy formatting changing
- Compatibility Across devices.

2.2 FUNCTIONAL REQUIREMENT

- Ability to create and submit incident reports.
- Ability to search for existing incident report.
- Ability to assign responders to incident.
- Ability to add incident updates.
- Ability to document incident, store incident, generate reports and generate notifications.
- Ability to access incident data from multiple devices.
- Ability to track incident progress in real-time.

2.2 NON-FUNCTIONAL REQUIREMENTS

The following are the system requirements for Online Fire Reporting System.

Hardware Specifications:

Processor: Intel core i5

Processor speed: 250MHz to 833MHz

RAM: 4 GB RAM

Hard Disk: 1TB

Software Specifications:

Operating System: Window 7 or above

Frontend tool: PHP

Backend: MySQL

Other Tool: XAMPP

Web-Server: Apache, MySQL

Web-Browser: Any browser

2.3 STRUCTURE OF THE PROJECT

The project explains about the reporting of fire from a short to complete combination of activities including reporting, team allotment, etc. The project is divided into different modules

A) Admin:

Dashboard

Teams

Fire Alerts

Reports

B) Users:

Login module: The user needs to login by filling required details to user its facilitates.

Report Module: Users can visit the website and report any fire incidents.

Track Module: Users can also track the fire incident reporting status.

2.4 FEATURES OF THE PROJECT

- The online fire reporting system features a user-friendly interface with easy-to-understand navigation panels and options.
- It allows the user to report a fire from anywhere and any device.
- It also allows user to track the reporting details.
- Easy to add and update information.
- Easy and fast retrieval of information.
- Various level of reports available with lots of criteria.
- User Accounts to control the access and maintain security.

- Accuracy in work.
- Access of any information individually.
- Easy to search the individuals-information.

2.5 FUNCTIONALITIES PROVIDED BY ONLINE FIRE REPORTING SYSTEM ARE AS FOLLOWS:

- Provides a variety of features that allows users to report and manage fire incidents quickly and efficiently.
- These features typically include incident reporting and tracking, data analysis and visualization tools, notifications and alerts, automated workflows, and more.
- The system also helps to provide a centralized platform for fire department to share data With other agencies and departments, as well as the public.
- Daily Report Page.
- Team Details Page.
- Management-side's Dashboard Page.
- Request or Fire Report List page.
- Public-Site.
- Fire Reporting Form page.

Integration of all records of report, editing, adding, and updating of records is improved which results in proper resource management of reporting data.

