FINAL REPORT

ON

DISASTER AID

Submitted in partial fulfilment of the requirement for the award of the degree of

"MASTER OF COMPUTER APPLICATIONS"

(Five years Integrated Course)

Session 2019-2020

Submitted To :

Dr. Kuljit Kaur

Submitted By :

Name-:Vritesh Malhotra

Roll No-:2015CSC1117

Computer Science Department

Guru Nanak Dev University, Amritsar

CERTIFICATE

This is to certify that Vritesh Malhotra , a bonafide student of MCA(FYIC) -11TH Sem., has completed the project titled ‘Disaster Aid’ under my supervision and submitted it to Guru Nanak Dev University , Amritsar . He is fully responsible for the authentication of his work .

Project Guide

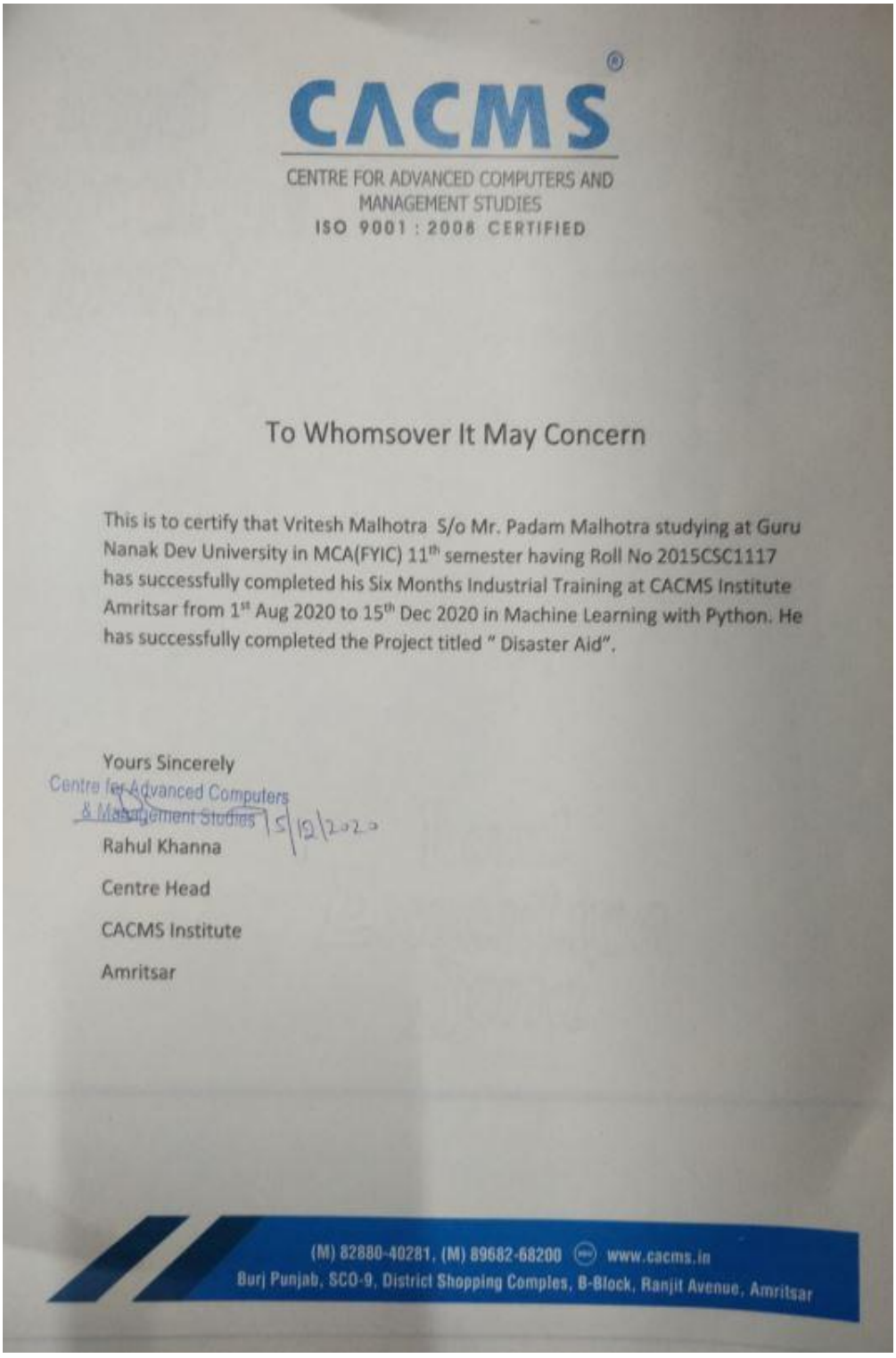
Dr. Kuljit Kaur

Professor

Comp. Sci. Dept

GNDU, Amritsar

LETTER



CACMS®

CENTRE FOR ADVANCED COMPUTERS AND MANAGEMENT STUDIES
ISO 9001 : 2008 CERTIFIED

To Whomsover It May Concern

This is to certify that Vritesh Malhotra S/o Mr. Padam Malhotra studying at Guru Nanak Dev University in MCA(FYIC) 11th semester having Roll No 2015CSC1117 has successfully completed his Six Months Industrial Training at CACMS Institute Amritsar from 1st Aug 2020 to 15th Dec 2020 in Machine Learning with Python. He has successfully completed the Project titled " Disaster Aid".

Yours Sincerely

Centre for Advanced Computers & Management Studies 15/12/2020

Rahul Khanna

Centre Head

CACMS Institute

Amritsar

(M) 82880-40281, (M) 89682-68200 www.cacms.in
Burj Punjab, SCO-9, District Shopping Complex, B-Block, Ranjit Avenue, Amritsar

DECLARATION

I, Vritesh Malhotra, do hereby that this project 'Disaster Aid ' is an authentic work carried out by me and is submitted by me in Guru Nanak Dev University , as my six months training project .

No part of this project is submitted to any other institution or university for any other award or degree.

Vritesh Malhotra

MCA(FYIC) 11th Semester

(2015CSC1117)

ACKNOWLEDGEMENT

Words are not just enough to express my gratitude but I take this opportunity to express my profound sense of gratitude and respect to all those who helped me throughout the duration of this project. I acknowledge the effort of those who have contributed significantly to my project.

A project is a major milestone during the study period of a student. As such this project was a challenge to me was an opportunity to prove my caliber. So it is a great pleasure to have the opportunity to extend my heart-felt thanks to everybody who helped me through the successful completion of this project.

I would like to express my special thanks of gratitude to my guide Dr Kuljit Kaur as well as our Head of Department (HOD) Dr.Hardeep Singh who gave me the golden opportunity to do this wonderful project on the topic Disaster Aid, which also helped me in doing a lot of Research and I came to know about so many new things I am really thankful to them.

Name : Vritesh Malhotra

(2015CSC1117)

COMPANY PROFILE

CACMS

CENTRE FOR ADVANCED COMPUTERS AND MANAGEMENT STUDIES

Centre for Advanced Computers and Management Studies (CACMS) is a leading IT education institute situated at Amritsar, which aims at providing advanced career-oriented computer Education to the students. CACMS is an ISO9001:2015 certified institute, Microsoft IT Partner, Hewlett Packard Enterprise delivery partner and Tally Authorized centre. Excellence is our habit and we strive for the best. Our accolades include the National Education Excellence Award, 2016. We believe "Future is Digital and with CACMS you can master it today".

Cacms offers variety of courses in the field of computers science and Accounting. Some of the courses offered are

1. Machine Learning
2. Python
3. R language
4. Hadoop
5. Java
6. Asp.net
7. Php
8. Web application development
9. Android app development
10. Computerized accounting using tally , busy ,quick books and many more

OUR DEPARTMENT

COMPUTER SCIENCE DEPARTMENT
GNDU, AMRITSAR

Our Computer Science department provides a well designed course curriculum that helps students to assimilate the subject theoretically and practically. The Computer Labs of the department are well equipped with latest PCs supported with leased line based internet connectivity of 10Mbps.

Moreover, the Department is graced with distinguished and highly qualified faculty. For the practical exposure of the technology, students are encouraged by the department to take up projects in diverse areas related to computer science. The students of the Department are also encouraged to participate in various co-scholastic activities to sharpen Soft-Skills and enrich their personalities. The Department has excellent campus recruitment for placements in prestigious companies.

TABLE OF CONTENTS

1. PROJECT DESCRIPTION

1.1 Project Name-:

Disaster Aid

1.2 Introduction :-

"Disaster Aid" software is designed to predict the future disasters by analyzing the past disasters, through graphical representation. This website will allow user to register and see different types of disasters, their past analysis and amount of loss caused that will help user to predict future disasters. The user can analyze the data by applying different techniques of retrieving it from graphical form and also can log in to see various NGO's that help people suffering from these disasters. This website will also provide an email notifications to all its registered users if any new data has been uploaded.

1.3 Features

Disaster Aid will tend to provide those tools that are useful in analyzing various graphs as well as different sorts of past data that will help in prediction of future disasters so that necessary steps would be taken to prevent the amount of loss happened in past. Not only analyzation of disasters is possible but also user can register and can see various organizations and NGO's that are working hard for survival of these people. The user will get these facilities in a single website. The aim of this project is to provide emerging knowledge to the user. The user can perform various operations in few clicks.

- **Death rate due to natural Disasters:** Globally, over the past decade, natural disasters accounted for an average of 0.1% of total deaths. This was, however, highly variable to high- impact events and ranged from 0.01% to 0.4% of total deaths. What we observe is that for most countries the share of deaths from natural disasters are very low in most years. Often it can be zero – with no loss of life to disasters – or well below 0.01%. But we also see clearly the effects of low-frequency but high- impact events: in 2010, more than 70% of deaths in Haiti were the result of the Port-au-Prince earthquake. The annual number of deaths from natural disasters is also available by country since 1990. This can be explored in the interactive map.
- **Number of deaths by type of natural disaster**: In the visualization we see the number of deaths globally by type of disaster – earthquakes, volcanic activity, or

extreme. This data is shown from 1900 onwards. If we explore these categories we see that historically earthquakes, floods and droughts could result in a large number of deaths. Over the last few decades, most years with a high death toll tend result from large earthquake events. Once again, the devastating impacts of drought, flood and earthquake events of the past become clear. But what we also observe is the significant decline in deaths from almost all types of disaster with the exception of earthquakes and extreme weather. When we consider that the world population has also grown rapidly over this period, this reduction in deaths is even more impressive.

- **Injuries and displacement from disasters**: Human impacts from natural disasters are not fully captured in mortality rates. Injury, homelessness, and displacement can all have a significant impact on populations. The visualization shows the number of people displaced internally (i.e. within a given country) from natural disasters. Note that these figures report on the basis of new cases of displaced persons: if someone is forced to flee their home from natural disasters more than once in any given year, they will be recorded only once within these statistics.

- **Natural disasters by type:** This website will show various different kinds of disasters along with the deadliest types and no of deaths caused by these disasters in particular year. Various disasters include: Earthquakes, Volcanoes, Landslides, Famines and Droughts, Hurricanes, Tornadoes and Cyclones etc.

- **Extreme precipitation and flooding**: In the visualization we see the global precipitation anomaly each year; This precipitation anomaly is measured relative to the century average from 1901 to 2000. Positive values indicate a wetter year than normal; negative values indicate a drier year. however, flooding events are often caused by intense rainfall over much shorter periods. Flooding events tend to occur when there is extremely high rainfall over the course of hours or days.

- **Extreme temperature(Hot & cold):** Extreme temperature risks to human health and mortality can result from both exposure to extreme heat and cold. When we look at the trajectory of unusually high summer temperatures over time (defined as 'unusually high' in the context of historical records) we see an upward trend in recent decades. Whilst we often focus on heatwave and warm temperatures in relation to weather extremes, extremely low temperatures can often have a high toll on human health and mortality.

- **Disasters costs by country:** Since economic losses from disasters in relation to GDP is the indicator adopted by all countries within the UN Sustainable Development Goals, this data is also now reported for each country.

- **The type of disaster matters:** The type of disaster matters to how newsworthy networks find it to be. The visualizations show the extent of this observed "news effect". On the other hand, the gradual disasters that tend to affect more lives build up slowly, allowing more time for preventative measures to be taken.

- **Email notifications to user:** Every time when a new disaster comes or any new information is added notification will be sent to the registered users through email.

- **Organization welfares:** Information about many different organizations and NGOs who are working hard for people will also be provided in this website, so that user can get the every possible help to understand and analyze.

2. HARDWARE AND SOFTWARE REQUIREMENTS

2.1. Software Requirements(Recommended):-

The technical specifications of requirements for the software are as follows:

- Any Operating System (Windows, Linux, MAC)
- Web browser
- WampServer 2.5
- VS Code
- Spyder IDE

2.2. Hardware Requirements(Recommended):-

The technical specifications of requirements for the software are as follows:

- Any PC rocessor
- 512 MB RAM
- Keyboard mouse
- Internet connection

3. DEVELOPEMENT TOOLS

3.1- FRONT END

HTML 5:

Introduction: HTML stands for Hyper Text Markup Language. It is used to design web pages using markup language. HTML is the combination of Hypertext and Markup language. Hypertext defines the link between the web pages. Markup language is used to define the text document within tag which defines the structure of web pages. HTML 5 is the fifth and current version of HTML. It has improved the markup available for documents and has introduced application programming interfaces (API) and Document Object Model (DOM).

Features:

- It has introduced new multimedia features which supports audio and video controls by using <audio> and <video> tags.
- There are new graphics elements including vector graphics and tags.
- Enrich semantic content by including <header> <footer>, <article>, <section> and <figure> are added.
- Drag and Drop- The user can grab an object and drag it further dropping it on a new location.
- Geo-location services- It helps to locate the geographical location of a client.
- Web storage facility which provides web application methods to store data on web browser.
- Uses SQL database to store data offline.
- Allows to draw various shapes like triangle, rectangle, circle, etc.
- Capable of handling incorrect syntax.
- Easy DOCTYPE declaration i.e. <!doctype html>

CSS 3:

Cascading style sheets (CSS) is a style sheet language used for describing the presentation of a document written in a markup language. CSS is designed primarily to enable the separation of document content from document presentation, including aspects such as the layout, colors, and fonts. It can also be used to display the web page differently which can change depending on your screen size. Changes to the design of a document can be applied quickly and easily.

Some of the most important CSS3 modules are:

- Selectors
- Box model
- Backgrounds and Borders
- Image values and replaced content
- Text effects
- 2D/3D transformations
- Animations
- Multiple column layout

Bootstrap:

Bootstrap is a free and open-source tool collection for creating responsive websites and web applications. It is the most popular HTML, CSS, and JavaScript framework for developing responsive, mobile-first web sites. It solves many problems which we had once, one of which is the cross-browser compatibility issue. Nowadays, the websites are perfect for all the browsers (IE, Firefox and Chrome) and for all sizes of screens (Desktop, Tablets and Phones). All thanks to Bootstrap developers -Mark Otto and Jacob Thornton of Twitter, though it was later declared to be an open-source project.

Bootstrap Features:

- Faster and Easier Web-Development.
- It creates Platform-independent web-pages.
- It creates Responsive Web-pages.
- It designed to be responsive to mobile devices too.

JQUERY:

JQuery is a lightweight, "write less, do more", JavaScript library. The purpose of jQuery is to make it much easier to use JavaScript on your website. JQuery takes a lot of common tasks that require many lines of JavaScript code to accomplish, and wraps them into methods that you can call with a single line of code. JQuery also simplifies a lot of the complicated things from JavaScript, like AJAX calls and DOM manipulation.

The jQuery library contains the following features:

- HTML/DOM manipulation
- CSS manipulation
- HTML event methods
- Effects and animations
- AJAX
- Utilitie

3.2- BACK END

PYTHON:

Python is a high-level, interpreted scripting language developed in the late 1980s by Guido van Rossum at the National Research Institute for Mathematics and Computer Science in the Netherlands. The initial version was published at the alt.sources newsgroup in 1991, and version 1.0 was released in 1994.

Python 2.0 was released in 2000, and the 2.x versions were the prevalent releases until December 2008. At that time, the development team made the decision to release version 3.0, which contained a few relatively small but significant changes that were not backward compatible with the 2.x versions. Python 2 and 3 are very similar, and some features of Python 3 have been backported to Python 2. But in general, they remain not quite compatible.

Both Python 2 and 3 have continued to be maintained and developed, with periodic release updates for both. As of this writing, the most recent versions available are 2.7.15 and 3.6.5. However, an official End of Life date of January 1, 2020 has been established for Python 2, after which time it will no longer be maintained. If you are a newcomer to Python, it is recommended that you focus on Python 3, as this tutorial will do.

Python is still maintained by a core development team at the Institute, and Guido is still in charge, having been given the title of BDFL (Benevolent Dictator For Life) by the Python community. The name Python, by the way, derives not from the snake, but from the British comedy troupe Monty Python's Flying Circus, of which Guido was, and presumably still is, a fan. It is common to find references to Monty Python sketches and movies scattered throughout the Python documentation.

Features of Python:

Readable: Python is a very readable language.

Easy to Learn: Learning python is easy as this is an expressive and high level programming language, which means it is easy to understand the language and thus easy to learn.

Cross platform: Python is available and can run on various operating systems such as Mac, Windows, Linux, UNIX etc. This makes it a cross platform and portable language.

Open Source: Python is an open source programming language.

Large standard library: Python comes with a large standard library that has some handy codes and functions which we can use while writing code in Python.

Free: Python is free to download and use. This means you can download it for free and use it in your application. Python is an example of FLOSS (Free/Libre Open Source Software), which means you can freely distribute copies of this software, read its source code and modify it.

Supports exception handling: If you are new, you may wonder what is an exception? An exception is an event that can occur during program exception and can disrupt the normal flow of program. Python supports exception handling which means we can write less error prone code and can test various scenarios that can cause an exception later on.

Advanced features: Supports generators and list comprehensions. We will cover these features later.

Automatic memory management: Python supports automatic memory management which means the memory is cleared and freed automatically. You do not have to bother clearing the memory.

MACHINE LEARNING:

Machine learning is a subfield of artificial intelligence (AI). The goal of machine learning generally is to understand the structure of data and fit that data into models that can be understood and utilized by people.

Although machine learning is a field within computer science, it differs from traditional computational approaches. In traditional computing, algorithms are sets of explicitly programmed instructions used by computers to calculate or problem solve. Machine learning algorithms instead allow for computers to train on data inputs and use statistical analysis in order to output values that fall within a specific range. Because of this, machine learning facilitates computers in building models from sample data in order to automate decision-making processes based on data inputs.

Any technology user today has benefitted from machine learning. Facial recognition technology allows social media platforms to help users tag and share photos of friends. Optical character recognition (OCR) technology converts images of text into movable type. Recommendation engines, powered by machine learning, suggest what movies or television shows to watch next based on user preferences. Self-driving cars that rely on machine learning to navigate may soon be available to consumers.

Machine learning is a continuously developing field. Because of this, there are some considerations to keep in mind as you work with machine learning methodologies, or analyze the impact of machine learning processes.

List of Common Machine Learning Algorithms

- Linear Regression.
- Logistic Regression.
- Decision Tree.
- SVM.
- SVR
- Naive Bayes.
- kNN.
- Random Forest.

Applications of Machine Learning Algorithms:

The developed machine learning algorithms are used in various applications such as −

- Vision processing
- Language processing
- Forecasting things like stock market trends, weather
- Pattern recognition
- Games
- Data mining
- Expert systems
- Robotics

DJANGO:

Django was initially developed between 2003 and 2005 by a web team who were responsible for creating and maintaining newspaper websites. After creating a number of sites, the team began to factor out and reuse lots of common code and design patterns. This common code evolved into a generic web development framework, which was open-sourced as the "Django" project in July 2005.

Django has continued to grow and improve, from its first milestone release (1.0) in September 2008 through to the recently-released version 2.0 (2017). Each release has added new functionality and bug fixes, ranging from support for new types of databases, template engines, and caching, through to the addition of "generic" view functions and classes (which reduce the amount of code that developers have to write for a number of programming tasks).

Django is a high-level Python web framework that enables rapid development of secure and maintainable websites. Built by experienced developers, Django takes care of much of the hassle of web development, so you can focus on writing your app without needing to reinvent the wheel. It is free and open source, has a thriving and active community, great documentation

Django helps you write software that is:

- **Complete:** Django follows the "Batteries included" philosophy and provides almost everything developers might want to do "out of the box". Because everything you need is part of the one "product", it all works seamlessly together, follows consistent design principles, and has extensive and up-to-date documentation.

- **Versatile:** Django can be (and has been) used to build almost any type of website — from content management systems and wikis, through to social networks and news sites. It can work with any client-side framework, and can deliver content in almost any format (including HTML, RSS feeds, JSON, XML, etc.). The site you are currently reading is built with Django!
  Internally, while it provides choices for almost any functionality you might want (e.g. several popular databases, templating engines, etc.); it can also be extended to use other components if needed.

- **Secure:** Django helps developers avoid many common security mistakes by providing a framework that has been engineered to "do the right things" to protect the website automatically. For example, Django provides a secure way to manage user accounts and passwords, avoiding common mistakes like putting session information in cookies where it is vulnerable (instead cookies just contain a key, and the actual data is stored in the database) or directly storing passwords rather than a password hash. A password hash is a fixed-length value created by sending the password through a cryptographic hash function. Django can check if an entered password is correct by running it through the hash function and comparing the output to the stored hash value. However due to the "one-way" nature of the function, even if a stored Hash value is compromised it is hard for an attacker to work out the original password. Django enables protection against much vulnerability by default, including SQL injection, cross-site scripting, cross-site request forgery and click jacking (see Website security for more details of such attacks).