CHAPTER 3

SYSTEM DESIGN

3.1 : ER DIAGRAM

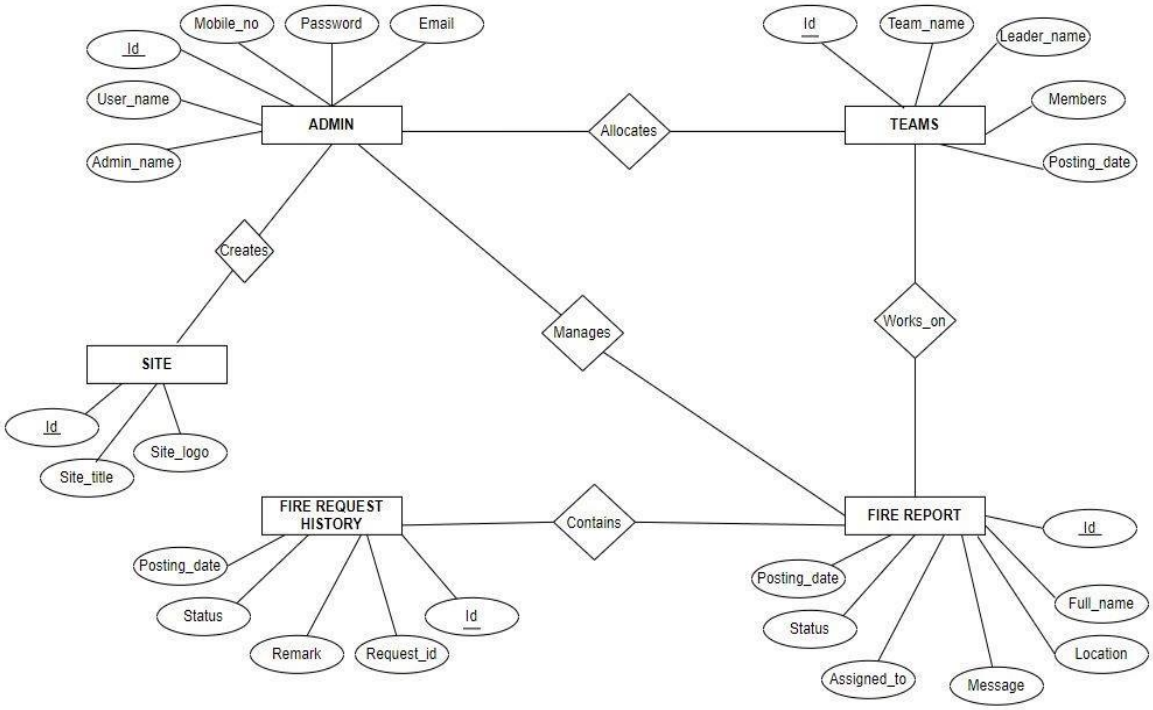

Figure 3.1: ER Diagram of Online Fire Reporting System

The above figure 3.1 shows the representation of ER Diagram of Online Fire Reporting system. It contains the connection i.e., relation between the entities and primary key is a column in table that uniquely identifies each record in that. It is underlined as we see in figure, foreign key are the keys that relate to primary key of other table represented by connection to that table.

3.2: SCHEMA DIAGRAM

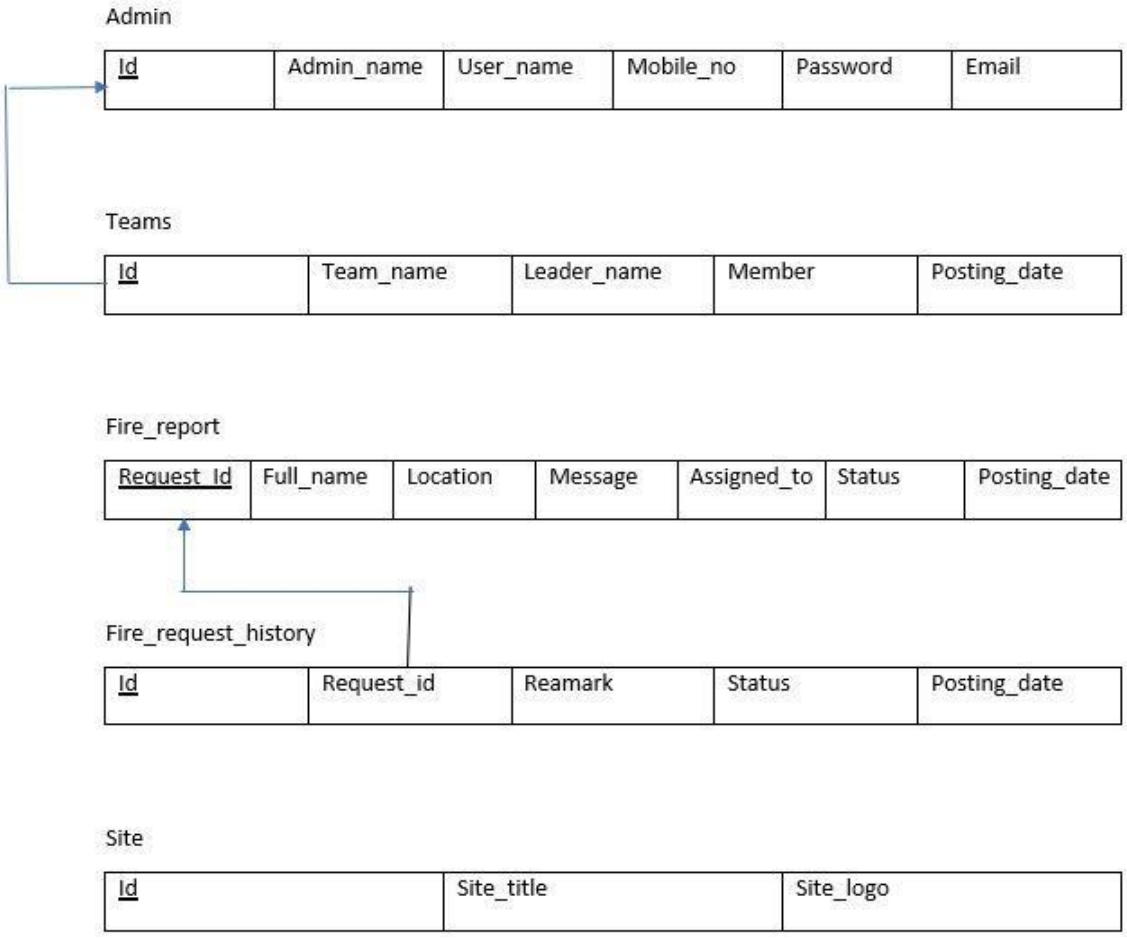

Figure 3.2 Schema Diagram of Online Fire Reporting System

The above figure 3.2 shows the representation of schema diagram of online fire reporting system. It contains all the tables used all the mini project and these tables are connected to each other with respect to primary keys and foreign keys. Here primary Keys are represented by underlying it and foreign keys are connected to the table of that particular primary key is present.