- **Scalable:** Django uses a component-based “shared-nothing” architecture (each part of the architecture is independent of the others, and can hence be replaced or changed if needed). Having a clear separation between the different parts means that it can scale for increased traffic by adding hardware at any level: caching servers, database servers, or application servers. Some of the busiest sites have successfully scaled Django to meet their demands.
- **Maintainable:** Django code is written using design principles and patterns that encourage the creation of maintainable and reusable code. In particular, it makes use of the Don't Repeat Yourself (DRY) principle so there is no unnecessary duplication, reducing the amount of code. Django also promotes the grouping of related functionality into reusable "applications" and, at a lower level, groups related code into modules (along the lines of the Model View Controller (MVC) pattern).

- **Portable:** Django is written in Python, which runs on many platforms. That means that you are not tied to any particular server platform, and can run your applications on many flavors of Linux, Windows, and Mac OS X. Furthermore, Django is well-supported by many web hosting providers, who often provide specific infrastructure and documentation for hosting Django sites.

4. DETAILED ANALYSIS

4.1 Problem Definition

Natural disasters kill on average 60,000 people per year, globally. Globally, disasters were responsible for 0.1% of deaths over the past decade. This was highly variable, ranging from 0.01% to 0.4%. Deaths from natural disasters have seen a large decline over the past century – from, in some years, millions of deaths per year to an average of 60,000 over the past decade. Historically, droughts and floods were the most fatal disaster events. Deaths from these events are now very low – the most deadly events today tend to be earthquakes. Disasters affect those in poverty most heavily: high death tolls tend to be centered in low-to-middle income countries without the infrastructure to protect and respond to events. Disaster Aid will tend to provide those tools that are useful in analyzing various graphs as well as different sorts of past data that will help in prediction of future disasters so that necessary steps would be taken to prevent the amount of loss happened in past. Not only analyzation of disasters is possible but also user can register and can see various organizations and NGO's that are working hard for survival of these people. The user will get these facilities in a single website. The aim of this project is to provide emerging knowledge to the user. The user can perform various operations in few clicks.

4.2 Inputs

Our system will receive inputs from admin interface as well as user interface. Thus we can categorize inputs into three sections:

4.2.1 Input by Admin :-

- Login

- Manage Articles, Admin will add/edit/delete Articles in which our Web app could be used.
- Change/Recover password
- Manage Organizations, Admin will add/edit/delete Organizations in which our Web app could be used.
- Manage Types, Admin will add/edit/delete Types in which our Web app could be used.
- Manage Contacts, Admin will add/edit/delete Contacts in which our Web app could be used.
- Manage Reviews, Admin will add/edit/delete Contacts in which our Web app could be used.

4.2.2 Input by User :-

- Sign up/login
- Users can register themselves by providing basic details like username, email, password.

.

- Change/Recover password
- Registered users can view the already provided statistics about various disasters and their effects.
- Users can make the visualizations according to their own needs.
- Users can view their profile and can change their basic information such as Email, Password, phone number and profile photo.

4.2.3 Constraints/Conditions :-

To keep the system hustle free, it will operate under few conditions like:

- No user is allowed to get access in web app unless he/she has registered himself/herself.
- Only registered users can make visualizations according to them.

4.2.4 Outputs :-

- User will be able to make all the available visualizations listed in our web app.

- Admin will see all the added articles, organizations, and types and will be able to add more.

5. DESIGN

5.1 DATABASE DESIGN

5.1.1 USERS:

Sr. No.	Attributes	Data Type	Constraints
1.	Id	VARCHAR(20)	PRIMARY KEY
2.	First Name	VARCHAR(20)	NOT NULL
3.	Last Name	VARCHAR(20)	NOT NULL
4.	E-mail	VARCHAR(50)	NOT NULL
5.	Password	VARCHAR(10)	NOT NULL

5.1.2 DISASTERS:

Sr. No.	Attributes	Data Type	Constraints
1.	Id	VARCHAR(20)	PRIMARY KEY
2.	Name	VARCHAR(20)	NOT NULL
3.	Image	VARCHAR(MAX)	NOT NULL
4.	Description	VARCHAR(MAX)	NOT NULL
5.	Risk	VARCHAR(MAX)	NOT NULL
6.	Getting Help	VARCHAR(20)	NOT NULL

5.1.3 COMMUNITIES:

Sr. No.	Attributes	Data Type	Constraints
1.	Id	VARCHAR(20)	PRIMARY KEY
2.	Image	VARCHAR(MAX)	NOT NULL
3.	Name	VARCHAR(20)	NOT NULL
4.	Description	VARCHAR(MAX)	NOT NULL
5.	Contact Info	INT	UNIQUE

5.1.4 NEWS:

Sr. No.	Attributes	Data Type	Constraints
1.	Id	VARCHAR(20)	PRIMARY KEY
2.	Title	VARCHAR(20)	NOT NULL
3.	Image	VARCHAR(Max)	NOT NULL
4.	Descrption	VARCHAR(Max)	NOT NULL
5.	Date	VARCHAR(20)	NOT NULL

5.1.5 POST:

Sr. No.	Attributes	Data Type	Constraints
1.	Id	VARCHAR(20)	PRIMARY KEY
2.	Title	VARCHAR(20)	NOT NULL
3.	Content	VARCHAR(20)	NOT NULL

5.2 PROCESS DESIGN

5.2.1- DATA FLOW DIAGRAMS

Data Flow Diagrams show information transfers and process steps of a system. The general concept is an approach of a depicting how input occur in a system, further process and what runs out.

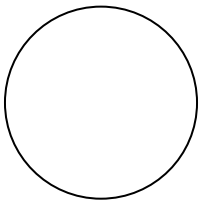
5.2.1.1 Data flow diagrams (DFD) notations:

a) **External entities*:*** Also known as actors, sources or sinks, and terminators, external entities produce and consume data that flows between the entity and the system being diagrammed.

Symbol

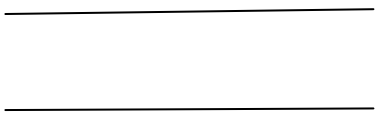
b) **Process:** An activity that changes or transforms data flows. Since they transform incoming data to outgoing data, all processes must have inputs and outputs on a DFD.

Symbol



c) **Data Store:** A data store does not generate any operations but simply holds data for later access. Data stores could consist of files held long term or a batch of documents stored briefly while they wait to be processed.

Symbol

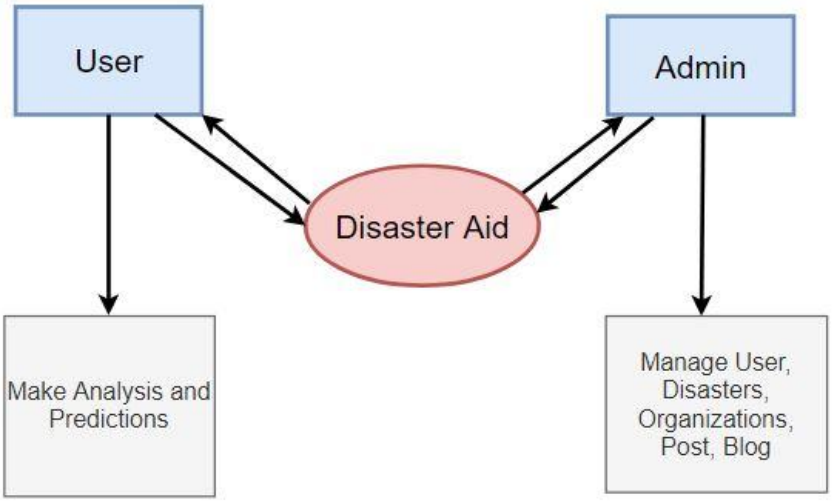


d) Data Flow: Movement of data between external entities, processes and data stores is represented with an arrow symbol, which indicates the direction of flow.

Symbol

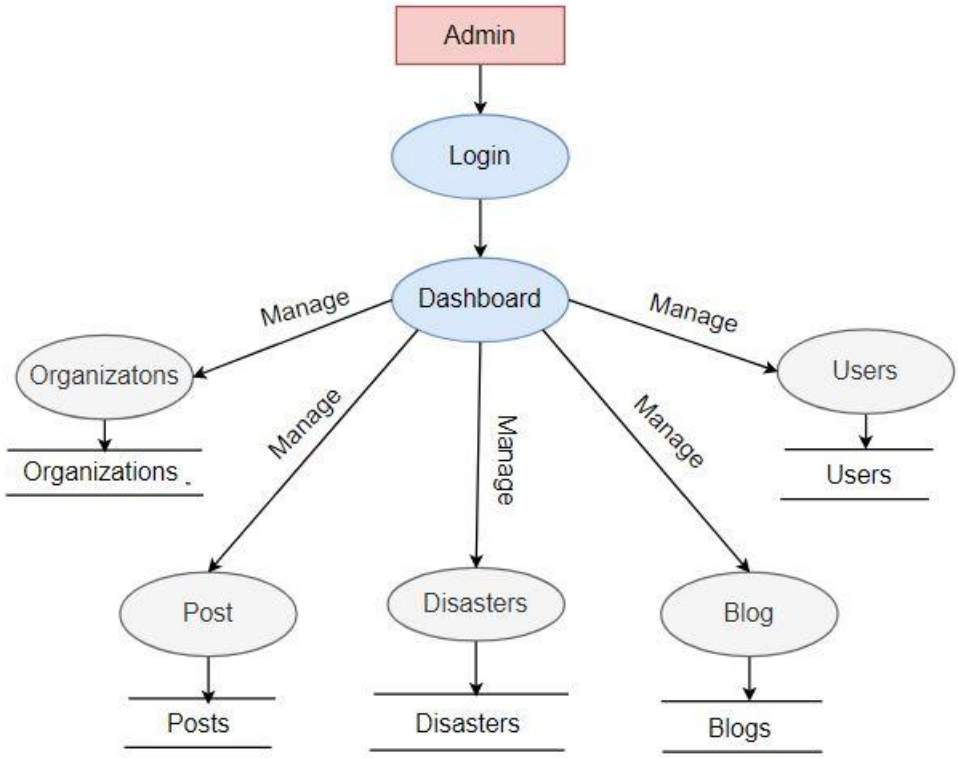
5.2.1.2 DFD LEVELS:

a) Level 0 DFD's-The zero level DFD shows the main processes within the system. Each of these processes can be further broken into processes.

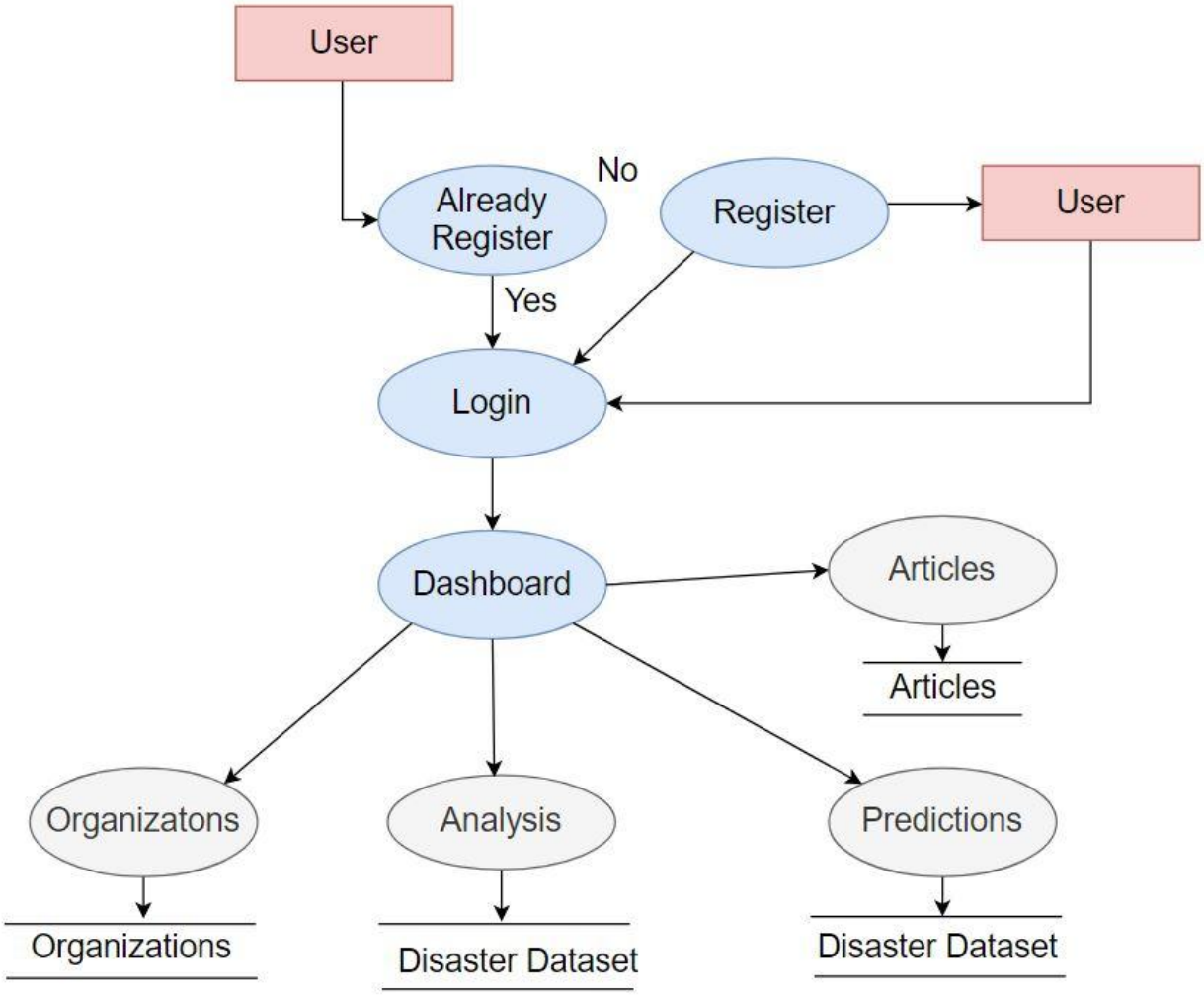


b) LEVEL 1 DFD's

1st Level Admin Side DFD

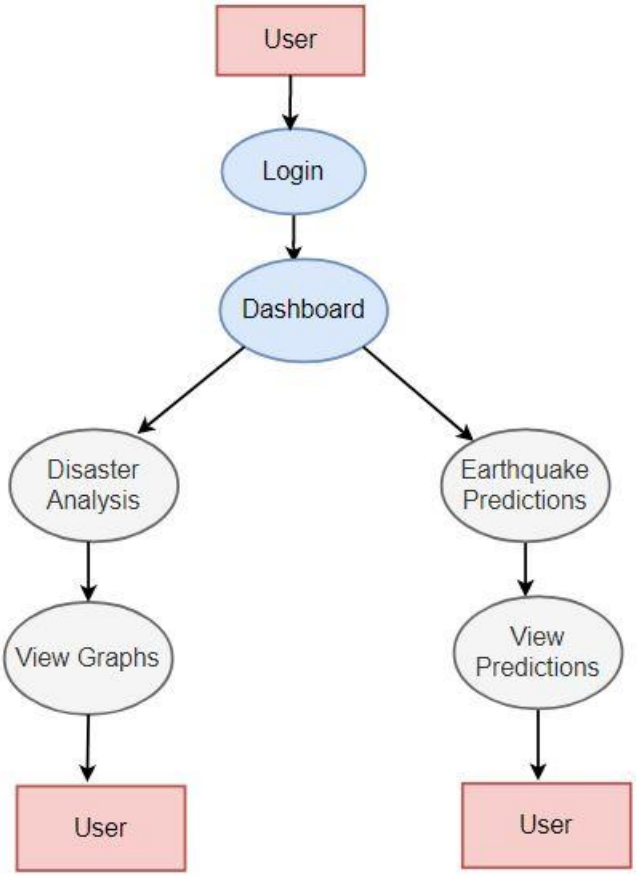


1st Level User Side DFD



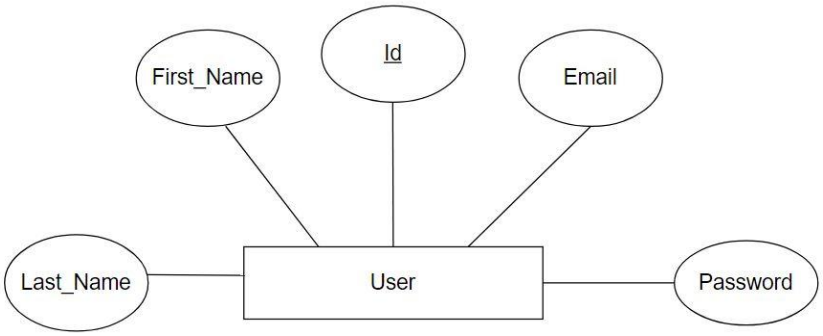
c) 2nd Level DFD's

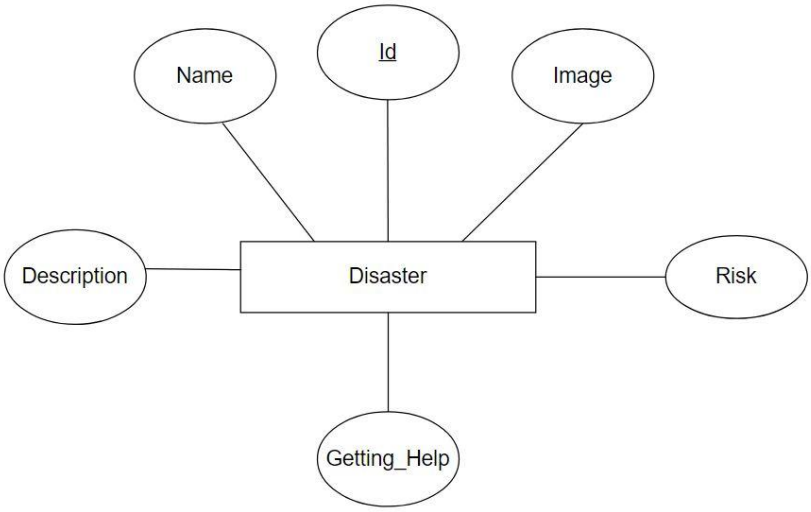
2nd Level User n side DFD

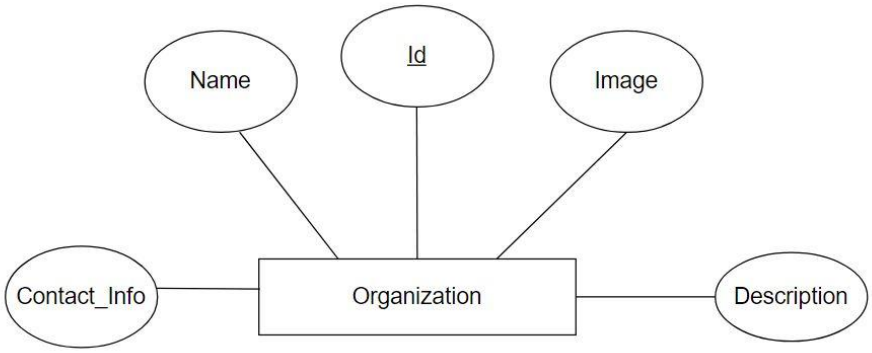


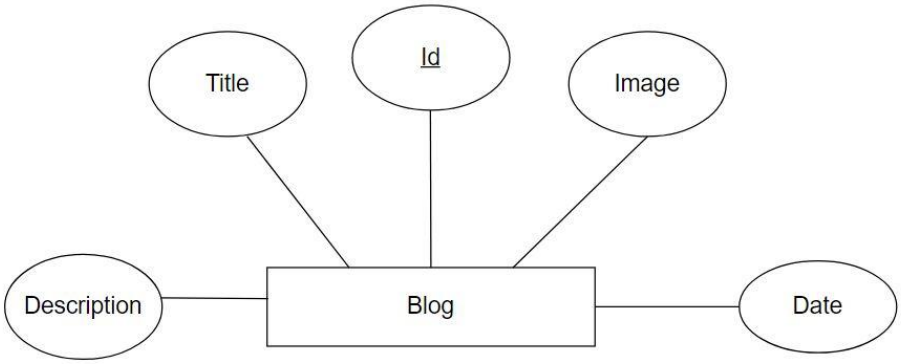
5.3 ENTITY RELATIONSHIP DIAGRAM

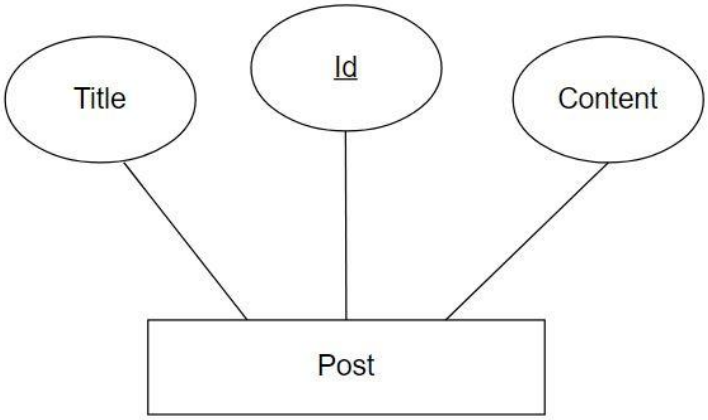
An **entity–relationship model** (**ER model** for short) describes interrelated things of interest in a specific domain of knowledge. A basic ER model is composed of entity types (which classify the things of interest) and specifies relationships that can exist between instances of those entity types.


First_Name
Id
Email
Last_Name
User
Password


Name
Id
Image
Description
Disaster
Risk
Getting_Help


Name
Id
Image
Contact_Info
Organization
Description





5.4 MODULE DESIGN

5.4.1 SignUp Module :-

User will have to register by selecting register or sign up link and will provide his/her credentials for the first time. Registered users are granted privileges beyond those granted to unregistered users.