CHAPTER 4

IMPLEMENTATION

Implementation is the stage of the project when the theoretical design is turned out into a working system. Thus, it can be considered to be the most critical stage in achieving a successful new system and in giving the user, confidence that the new system will work and be effective. The implementation stage involves careful planning, investigation of the existing system and its constraints on implementation, designing of methods to achieve changeover and evaluation of changeover methods.

Prerequisite

The interface for this system has been designed using PHP, MySQL has been used for data Storage.

4.1 MODULES & DESCRIPTION

DASHBOARD:

In this section, the admin can briefly view information about fire incidents.

TEAMS:

In this section, admin can manage Teams (Add/Update/Delete)**.**

FIRE ALERTS:

In this section, the admin can view new, assigned, Team on the way, Fire relief work in progress, completed requests, and all requests and also give a remark.

REPORTS:

In this section, the admin can view fire incidents in a particular period and also search the fire Reporting/incidents

WEBSITE SETTING:

The admin changes the setting like logos contents, etc.

CHAPTER 5

SNAPSHOTS

5.1 : Home page

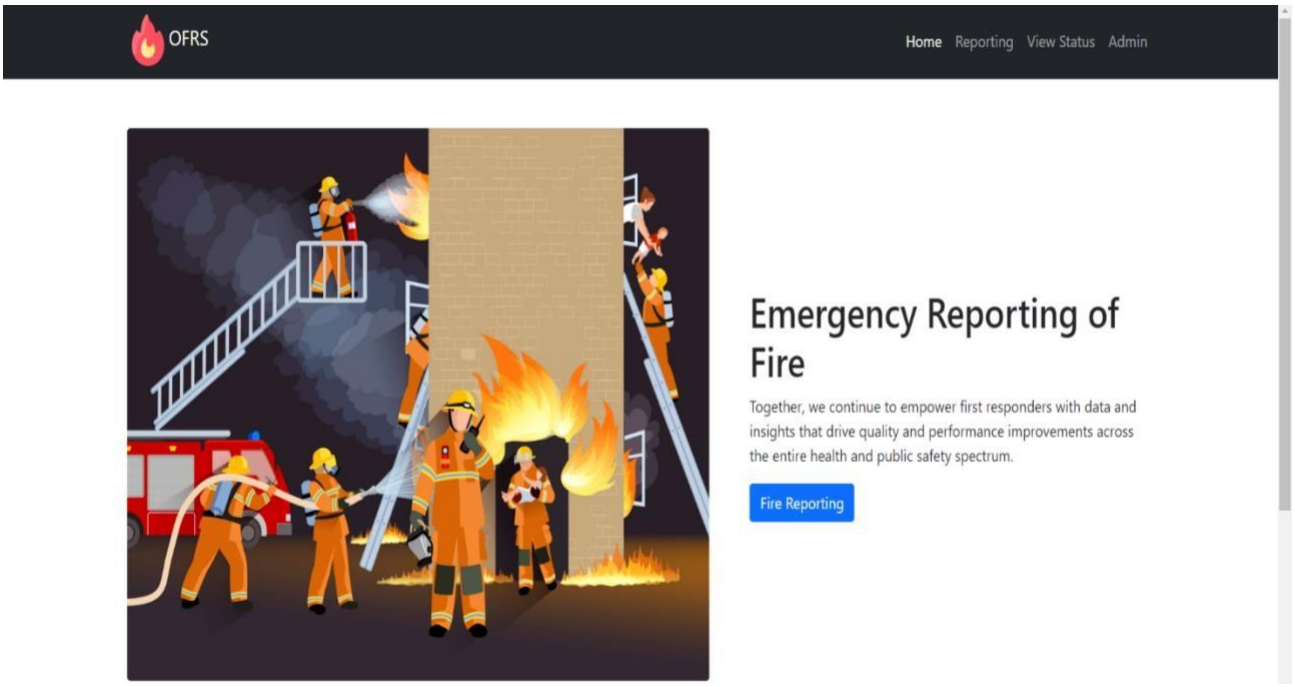

Figure 5.1: Home Page

The above figure 5.1 provide the user with information about how the system works and what it can do. It provides an easy way to navigate to different areas of the system, such as reporting a fire, receiving Existing report, and tracking progress.

5.2 : Login Page

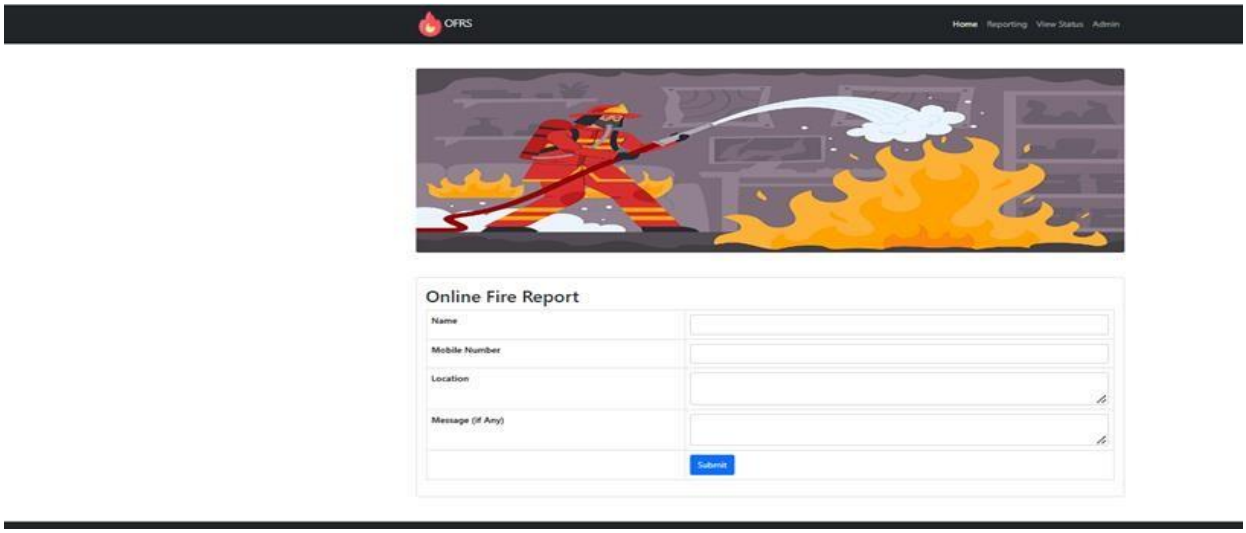

Figure 5.2: login page

In the above figure 5.2 the reporters can report by filling the details like name, mobile number, location and messages Then click submit button.

5.3 : View Status

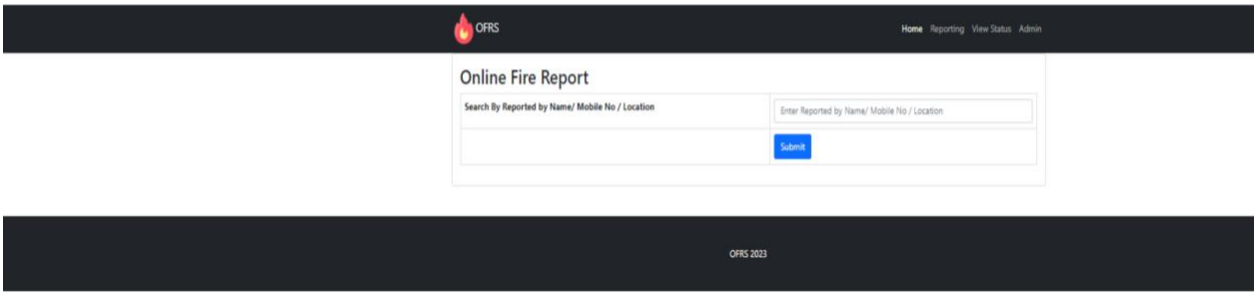

Figure 5.3: View status

In the above figure 5.3 user can view the status by giving their name, location or mobile number.