5.4.2 Login Module :-

The login module is for the user who had already signed up. The login module is mainly added for an authentication purpose, if the user enters the wrong details he/she

would not be allowed to enter the website. The login is broadly classified into two types User Login and Admin Login

5.4.3 User Module:-

Once if the user enters the User email and password in the login module, if the authentication is successful user will be redirected to the user module where user can browse through properties and view their details.

5.4.4 Admin Module:-

Once if the Admin entered the correct user name and the password then admin will be directed to the admin page where admin can perform various tasks such as adding and editing of articles, organizations, types and reviews.

,

6. DESIGN ENCODING

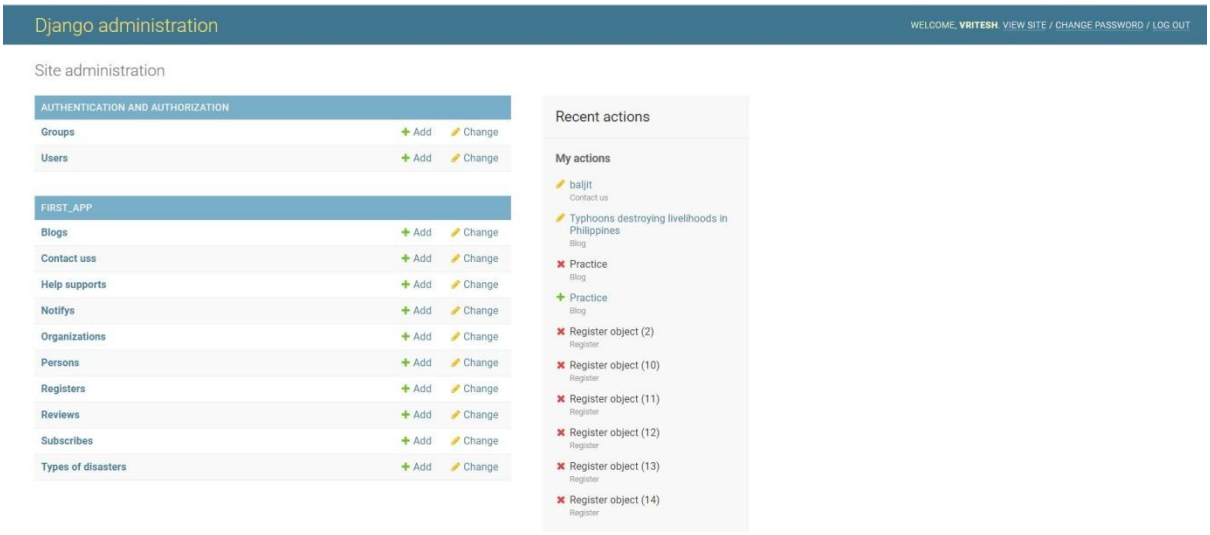
6.1- INTERFACE

Admin Login

Admin will login on this page.

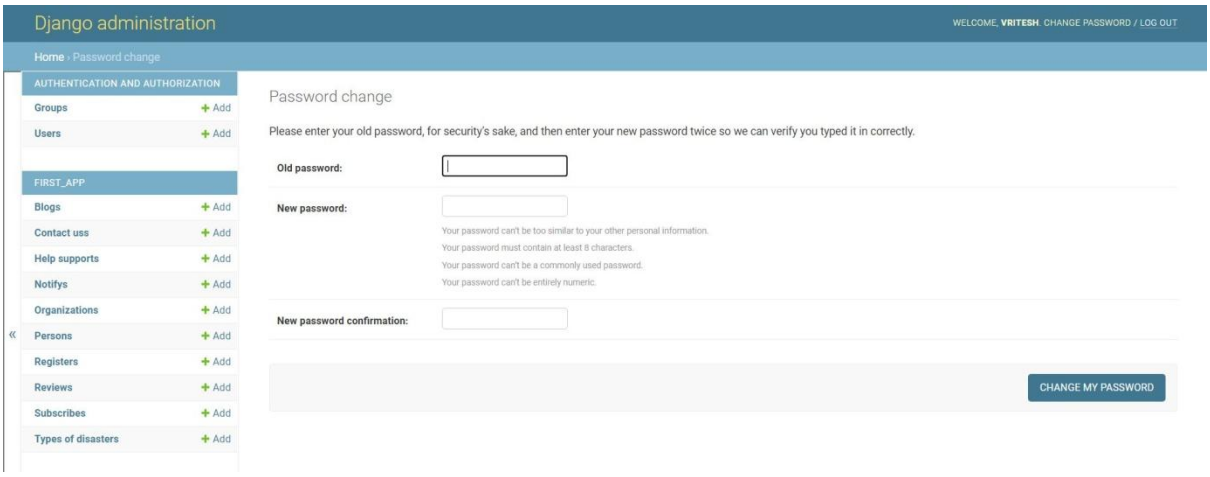
Admin Interface

After login, this page will open where admin will be able to perform various tasks.



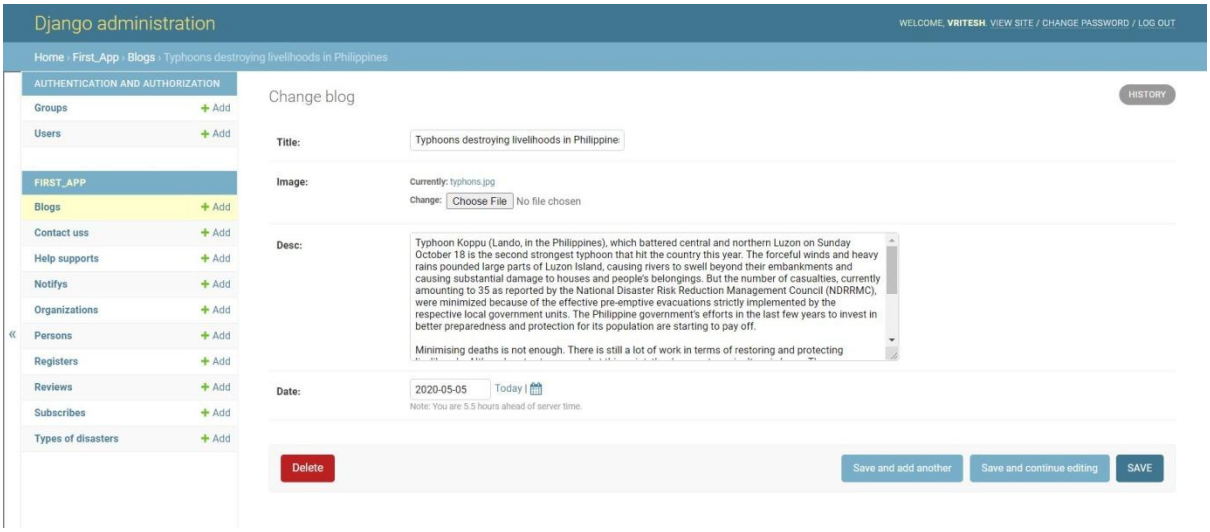
Change Password

After clicking on **change password** ,a modal will open where admin will be able to change his password.



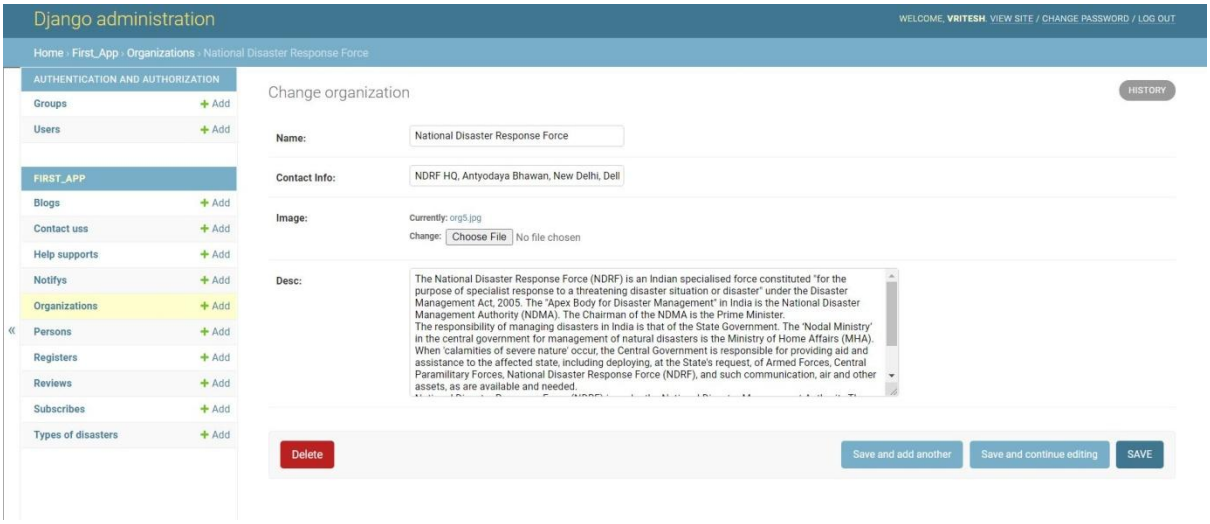
Manage Articles

Here admin will be able to add, edit and delete articles.



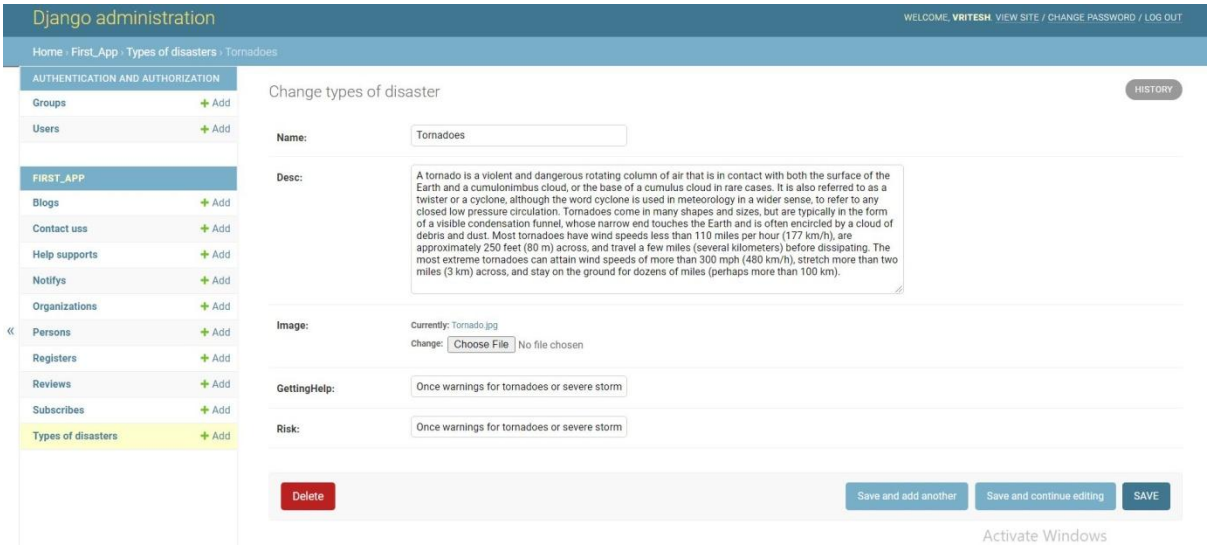
Manage Organizations

Here admin will be able to add, edit and delete organizations.



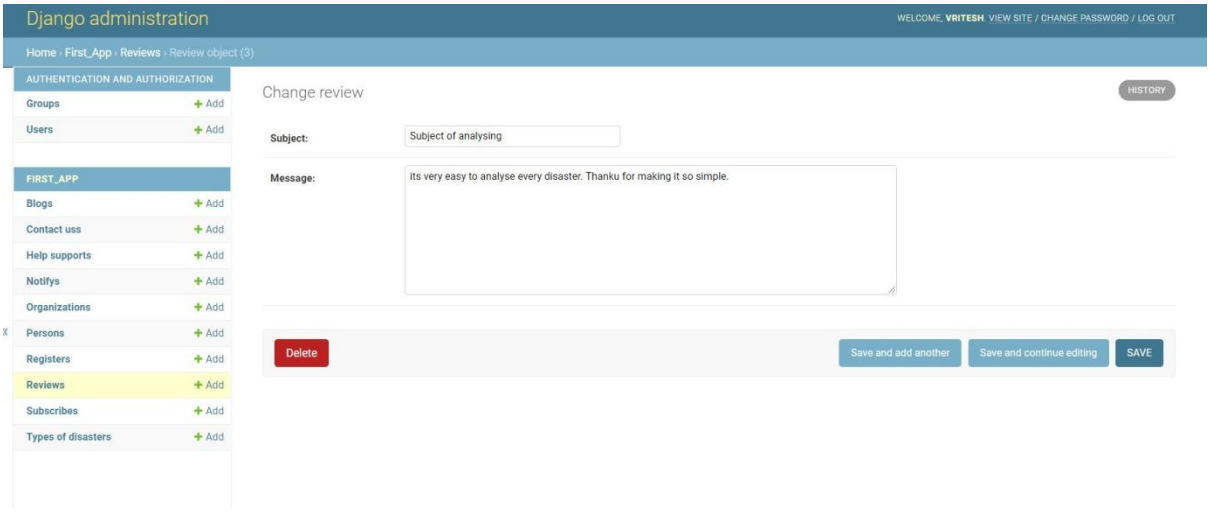
Manage Types Of Disasters

Here admin will be able to add, edit and delete types of disasters.



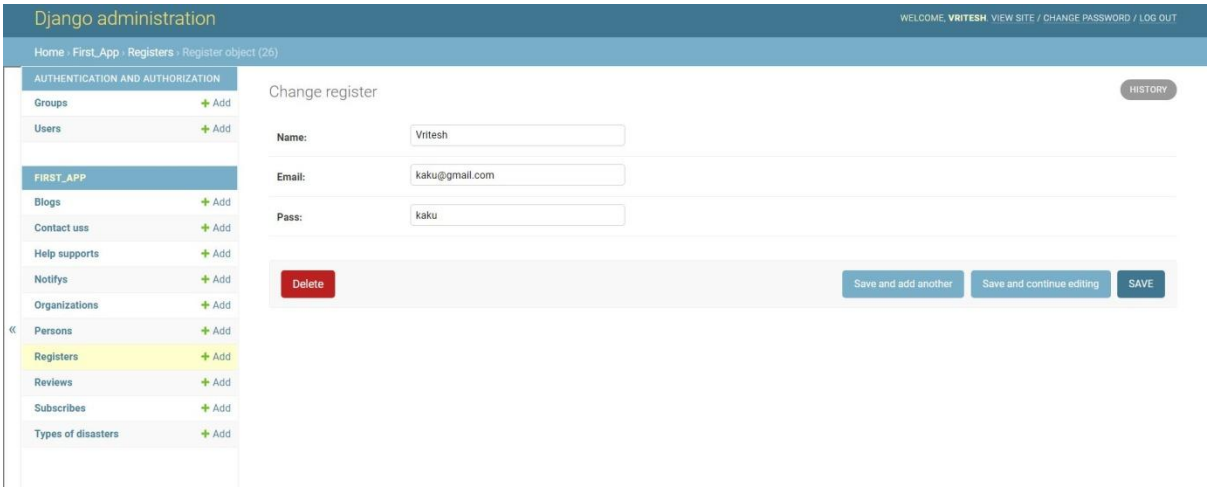
Manage Reviews

Here admin will be able to manage reviews given by users.



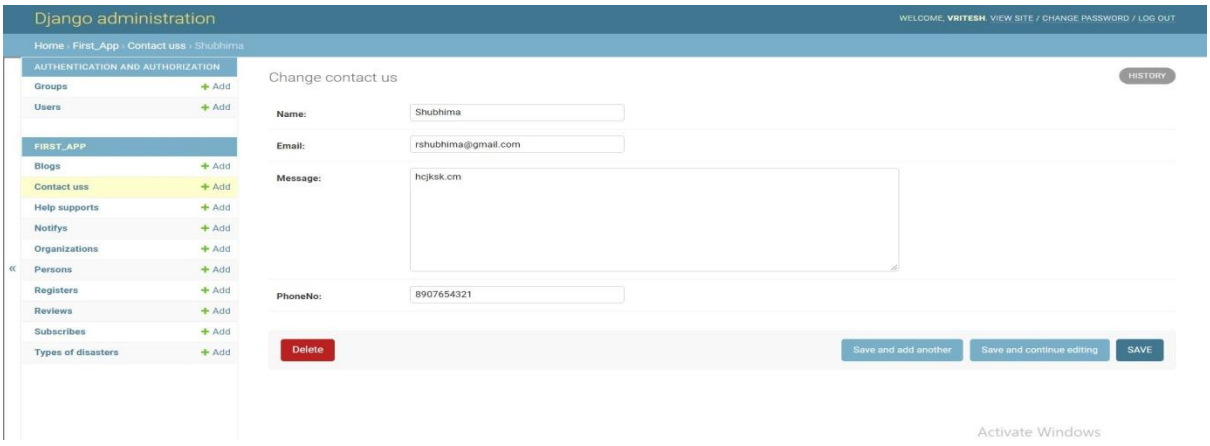
Manage Users

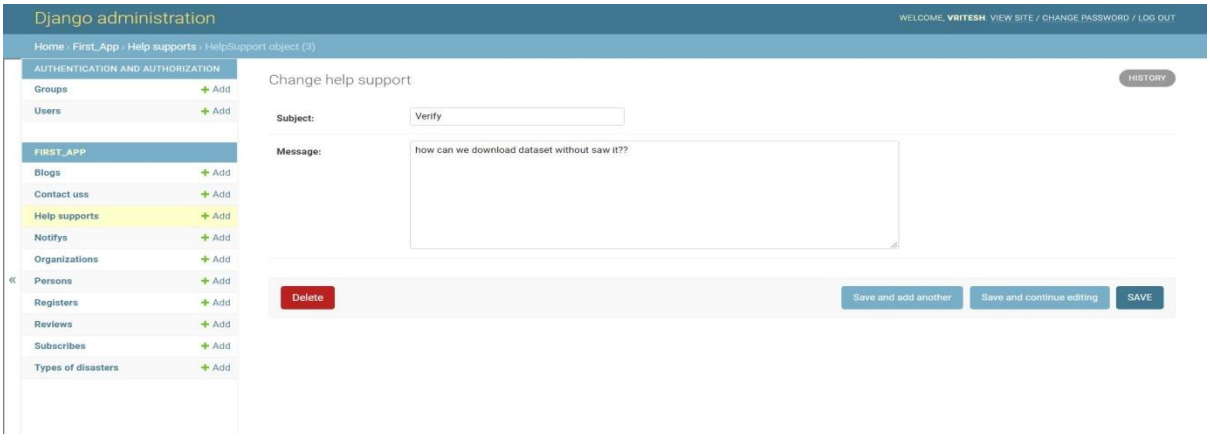
Here admin will be able to manage all the registered users.



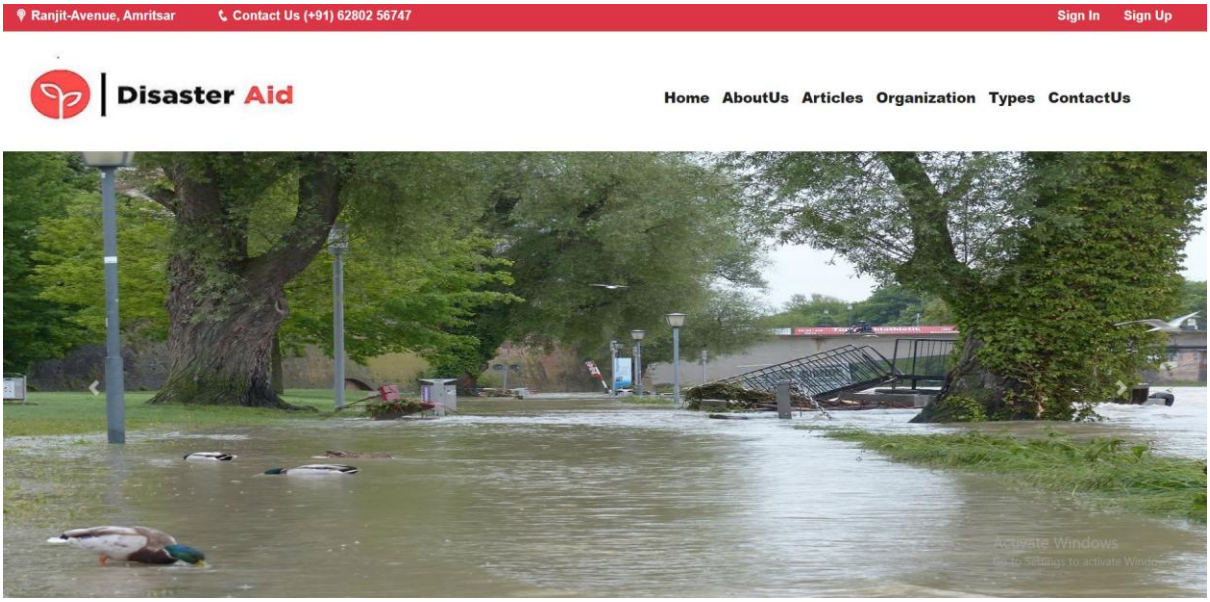
Manage Queries

Here admin will be able to manage all the queries by people.





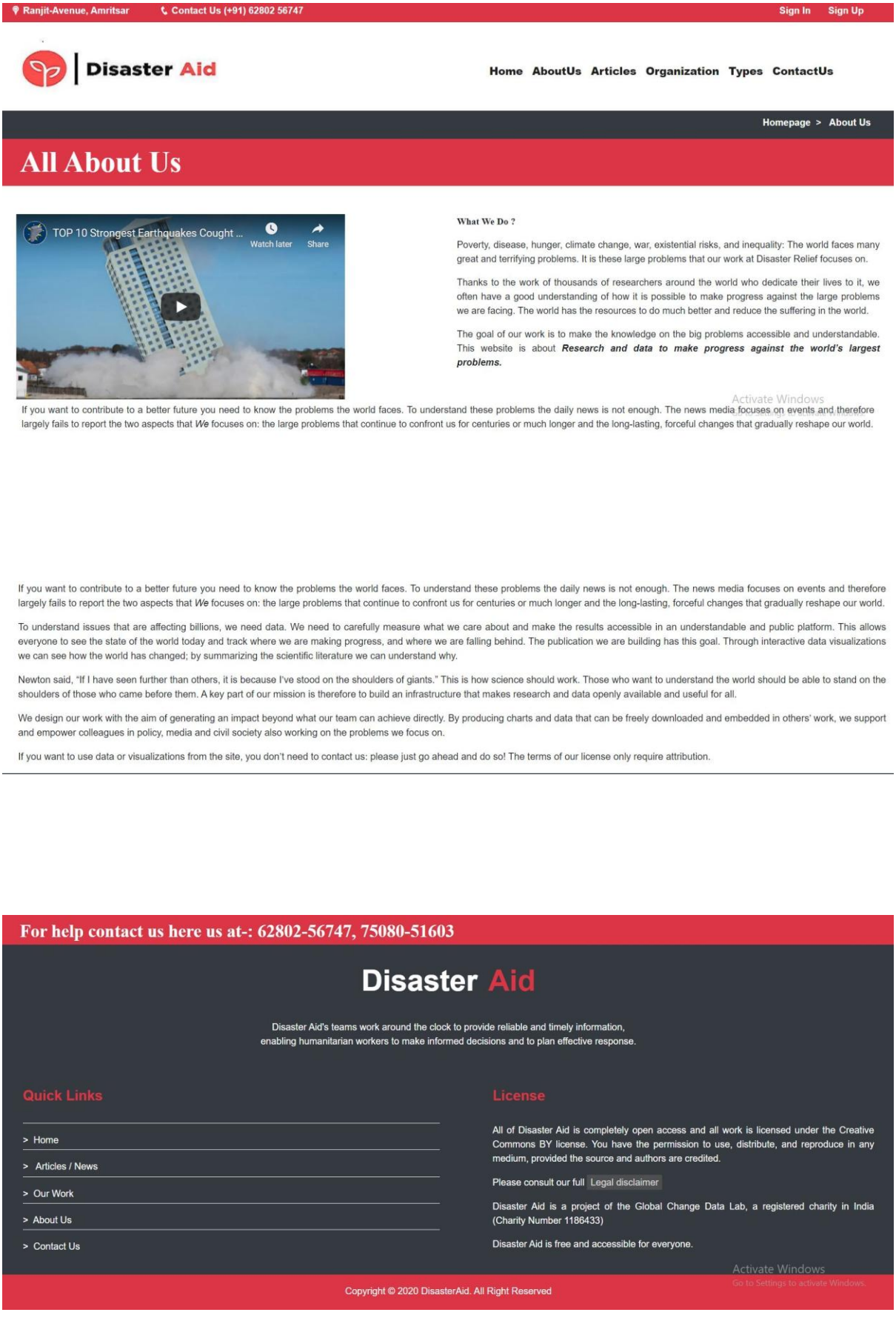
Home Page


Ranjit-Avenue, Amritsar
Contact Us (+91) 62802 56747
Sign In
Sign Up
Disaster Aid
Home
AboutUs
Articles
Organization
Types
ContactUs
Activate Windows

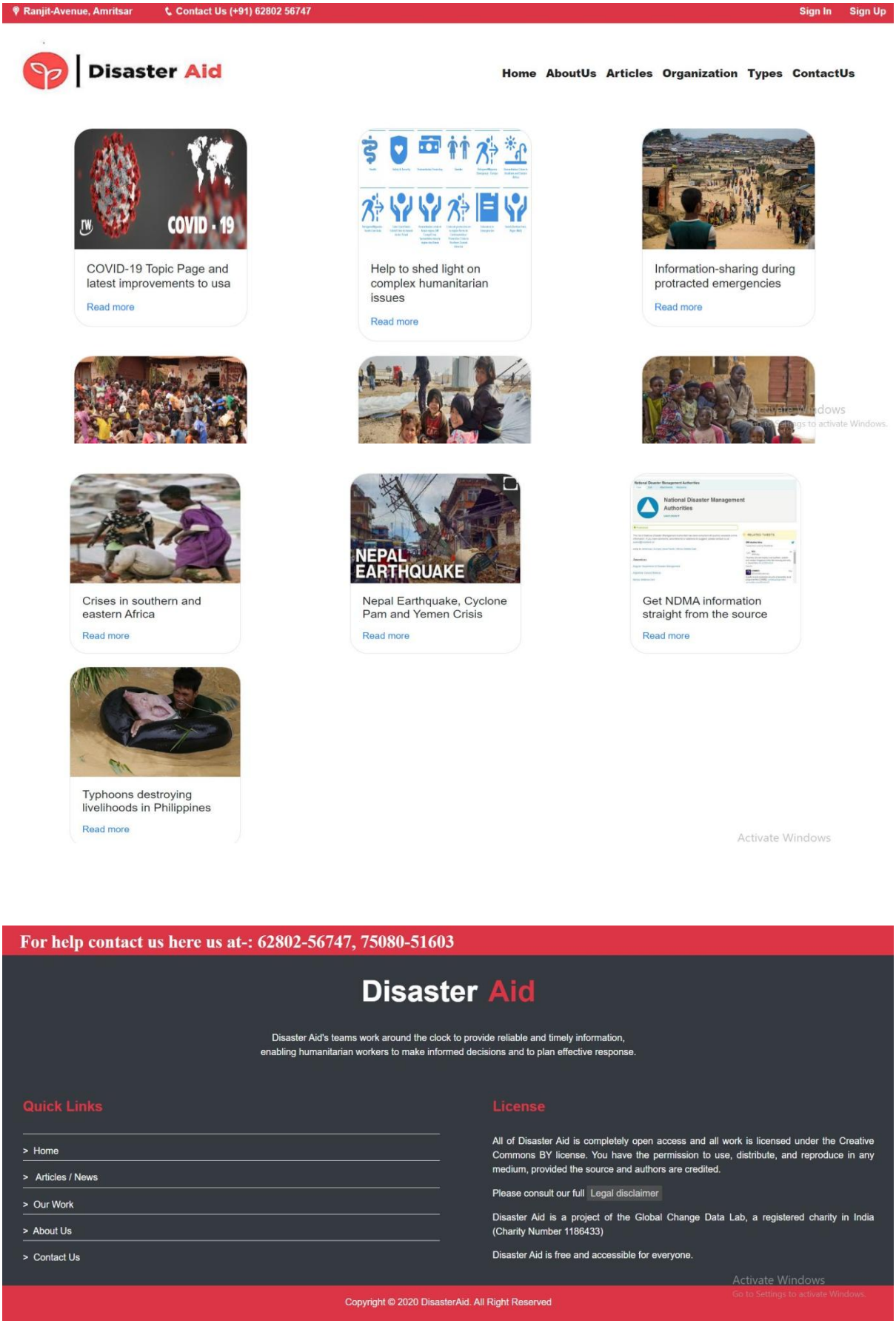

Articles
COVID-19 Topic Page and latest improvements to usa
When the World Health Organization pronounced COVID-19 a pandemic on March 11 2020, there were more than 118,000 cases in 114 countries, and 4,291 people had lost their lives. At time of writing, those numbers had topped 1,350,000 cases in 184 countries, with almost 75,000
Help to shed light on
Communities
National Disaster Management Authority (India)
National Disaster Management Authority, abbreviated as NDMA, is an apex Body of Government of India, with a mandate to lay down policies for disaster management. The phrase disaster management is to be understood to mean 'a continuous and integrated process of planning, organising
Disasters
Floods
Floods are one of the most common hazards in the United States. They occur when land that is normally dry experiences an overflow of water.
Wildfires
Wildfires are usually triggered by lightning or accidents and often go unnoticed at first. They can spread quickly and are especially destructive if


For help contact us here us at-: 62802-56747, 75080-51603
Disaster Aid
Disaster Aid's teams work around the clock to provide reliable and timely information, enabling humanitarian workers to make informed decisions and to plan effective response.
Quick Links
> Home
> Articles / News
> Our Work
> About Us
> Contact Us
License
All of Disaster Aid is completely open access and all work is licensed under the Creative Commons BY license. You have the permission to use, distribute, and reproduce in any medium, provided the source and authors are credited.
Please consult our full Legal disclaimer
Disaster Aid is a project of the Global Change Data Lab, a registered charity in India (Charity Number 1186433)
Disaster Aid is free and accessible for everyone.
Activate Windows
Copyright © 2020 DisasterAid. All Right Reserved

About Us


Ranjit-Avenue, Amritsar
Contact Us (+91) 62802 56747
Sign In
Sign Up
Disaster Aid
Home
AboutUs
Articles
Organization
Types
ContactUs
Homepage > About Us
All About Us
TOP 10 Strongest Earthquakes Cought ...
Watch later
Share
What We Do ?
Poverty, disease, hunger, climate change, war, existential risks, and inequality: The world faces many great and terrifying problems. It is these large problems that our work at Disaster Relief focuses on.
Thanks to the work of thousands of researchers around the world who dedicate their lives to it, we often have a good understanding of how it is possible to make progress against the large problems we are facing. The world has the resources to do much better and reduce the suffering in the world.
The goal of our work is to make the knowledge on the big problems accessible and understandable. This website is about Research and data to make progress against the world's largest problems.
Activate Windows
If you want to contribute to a better future you need to know the problems the world faces. To understand these problems the daily news is not enough. The news media focuses on events and therefore largely fails to report the two aspects that We focuses on: the large problems that continue to confront us for centuries or much longer and the long-lasting, forceful changes that gradually reshape our world.
If you want to contribute to a better future you need to know the problems the world faces. To understand these problems the daily news is not enough. The news media focuses on events and therefore largely fails to report the two aspects that We focuses on: the large problems that continue to confront us for centuries or much longer and the long-lasting, forceful changes that gradually reshape our world.
To understand issues that are affecting billions, we need data. We need to carefully measure what we care about and make the results accessible in an understandable and public platform. This allows everyone to see the state of the world today and track where we are making progress, and where we are falling behind. The publication we are building has this goal. Through interactive data visualizations we can see how the world has changed; by summarizing the scientific literature we can understand why.
Newton said, "If I have seen further than others, it is because I've stood on the shoulders of giants." This is how science should work. Those who want to understand the world should be able to stand on the shoulders of those who came before them. A key part of our mission is therefore to build an infrastructure that makes research and data openly available and useful for all.
We design our work with the aim of generating an impact beyond what our team can achieve directly. By producing charts and data that can be freely downloaded and embedded in others' work, we support and empower colleagues in policy, media and civil society also working on the problems we focus on.
If you want to use data or visualizations from the site, you don't need to contact us: please just go ahead and do so! The terms of our license only require attribution.
For help contact us here us at-: 62802-56747, 75080-51603
Disaster Aid
Disaster Aid's teams work around the clock to provide reliable and timely information, enabling humanitarian workers to make informed decisions and to plan effective response.
Quick Links
> Home
> Articles / News
> Our Work
> About Us
> Contact Us
License
All of Disaster Aid is completely open access and all work is licensed under the Creative Commons BY license. You have the permission to use, distribute, and reproduce in any medium, provided the source and authors are credited.
Please consult our full Legal disclaimer
Disaster Aid is a project of the Global Change Data Lab, a registered charity in India (Charity Number 1186433)
Disaster Aid is free and accessible for everyone.
Activate Windows
Go to Settings to activate Windows.
Copyright © 2020 DisasterAid. All Right Reserved

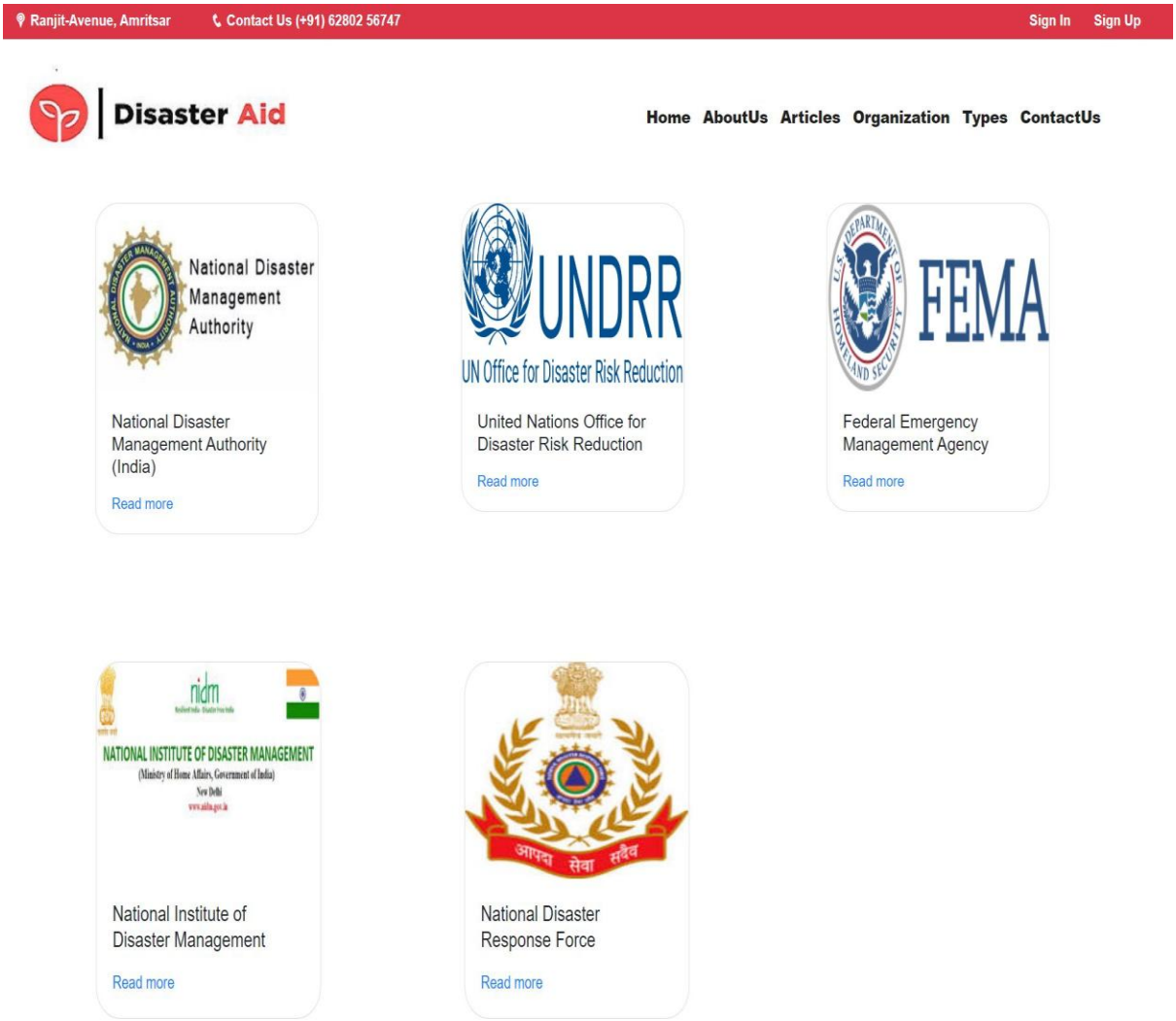
Articles


Ranjit-Avenue, Amritsar
Contact Us (+91) 62802 56747
Sign In
Sign Up
Disaster Aid
Home
AboutUs
Articles
Organization
Types
ContactUs
COVID-19
COVID-19 Topic Page and latest improvements to usa
Read more
Help to shed light on complex humanitarian issues
Read more
Information-sharing during protracted emergencies
Read more
Crises in southern and eastern Africa
Read more
NEPAL EARTHQUAKE
Nepal Earthquake, Cyclone Pam and Yemen Crisis
Read more
National Disaster Management Authorities
Get NDMA information straight from the source
Read more
Typhoons destroying livelihoods in Philippines
Read more
Activate Windows

For help contact us here us at-: 62802-56747, 75080-51603
Disaster Aid
Disaster Aid's teams work around the clock to provide reliable and timely information, enabling humanitarian workers to make informed decisions and to plan effective response.
Quick Links
> Home
> Articles / News
> Our Work
> About Us
> Contact Us
License
All of Disaster Aid is completely open access and all work is licensed under the Creative Commons BY license. You have the permission to use, distribute, and reproduce in any medium, provided the source and authors are credited.
Please consult our full Legal disclaimer
Disaster Aid is a project of the Global Change Data Lab, a registered charity in India (Charity Number 1186433)
Disaster Aid is free and accessible for everyone.
Activate Windows
Copyright © 2020 DisasterAid. All Right Reserved