5.4: ADMIN LOGIN

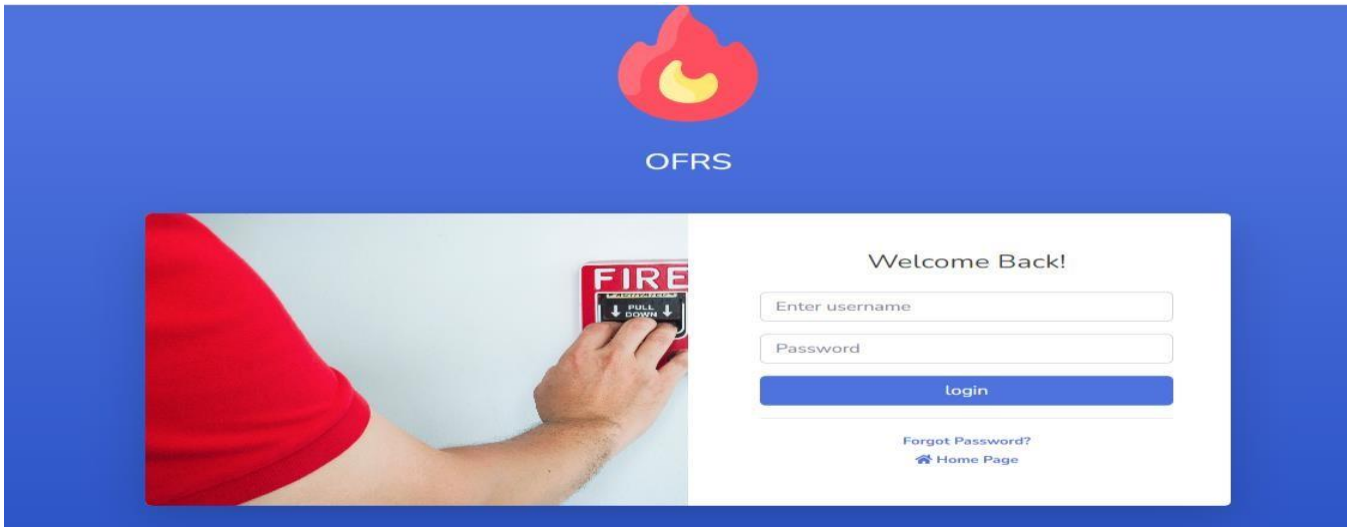

Figure 5.4: Admin login

In the above figure 5.4 admin needs to enter username and password. If username and password is correct then Admin will be switched to next page. If it is incorrect then admin is not able to login. If we Don't remember it can even change the password.

5.5: Admin Dashboard

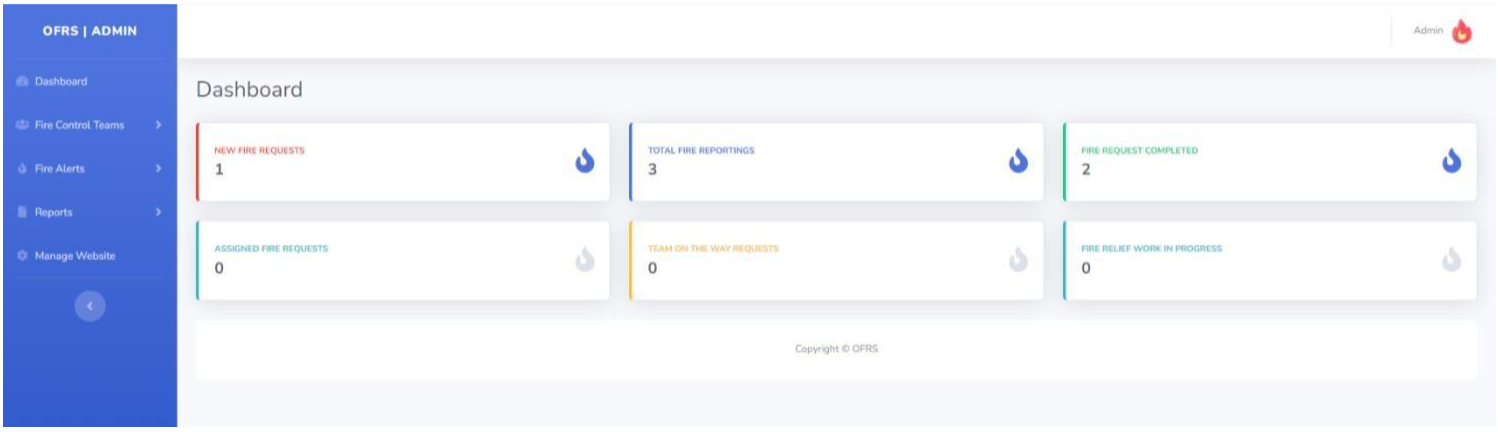

Figure 5.5: Admin dashboard

The above figure 5.5 is a dashboard of admin where he can see all details of the reporters. It contains details Like new fire request, total fire requests, fire report completed, assigned fire requests, teams on the way request, fire relief work in process.