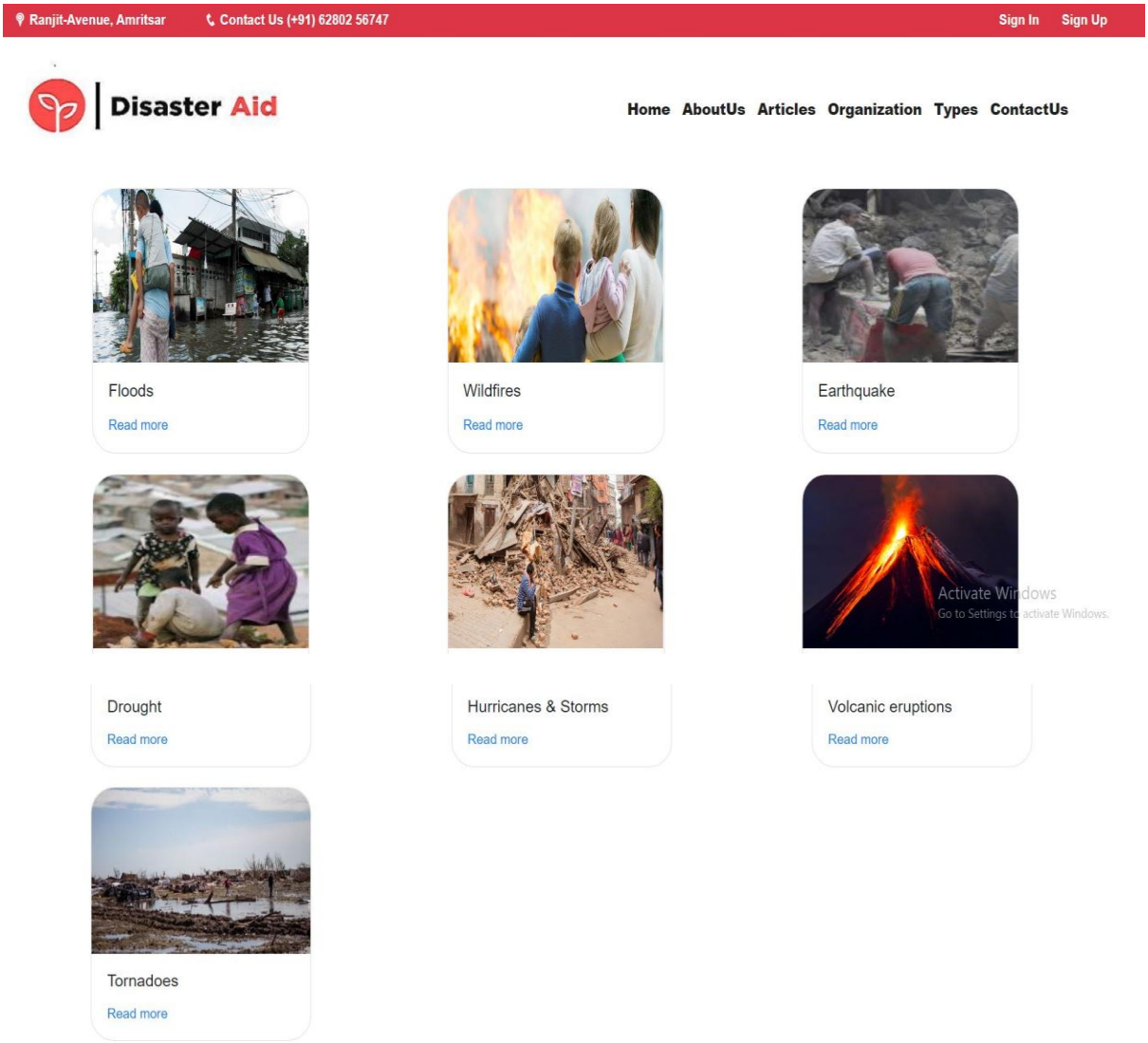
Article's Description

Organizations



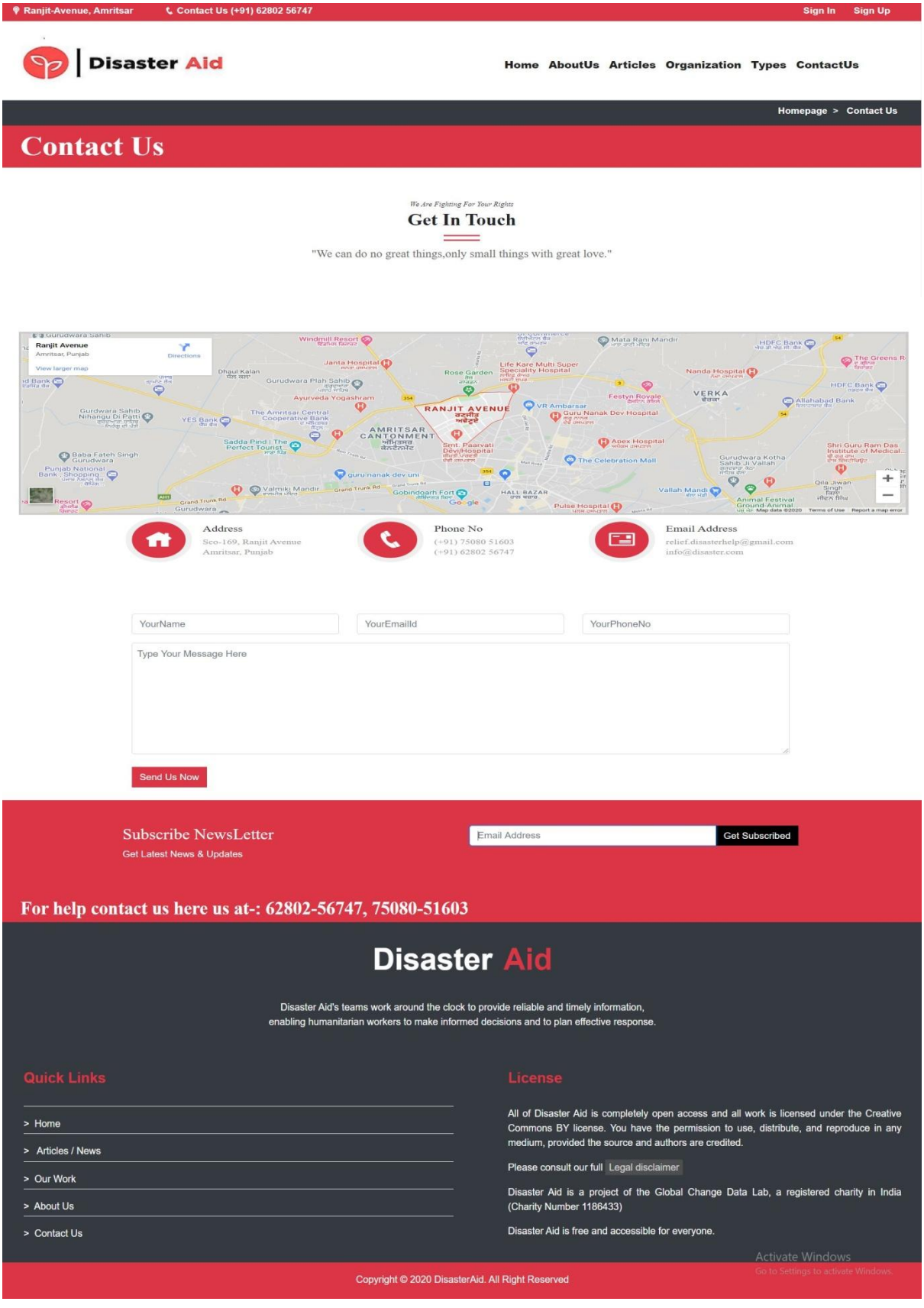
Organization's Description

Types Of Disasters



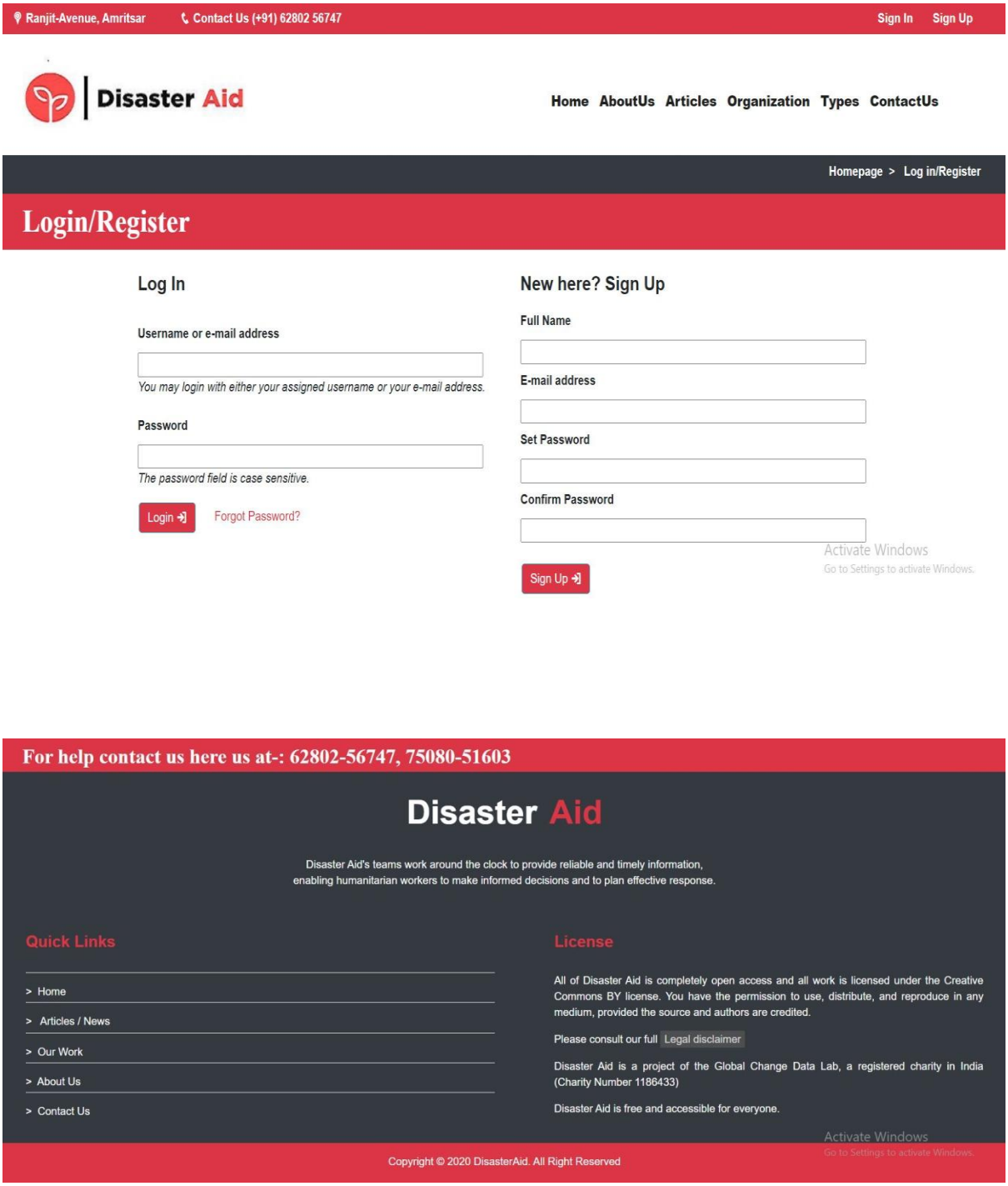
Disaster's Description

Contact Us


Ranjit-Avenue, Amritsar
Contact Us (+91) 62802 56747
Sign In
Sign Up
Disaster Aid
Home
AboutUs
Articles
Organization
Types
ContactUs
Homepage > Contact Us
Contact Us
We Are Fighting For Your Rights
Get In Touch
"We can do no great things,only small things with great love."
Address
Sco-169, Ranjit Avenue
Amritsar, Punjab
Phone No
(+91) 75080 51603
(+91) 62802 56747
Email Address
relief.disasterhelp@gmail.com
info@disaster.com
YourName
YourEmailId
YourPhoneNo
Type Your Message Here
Send Us Now
Subscribe NewsLetter
Get Latest News & Updates
Email Address
Get Subscribed
For help contact us here us at-: 62802-56747, 75080-51603
Disaster Aid
Disaster Aid's teams work around the clock to provide reliable and timely information,
enabling humanitarian workers to make informed decisions and to plan effective response.
Quick Links
> Home
> Articles / News
> Our Work
> About Us
> Contact Us
License
All of Disaster Aid is completely open access and all work is licensed under the Creative Commons BY license. You have the permission to use, distribute, and reproduce in any medium, provided the source and authors are credited.
Please consult our full Legal disclaimer
Disaster Aid is a project of the Global Change Data Lab, a registered charity in India (Charity Number 1186433)
Disaster Aid is free and accessible for everyone.
Activate Windows
Go to Settings to activate Windows.
Copyright © 2020 DisasterAid. All Right Reserved

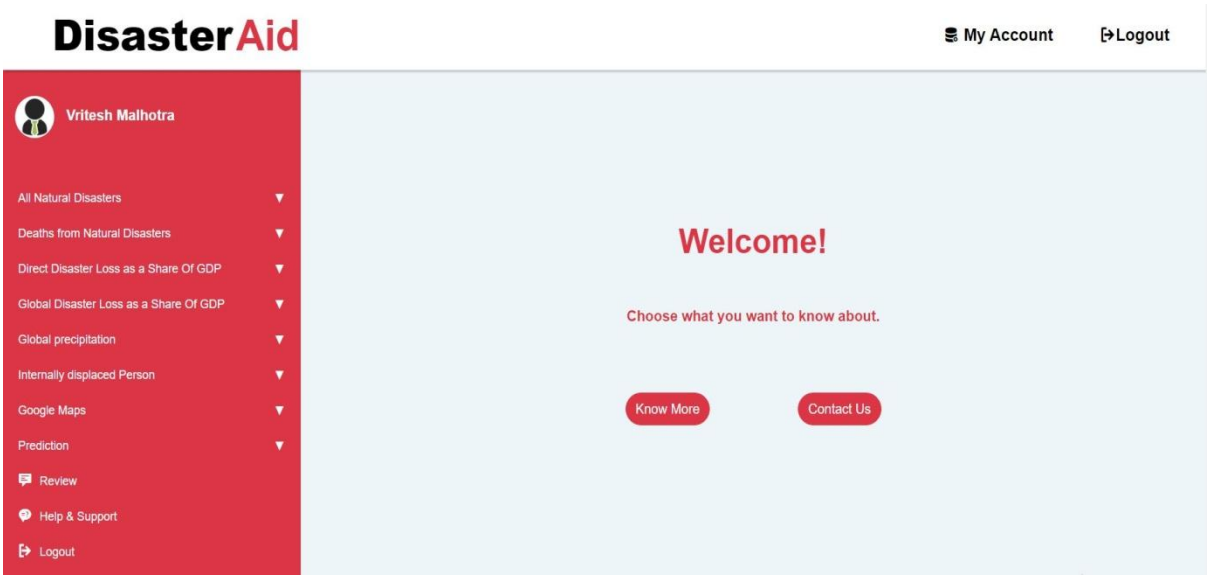
Login/Register

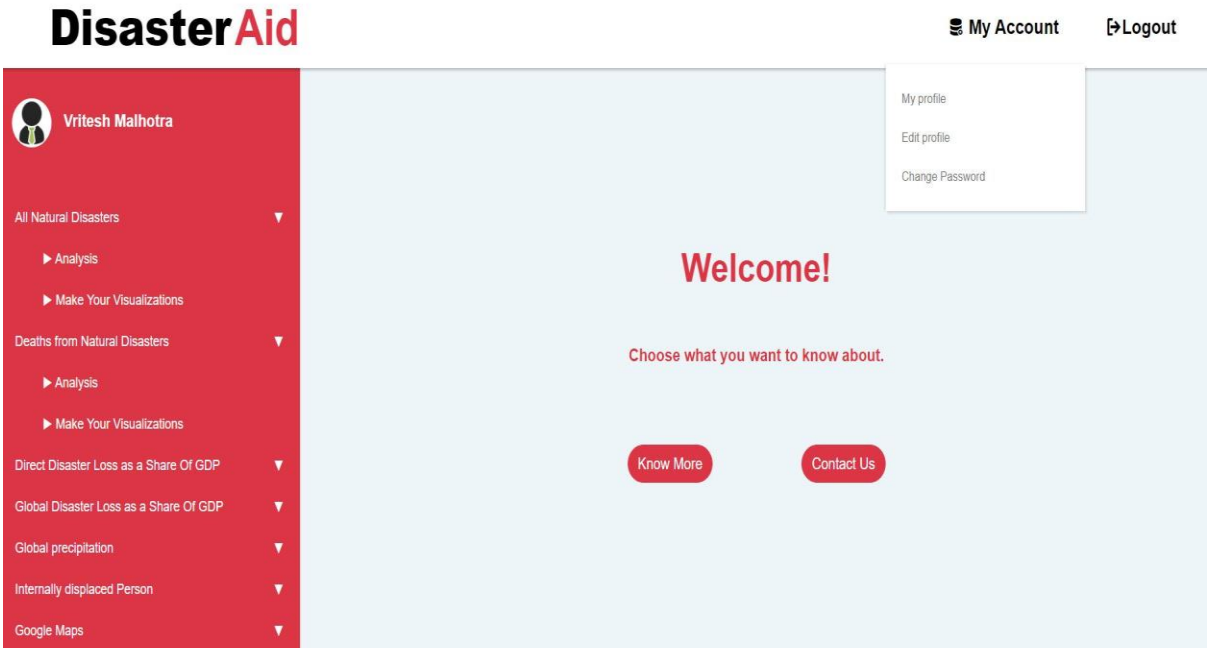
User will Login or Register on this page.



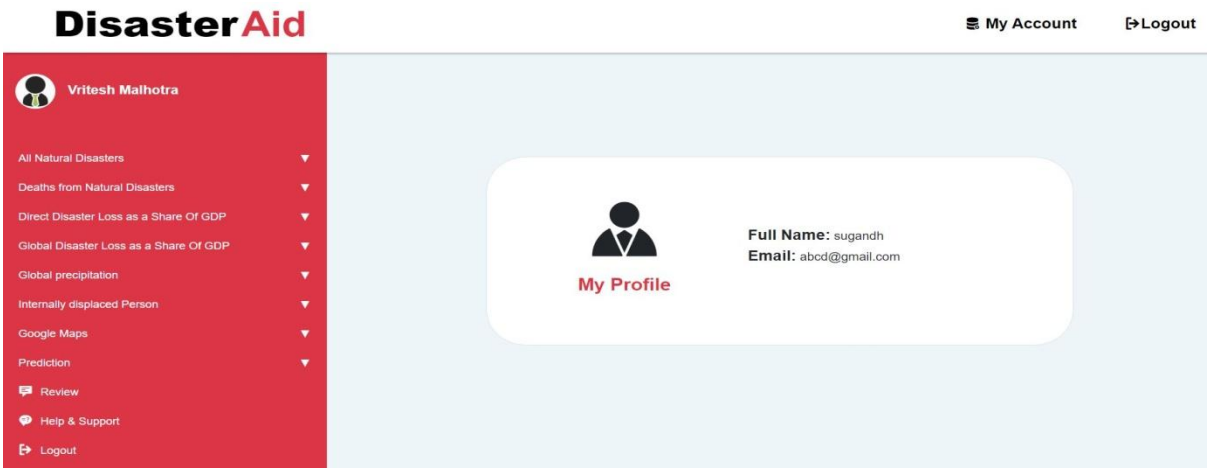
User Interface

After login, this page will open where User will be able to perform various tasks.