5.6: Team creation

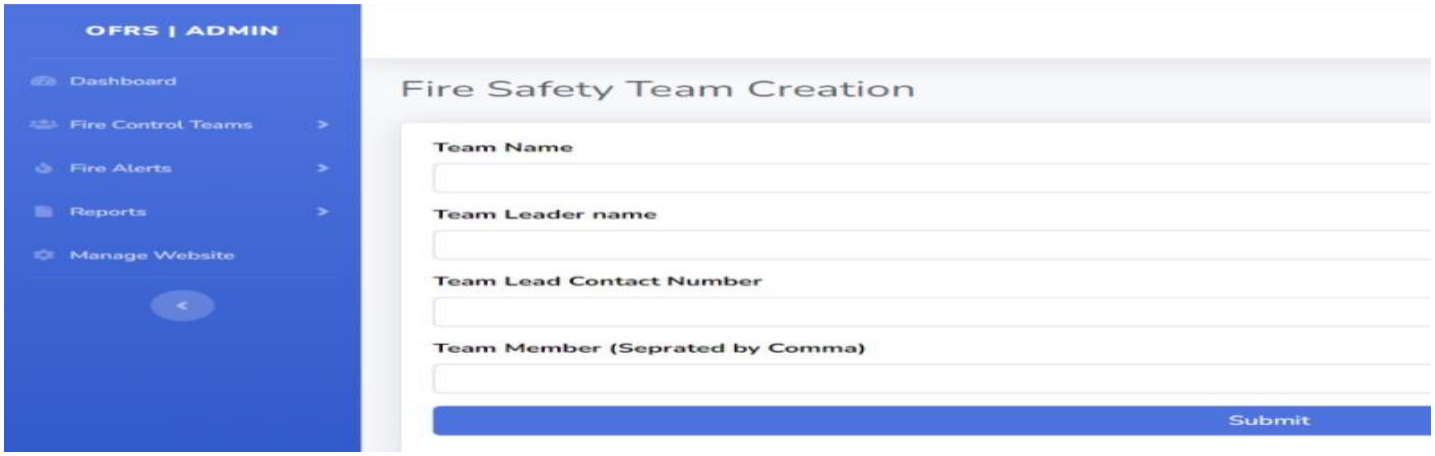

Figure 5.6: Team creation

In the above figure 5.6 admin can create a teams by giving team name, team leader name, team lead contact number and team members.

5.7: Team Manage

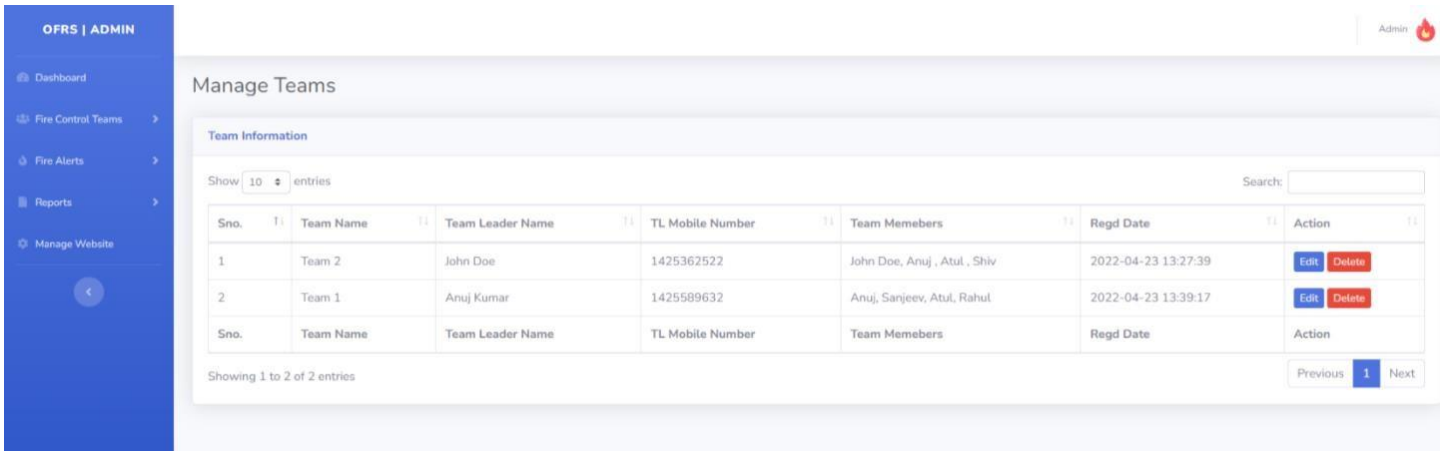

Figure 5.7: Team Creation

The above figure 5.7 contain the team information that are team name, team leader name, TL mobile number, team members and registered date. here we can edit and delete.

5.8 : FIRE ALERTS

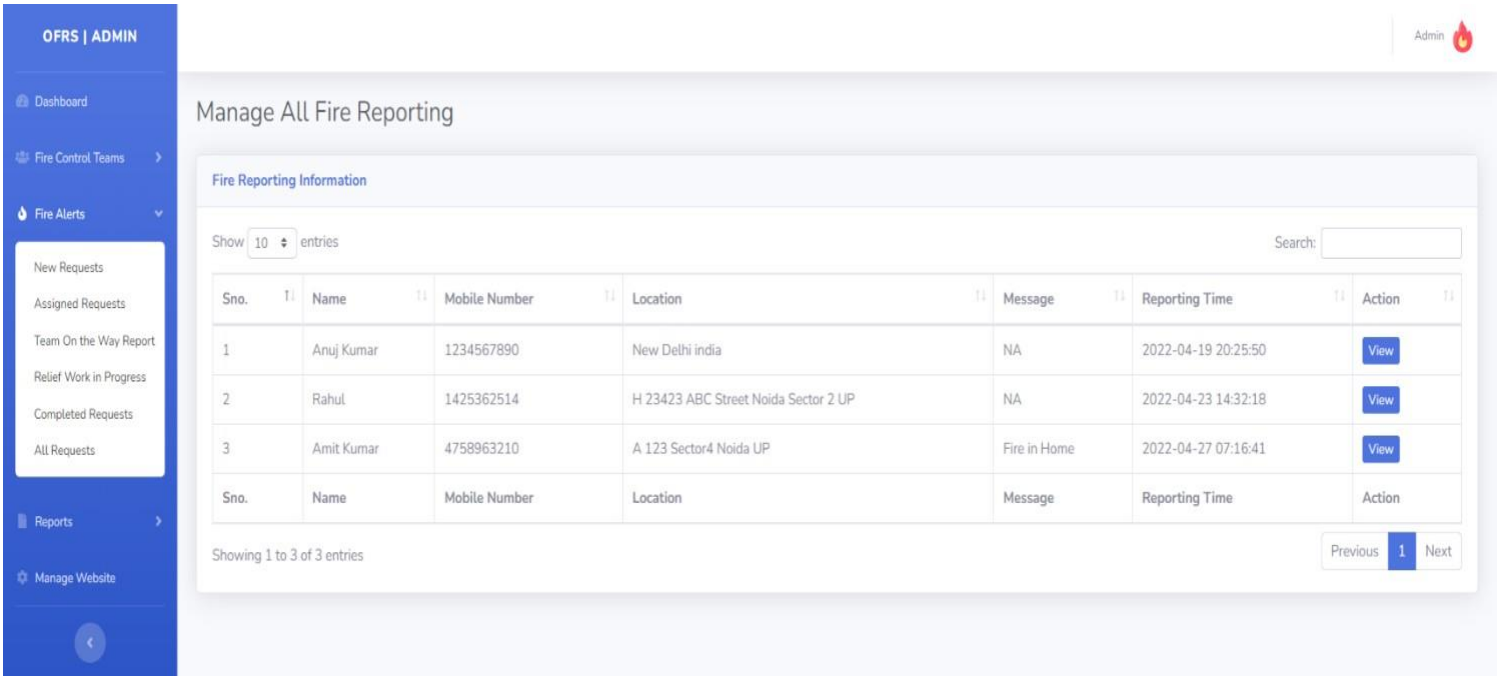

Figure 5.8: Fire alerts

The above figure 5.8 fire alerts option we can see so many options that are new requests, assigned requests, team on the way report, relief work in progress, completed requests and all requests. In new request option we can see the latest requests.