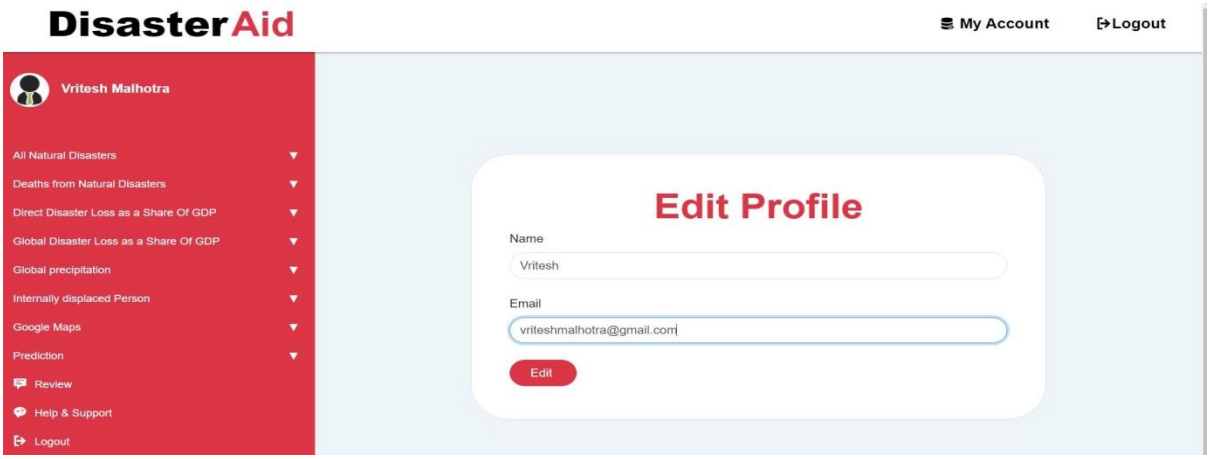




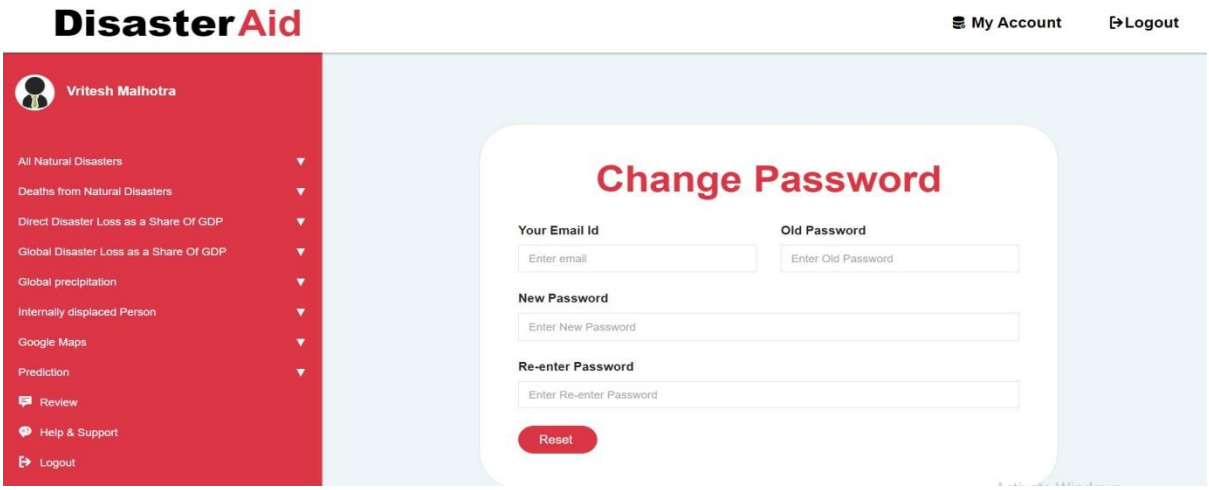
My Profile



Edit Profile

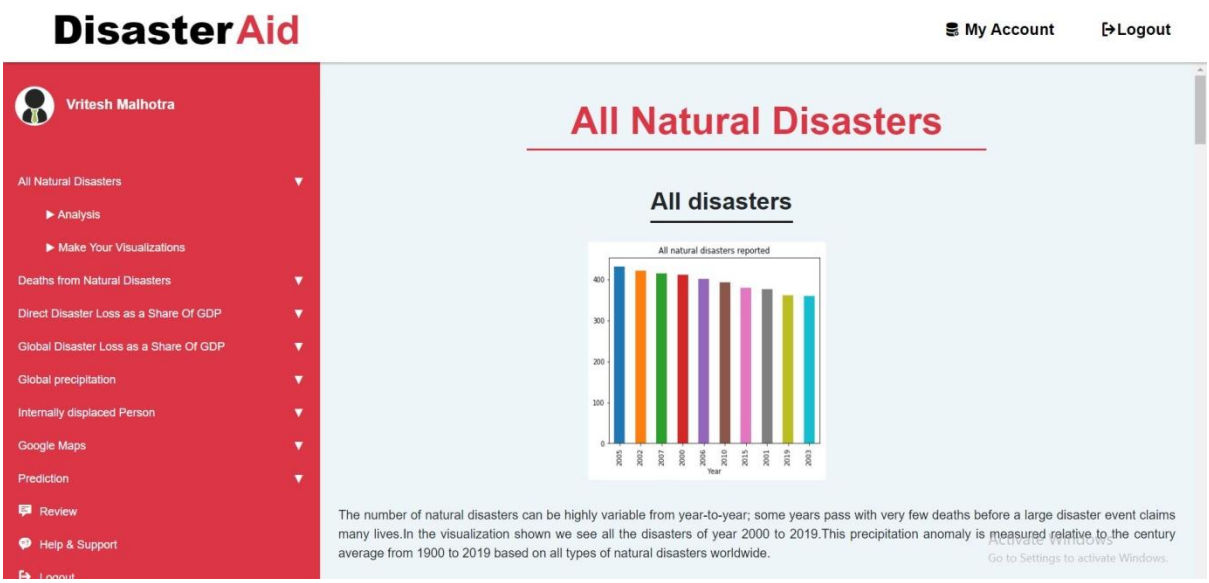


Change Password

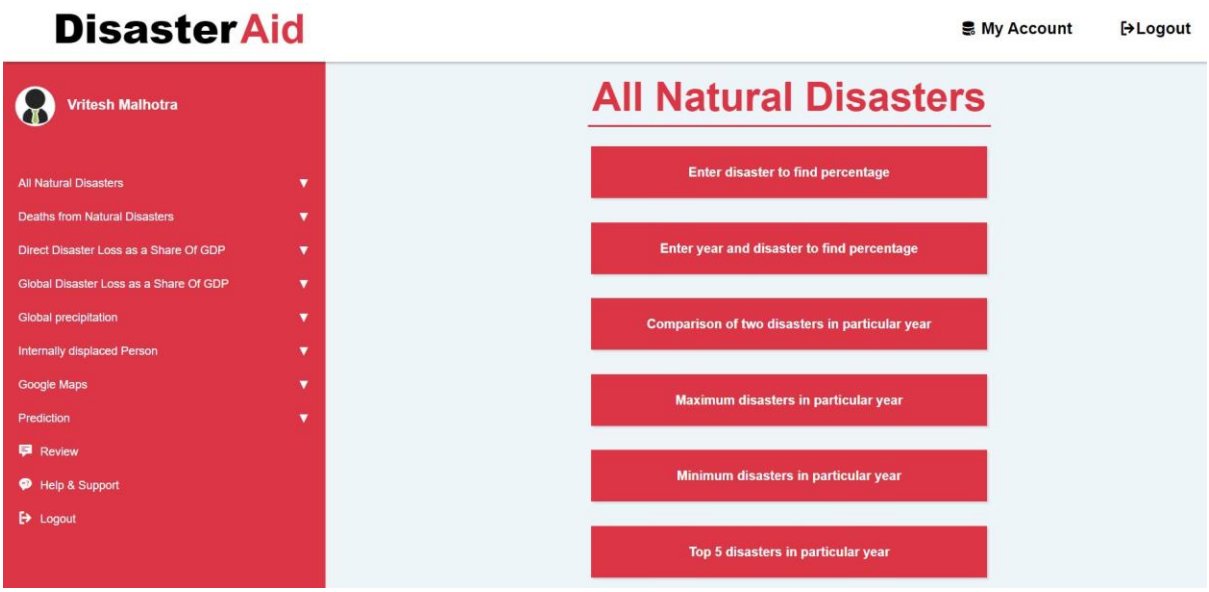


All Natural Disasters

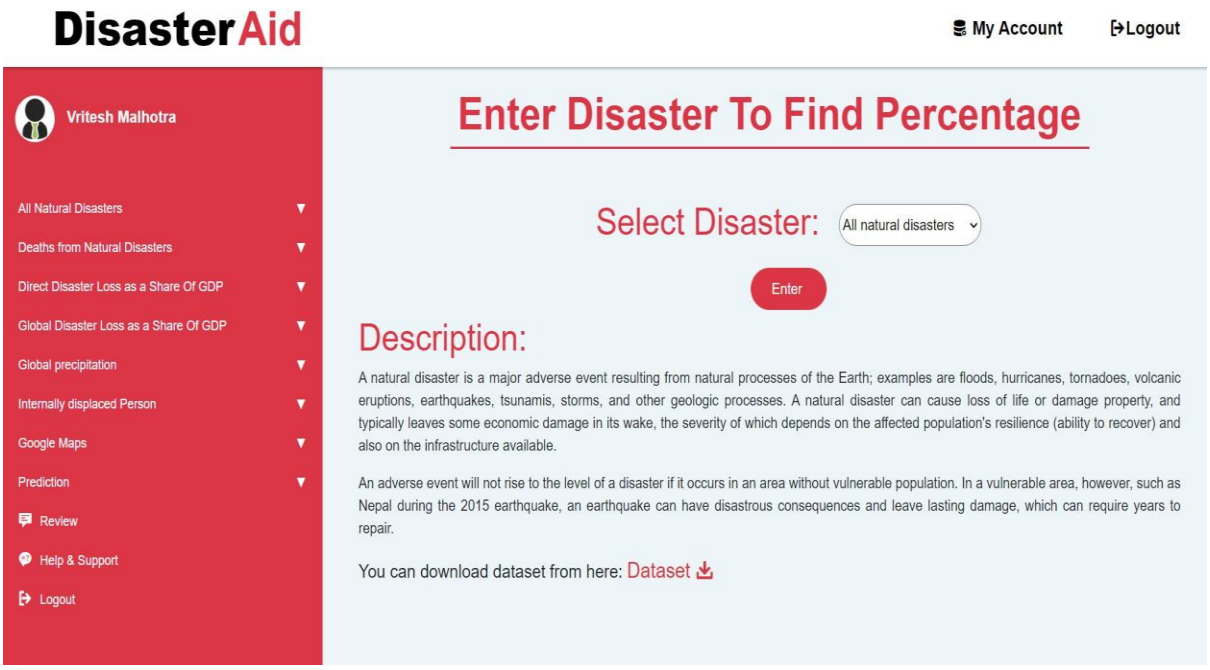
Analysis



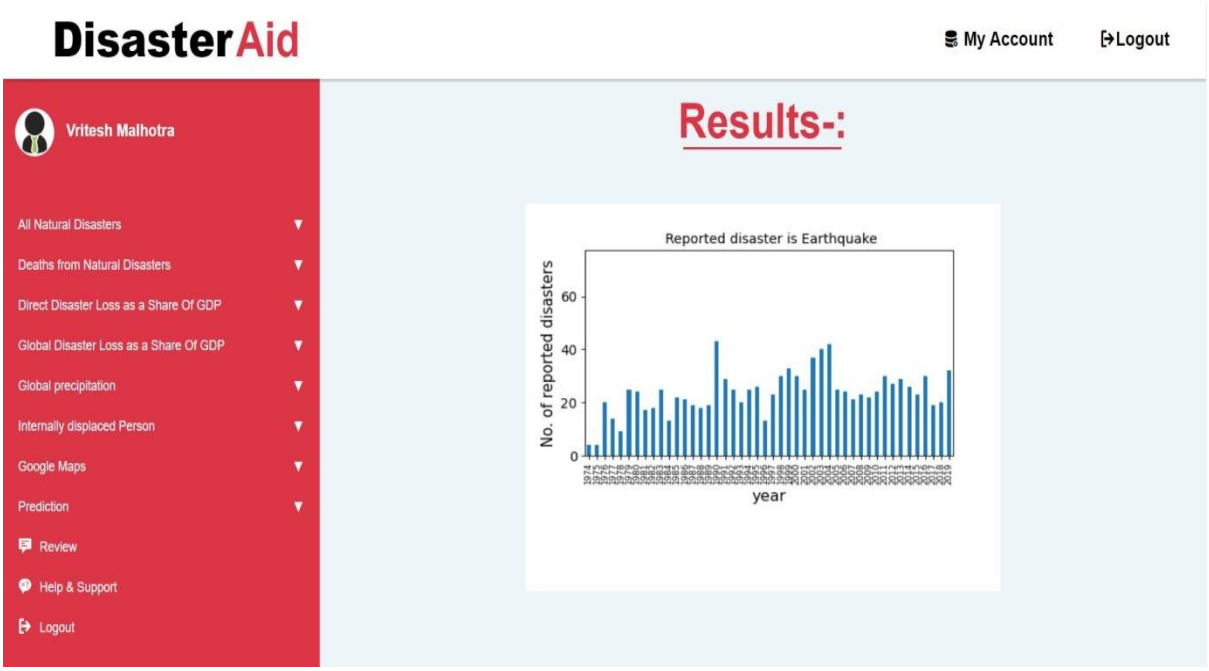
Make Your Visualizations



Enter Disaster To Find Percentage

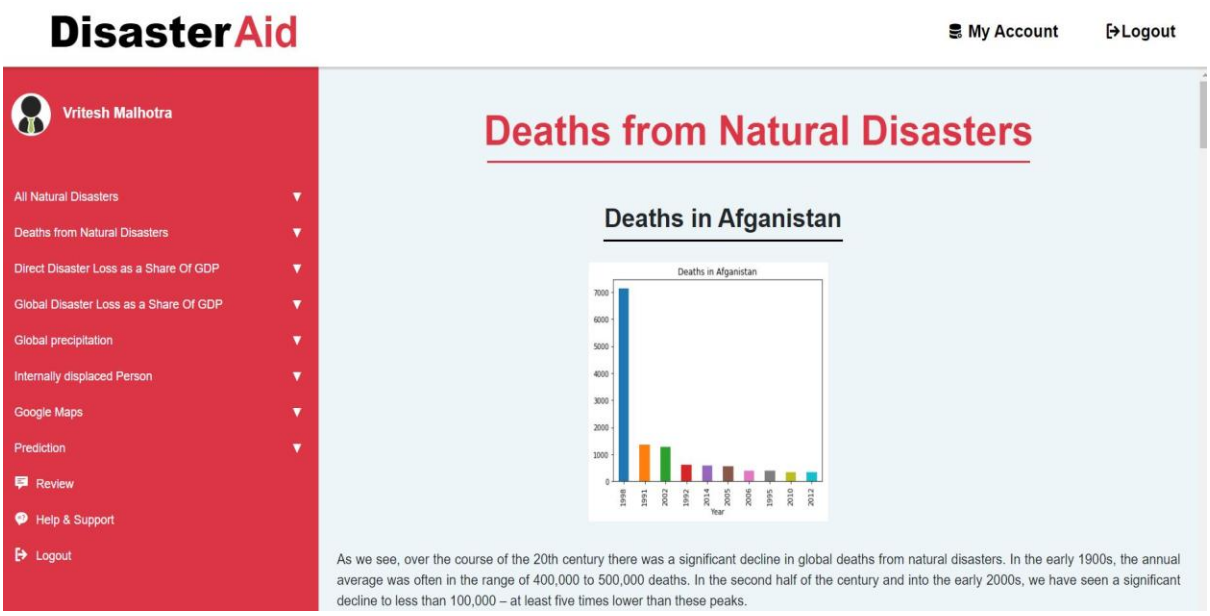


Results



Deaths From Natural Disasters

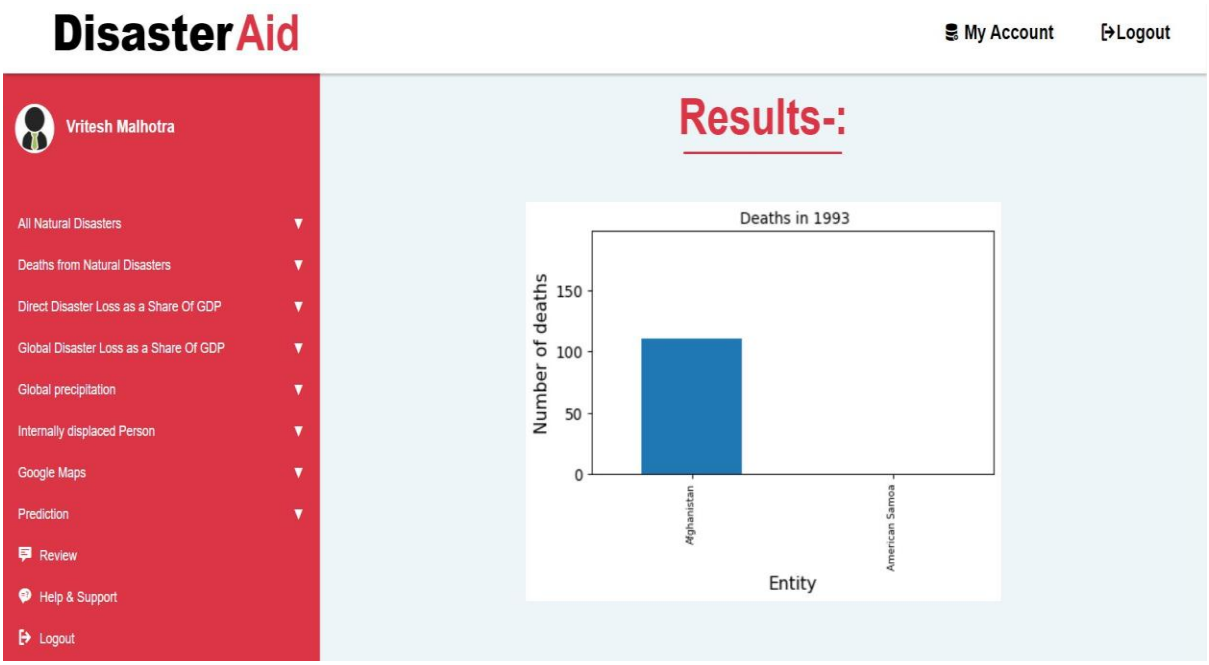
Analysis



Make Your Visualizations

Comparison Of Deaths

Results

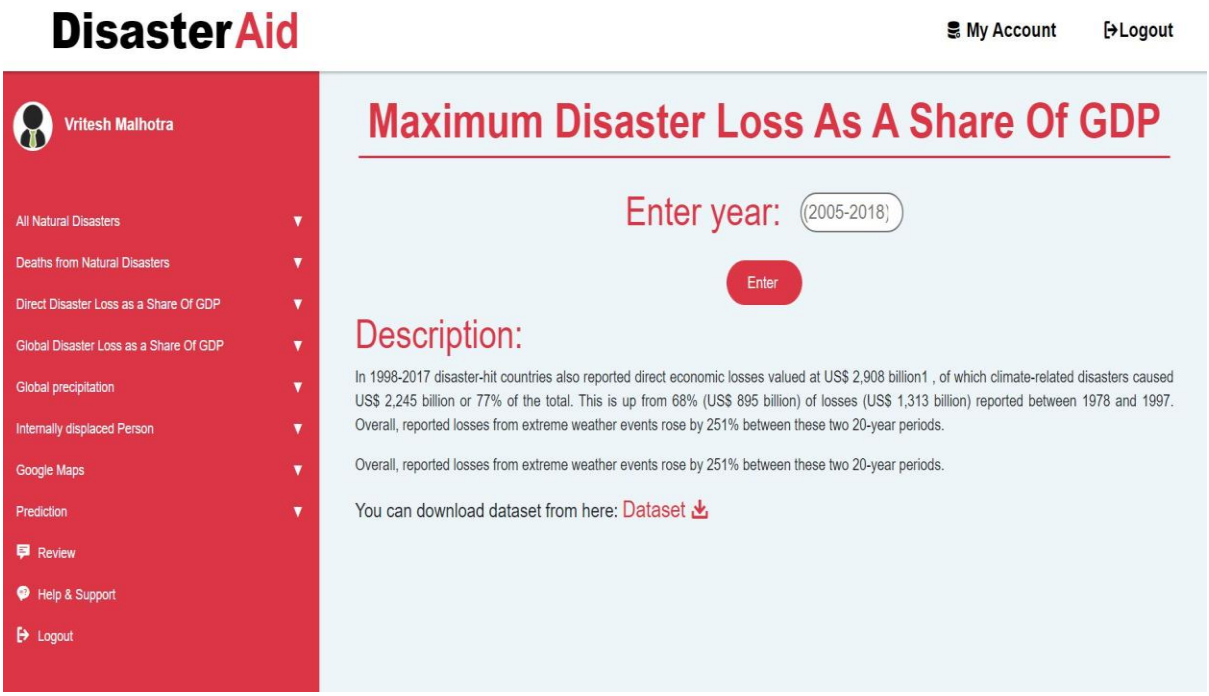


Direct Disaster Loss As A Share Of GDP

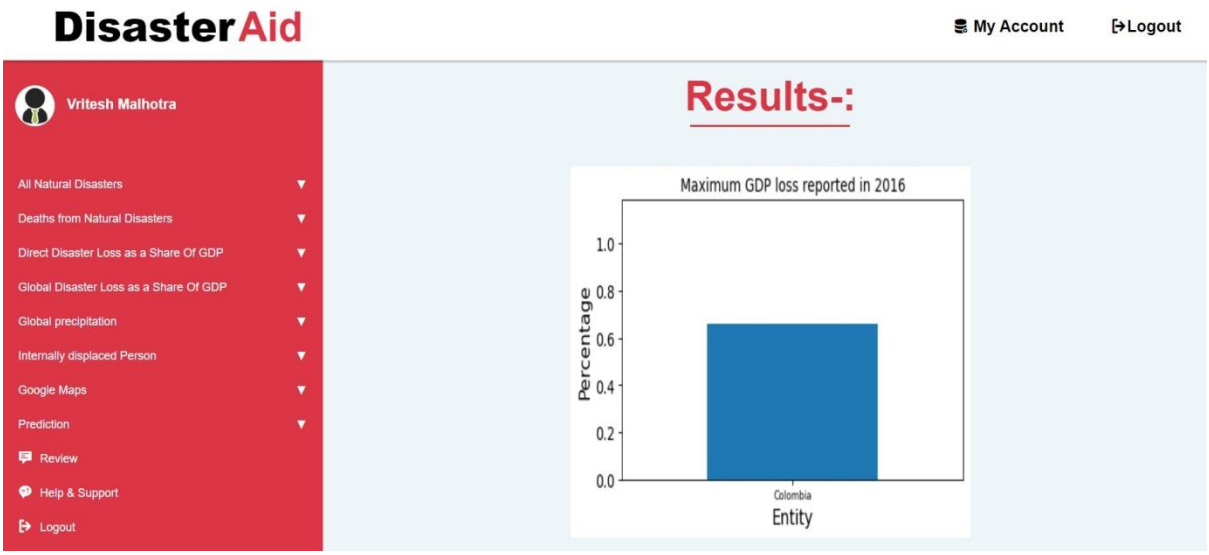
Analysis

Make Your Visualizations

Maximum Disaster Loss



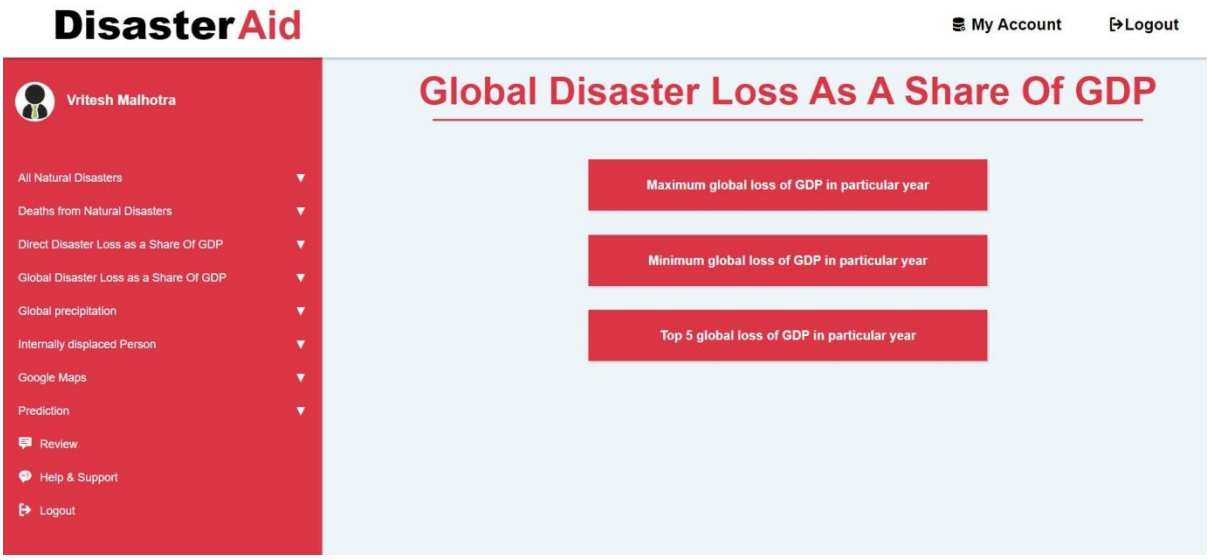
Results



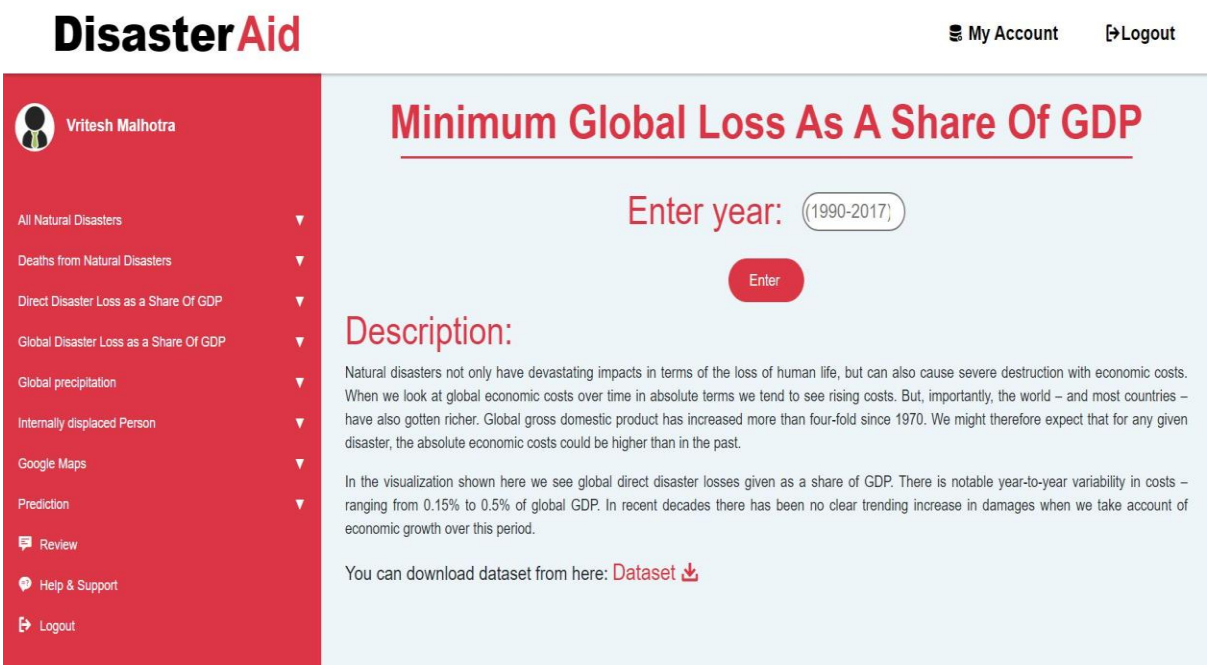
Global Disaster Loss As A Share Of GDP

Analysis

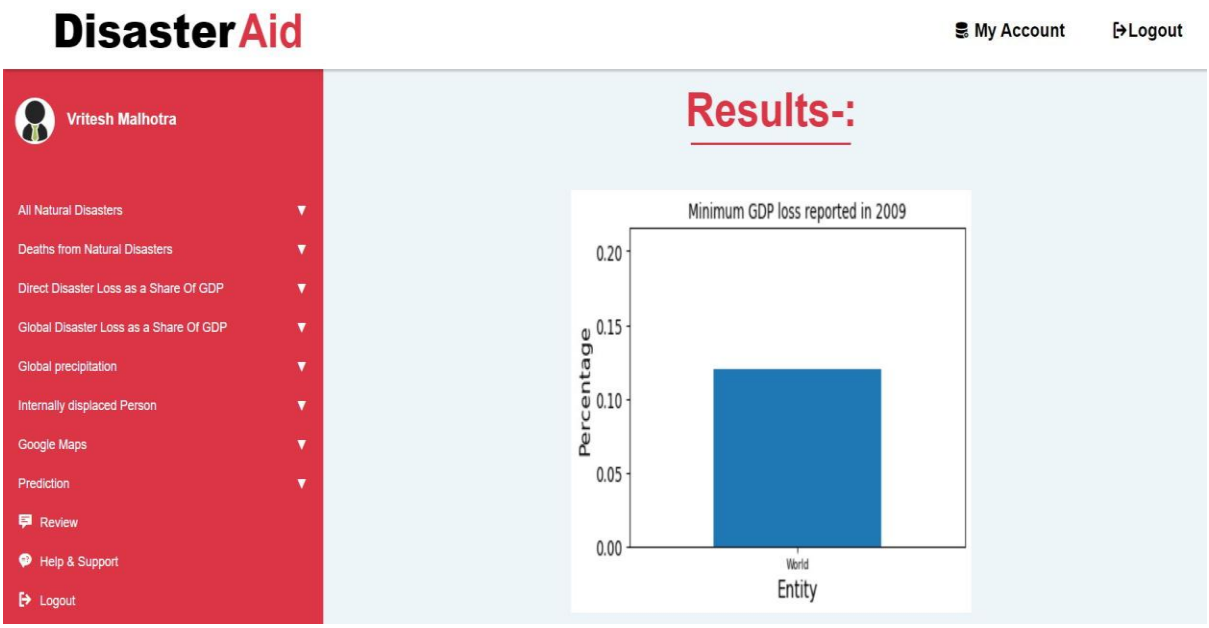
Make Your Visualizations



Minimum Disaster Loss

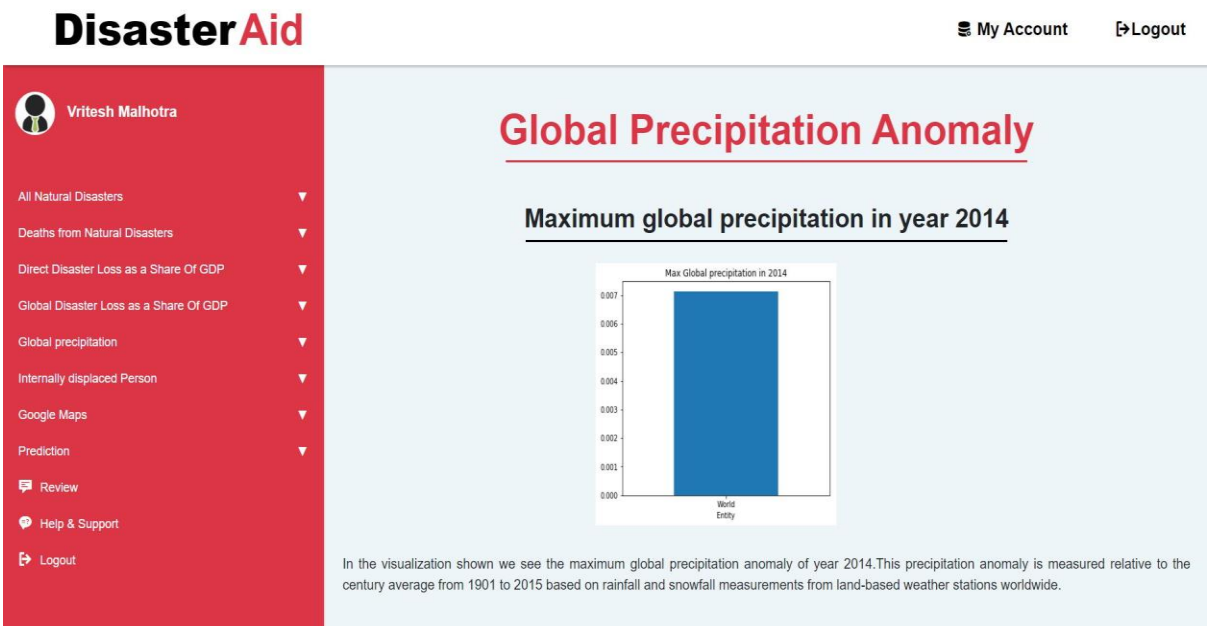


Results

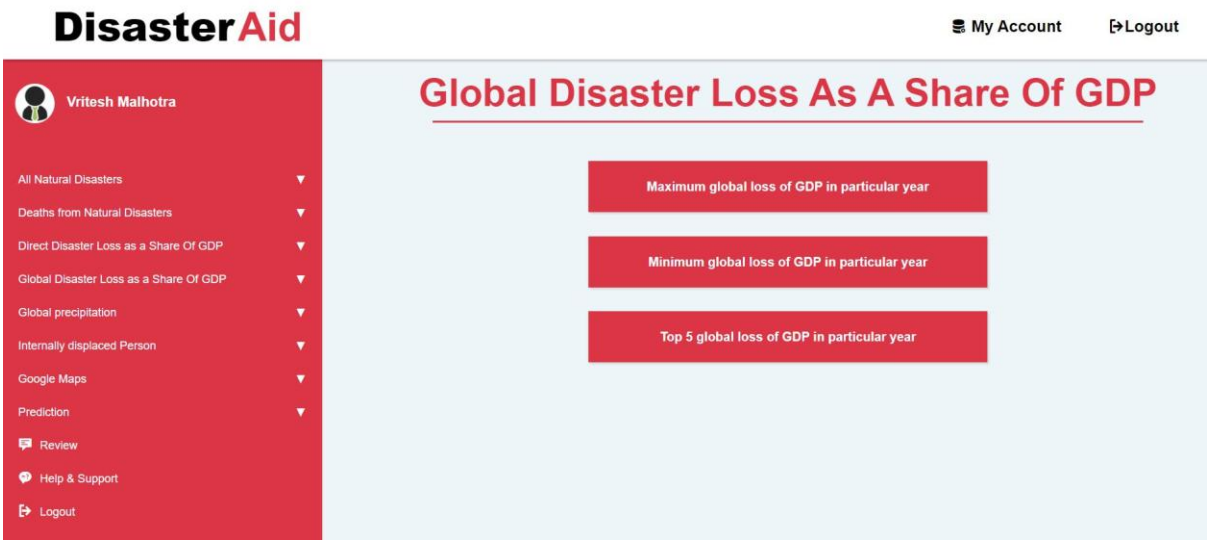


Global Precipitation

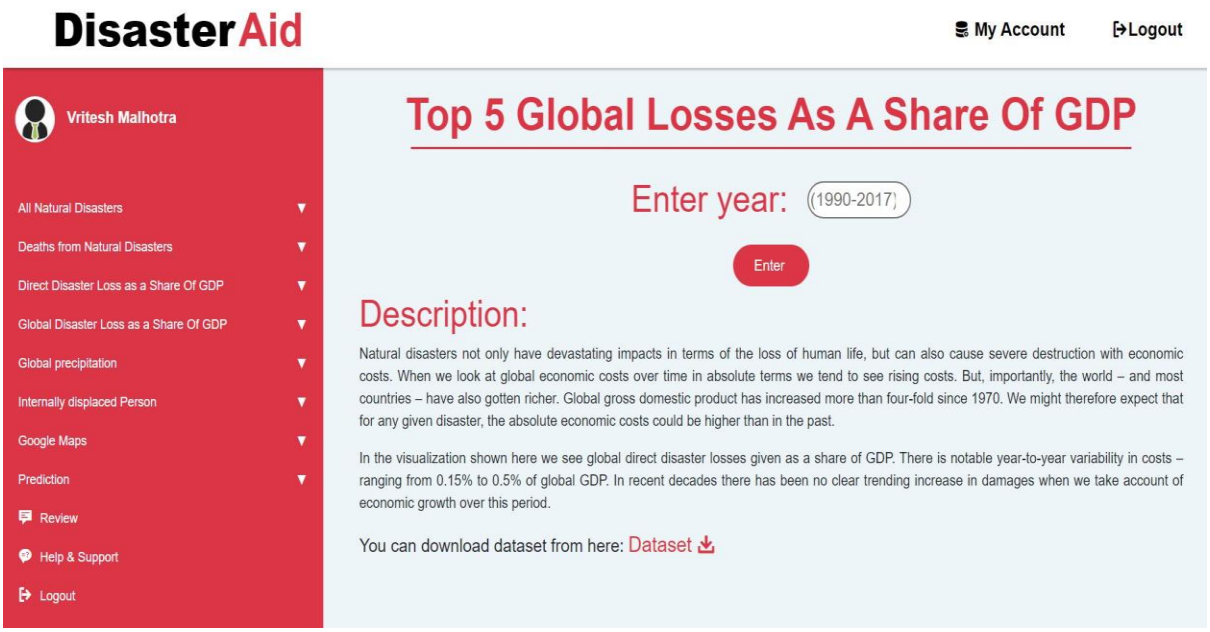
Analysis



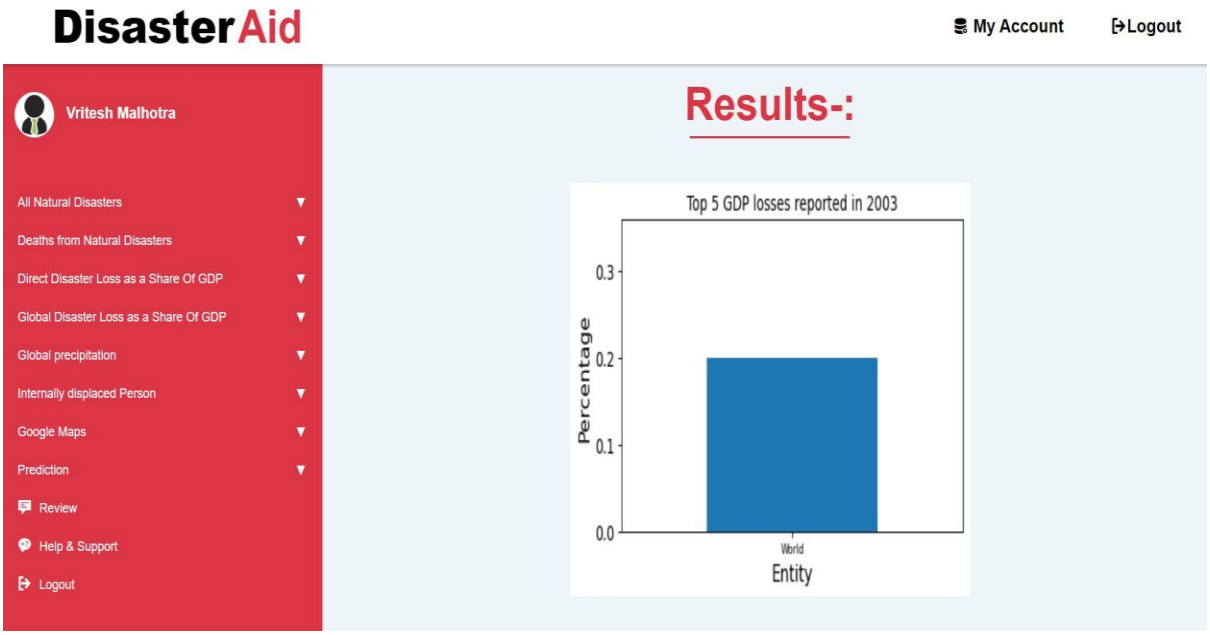
Make Your Visualizations



Top 5 Global Losses

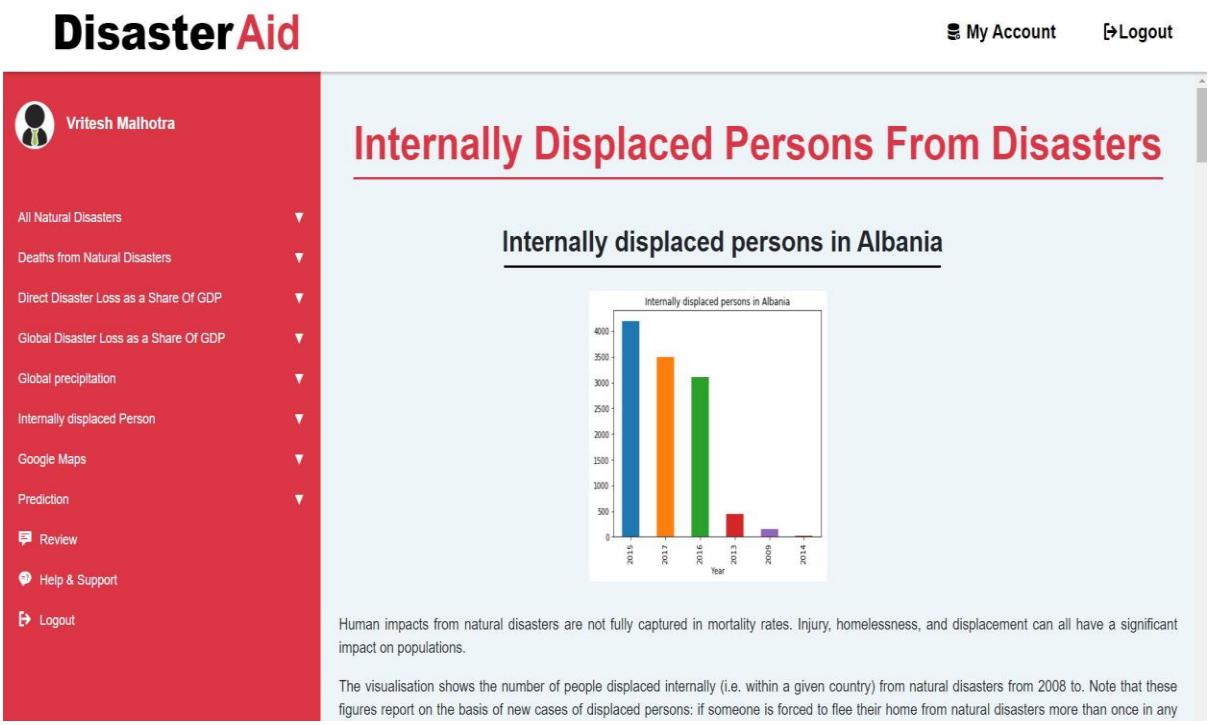


Results

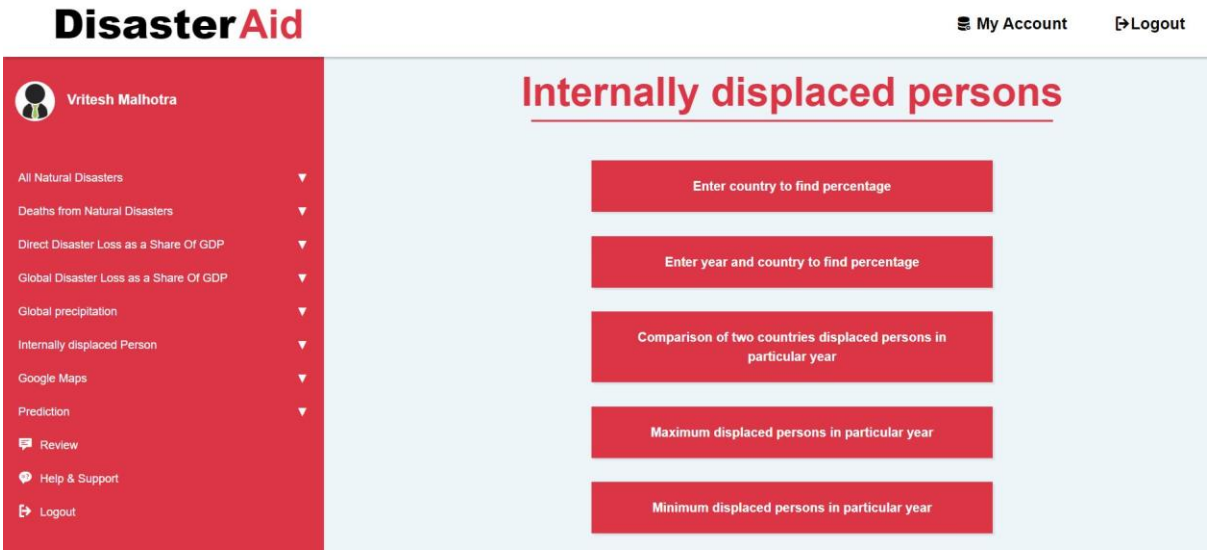


Internally Displaced People

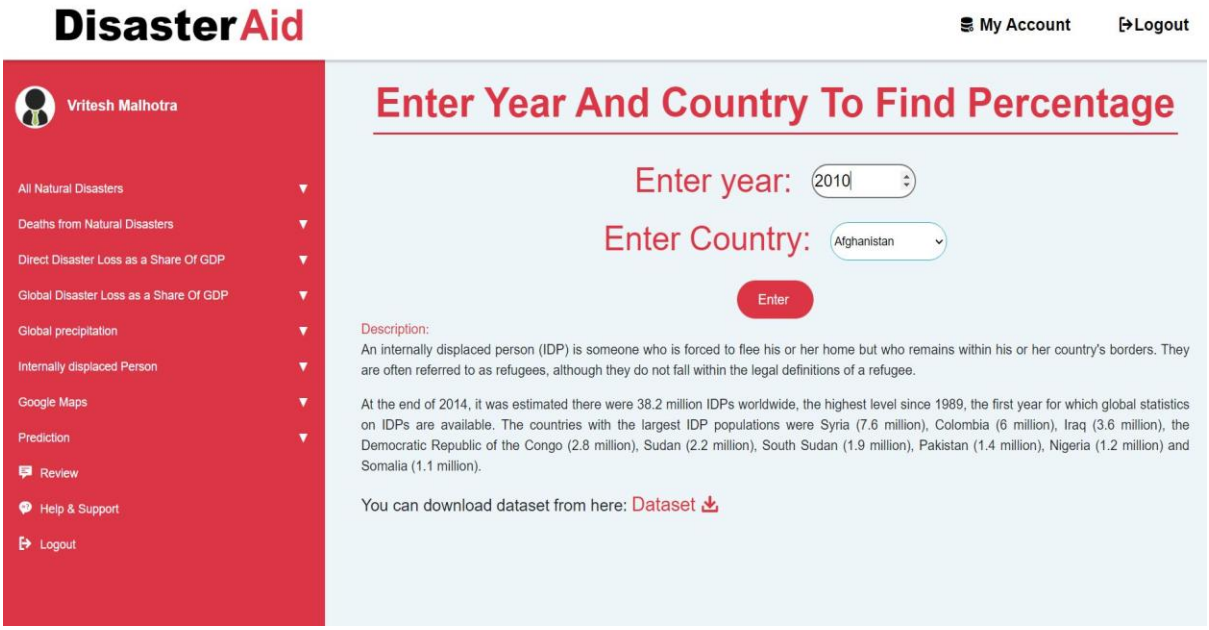
Analysis



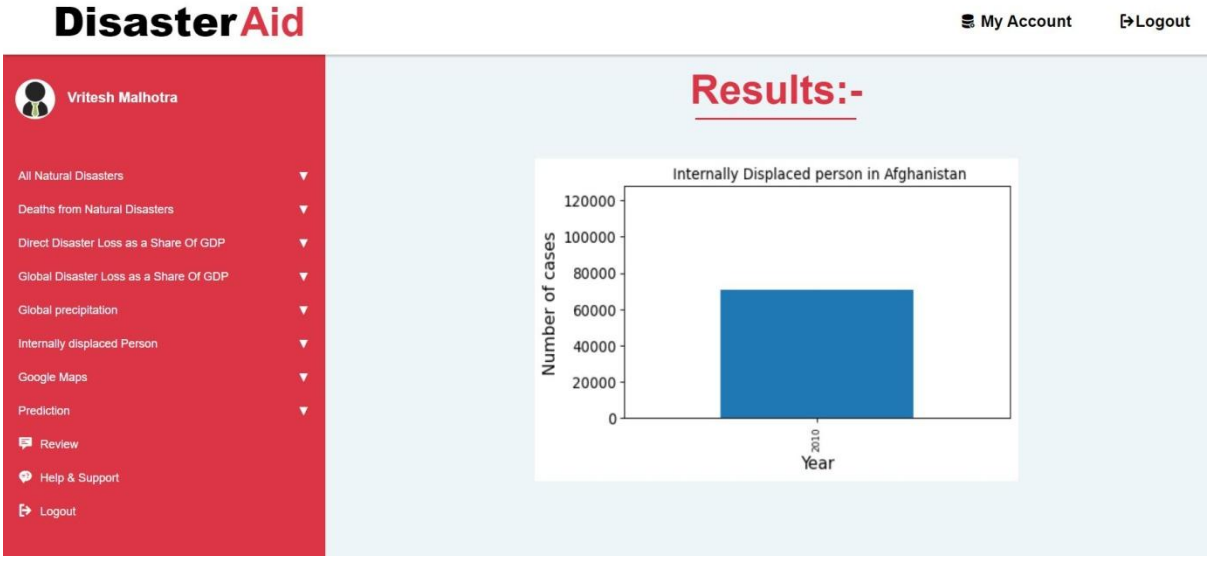
Make Your Visualizations



Enter Year And Country To Find Percentage

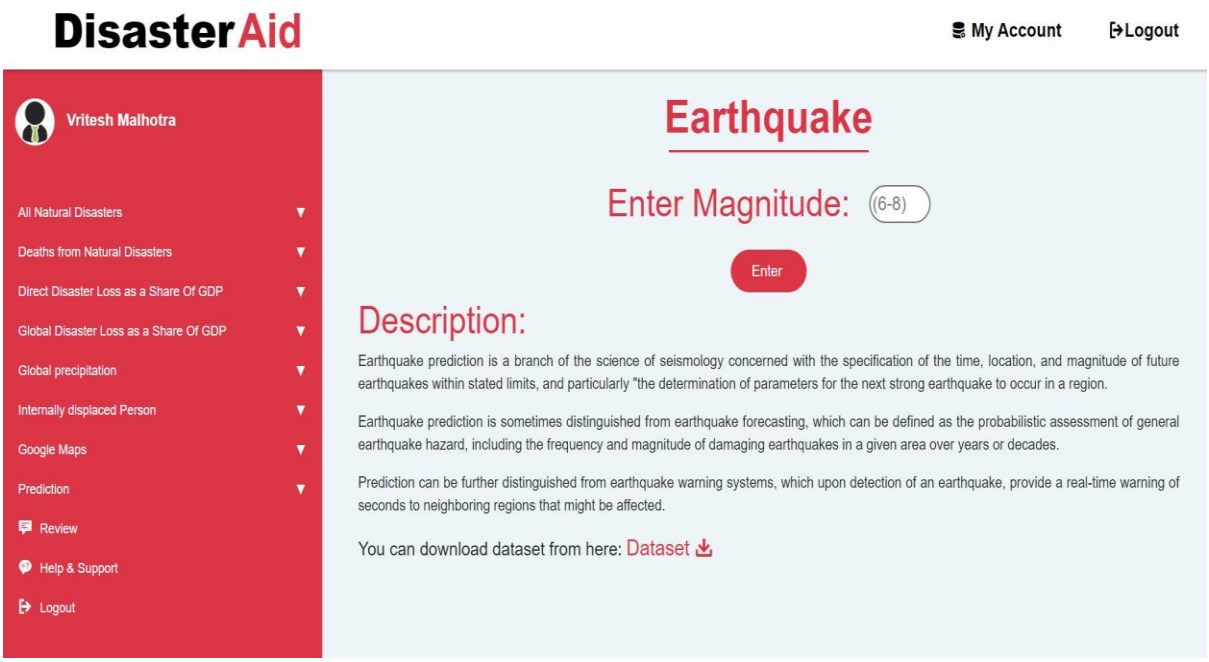


Results

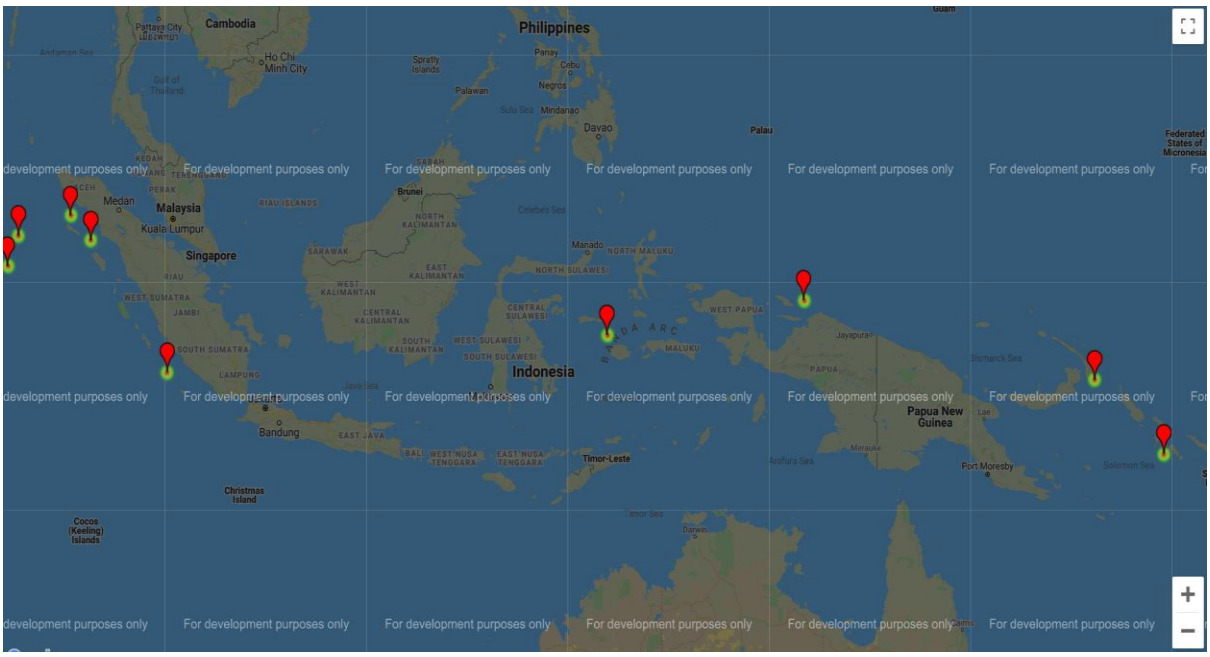


Maps

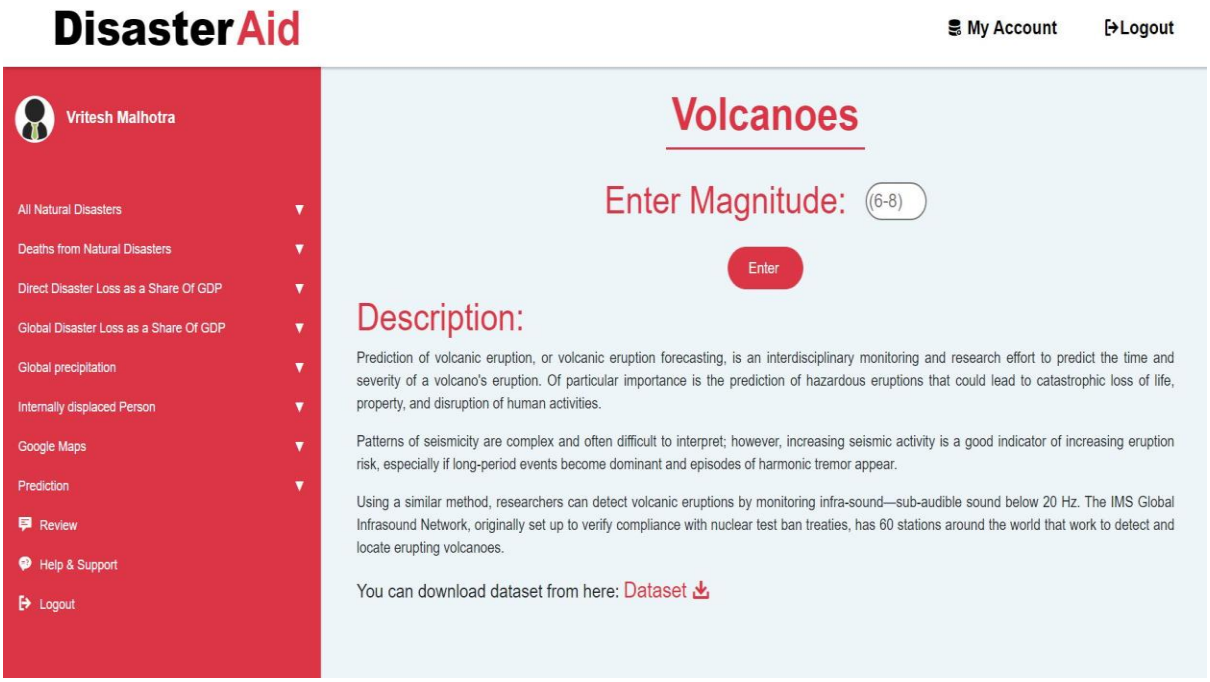
Earthquake



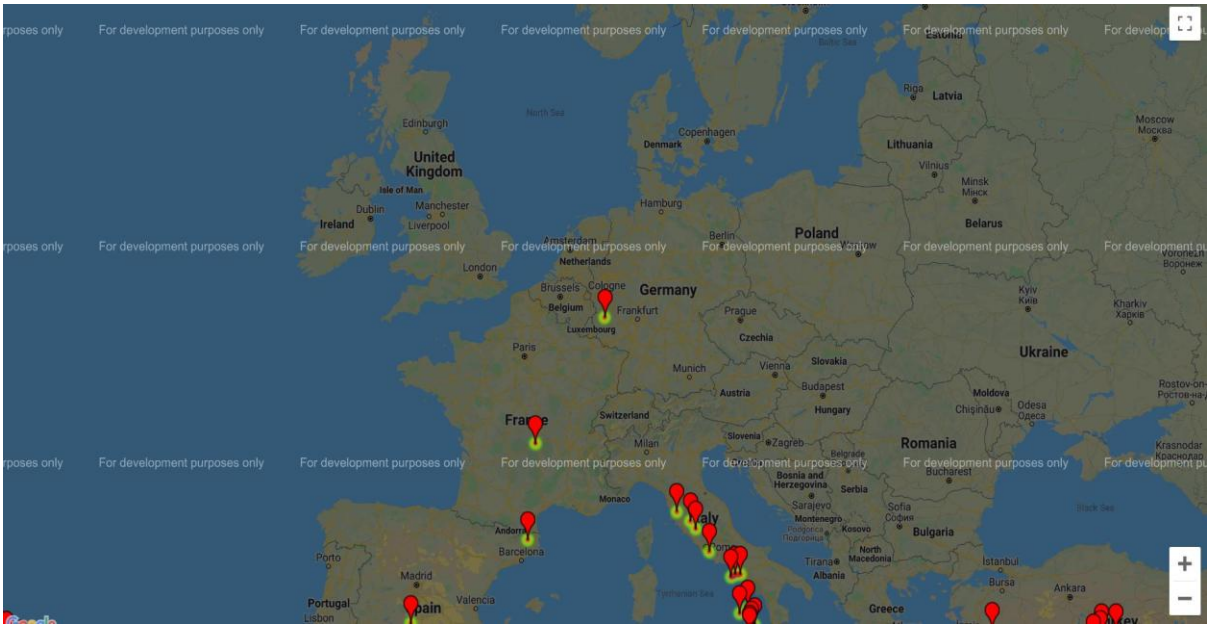
Locations



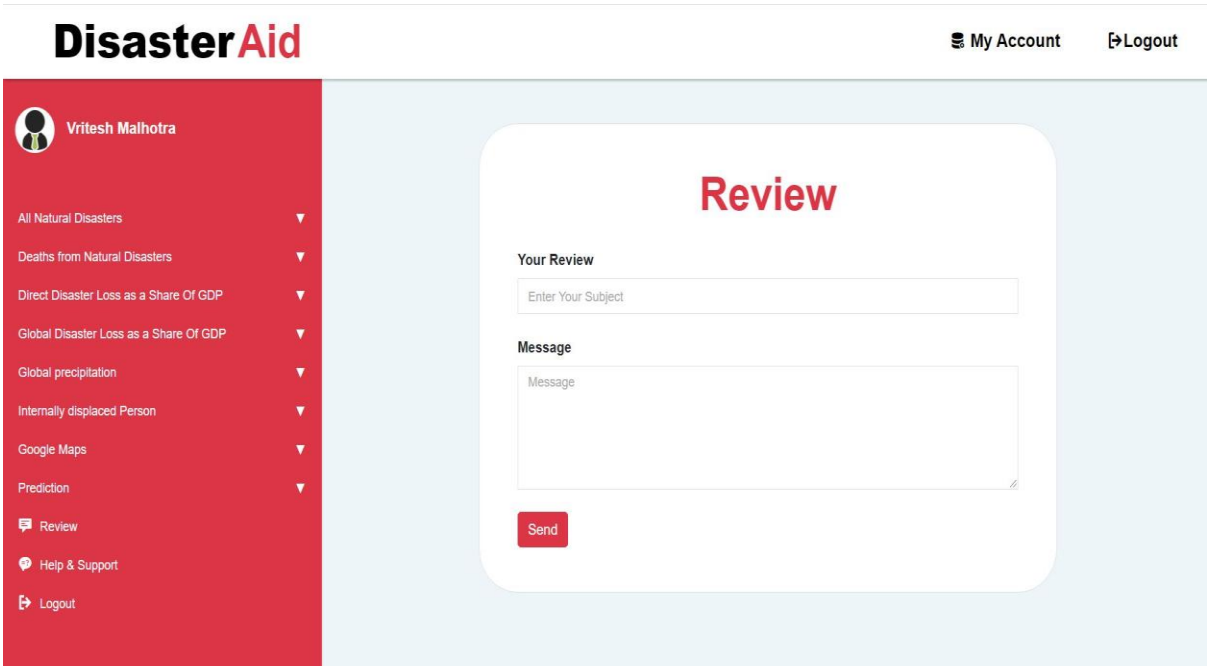
Volcanoes



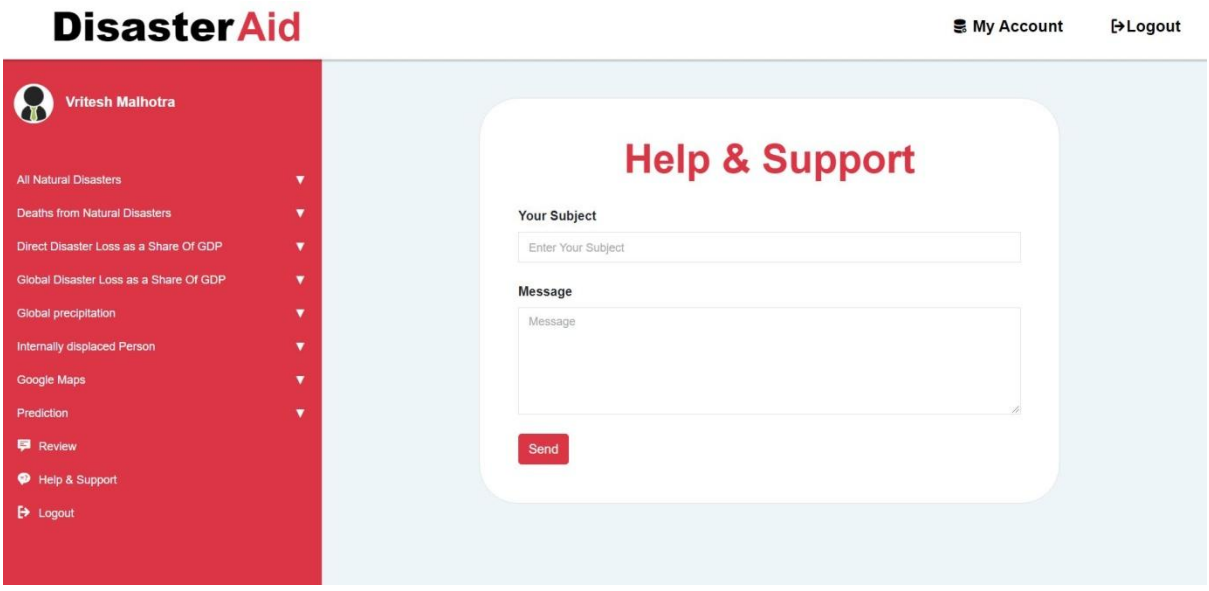
Locations



Review



Help And Support



6.2 TESTING

Testing is the process of running a system with the intention of finding errors. Testing enhances the integrity of a system by detecting deviations in design and errors in the system. Testing aims at detecting error-prone areas. This helps in the prevention of errors in a system. Testing also adds value to the product by conforming to the user requirements. The main purpose of testing is to detect errors and error-prone areas in a system. Testing must be thorough and well-planned. A partially tested system is as bad as an untested system. And the price of an untested and under-tested system is high. The implementation is the final and important phase. It involves user-training, system testing in order to ensure successful running of the proposed system. The user tests the system and changes are made according to their needs. The testing involves the testing of the developed system using various kinds of data. While testing, errors are noted and correctness is the mode.
A Successful test case is one that uncovers an as- yet-undiscovered error. System testing is a stage of implementation, which is aimed a ten suring that the system works accurately and efficiently as per the user need, before the live operation commences. As stated before, testing is vital to the success of a system. System testing makes a logical assumption that if all parts of the as system are correct, the goal will be successfully achieved. A series of tests are performed before the system is ready for the user acceptance test.

TESTING METHODS