5.9 : REPORTS

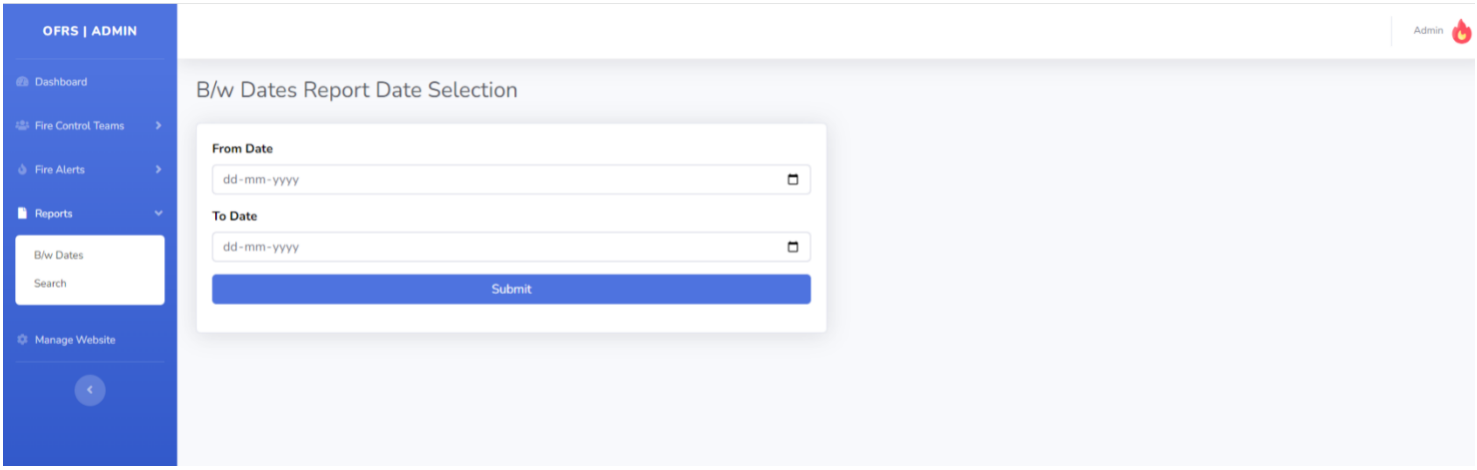

Figure 5.9: Reports

In the above figure 5.9 report the admin can assign the dates between dates report and date selection. One more feature is here we can search the report.

5.10 : MANAGE WEBSITE+

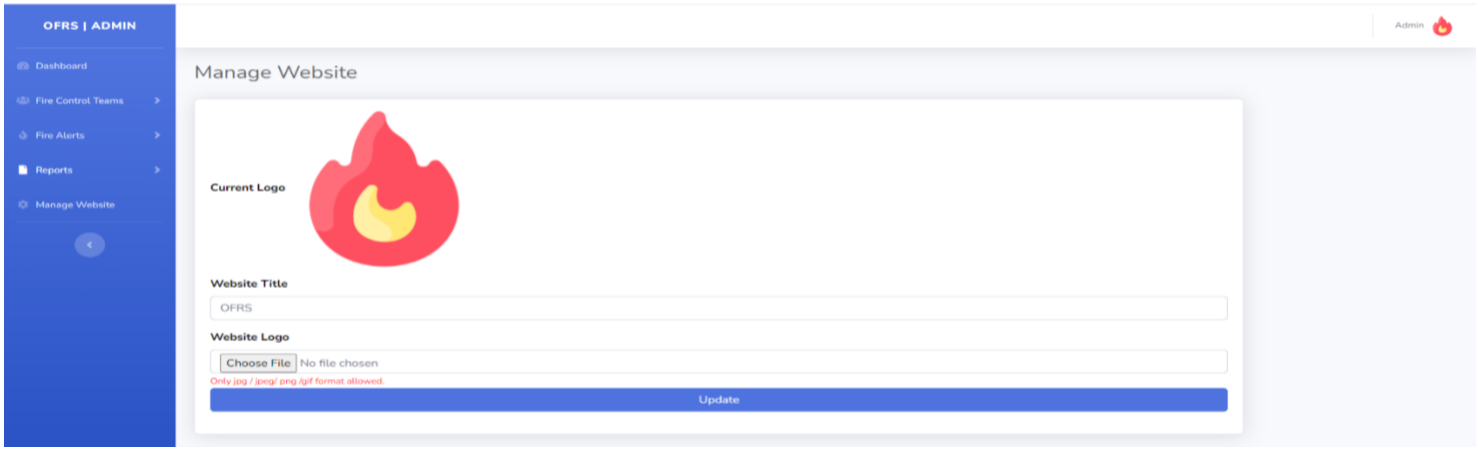

Figure 5.10: Manage website

Here In the above figure 5.10 we can change the logo and we can add the new logo also we can change the website tittle.

CONCLUSION

The conclusion for the online fire reporting system project is that it has been effective tool for quickly and efficiently gathering, organizing, and reporting fire-related data. It has allowed for a more comprehensive understanding of fire-related activities and trends in an area as well as providing a convenient and efficient way to report fire incidents and potential risks. Additionally, it has enabled more effective collaboration between fire departments, allowing for more comprehensive fire prevention and response.

REFERENCES

TEXTBOOKS

1. Design patterns, Erich Gamma, Richard Helen, Ralph Johnson, person Publications, 2013.
2. HTML5: The Missing Manual, 2nd edition.
3. MySQL/PHP Applications.
4. Beginning PHP5, Apache and MySQL Web Development by Elizabeth Naramore.
5. Randy Connolly, Ricardo Hoar, Fundamentals of Web Development, 1St edition.

WEBSITES

1. http://ieeexplore.ieee.org
2. W3Schools.com
3. PHP project tutorials