System testing is the stage of implementation. This is to check whether the system works accurately and efficiently before live operation commences. Testing is vital to the success of the system. The candidate system is subject to a variety of tests: on line response, volume, stress, recovery, security and usability tests. A series of tests are performed for the proposed system is ready for user acceptance testing.

The Testing Steps are:

Unit Testing

Unit testing focuses efforts on the smallest unit of software design. This is known as module testing. The modules are tested separately. The test is carried out during programming stage itself. In this step, each module is found to be working satisfactory as regards to the expected output from the module.

Data can be lost across an interface. One module can have an adverse effect on another, sub functions, when combined, may not be linked in desired manner in major functions.
Integration testing is a systematic approach for constructing the program structure, while at the same time conducting test to uncover errors associated within the interface. The objective is to take unit tested modules an
builds program structure. All the modules are combined and tested as awhole.

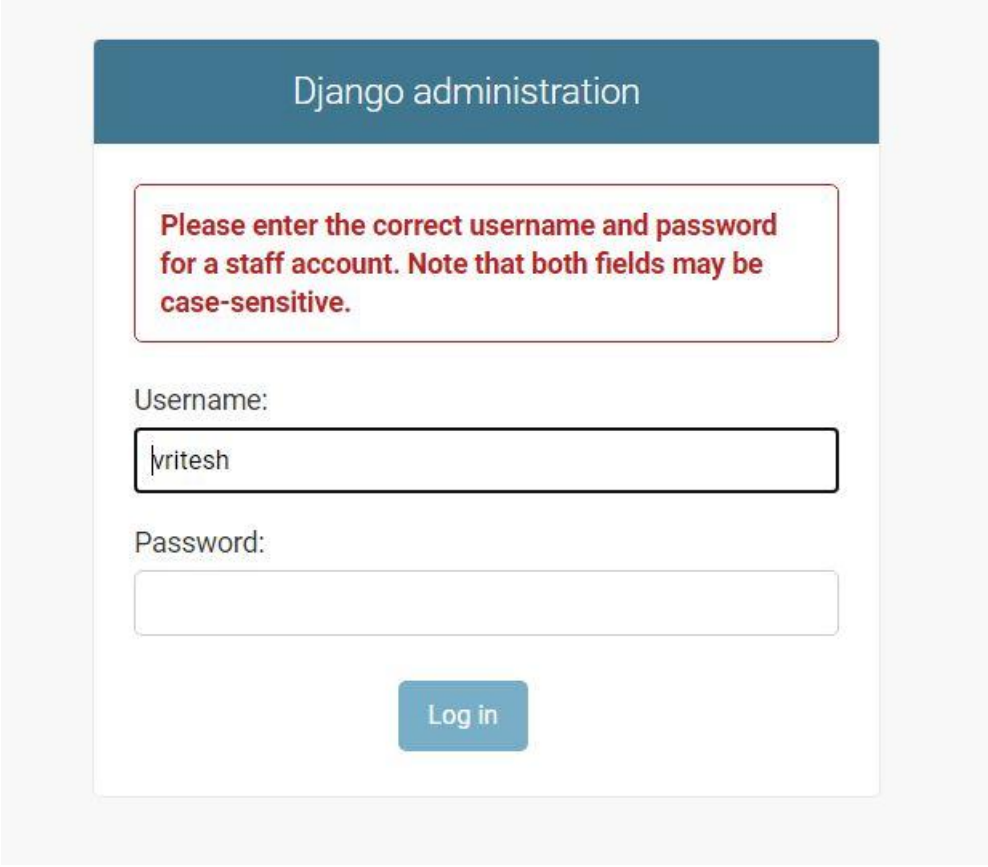
Validation

At the culmination of the integration testing, Software is completely assembled as a package. Interfacing errors have been uncovered and corrected and a final series of software test begin invalidation testing. Validation testing can be defined in many ways, but a simple definition is that the validation succeeds when the software functions in a manner that is expected by the customer. After validation test has been conducted, one of the three possible conditions exists.

Admin Interface:

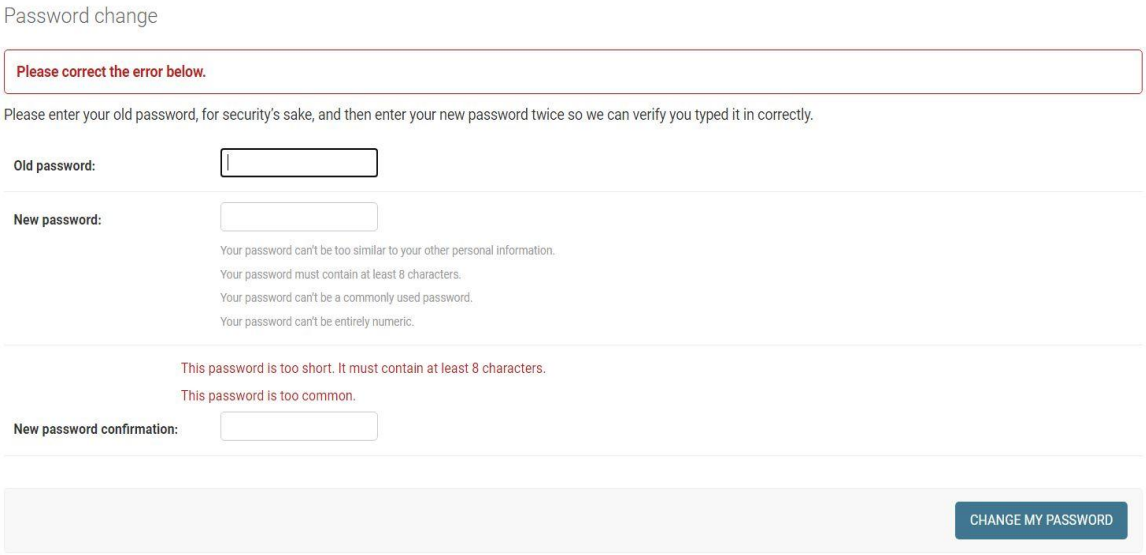
Admin Login

If admin will add username or password incorrectly then he will not be able to login and a message will be shown as given in the screenshot below.

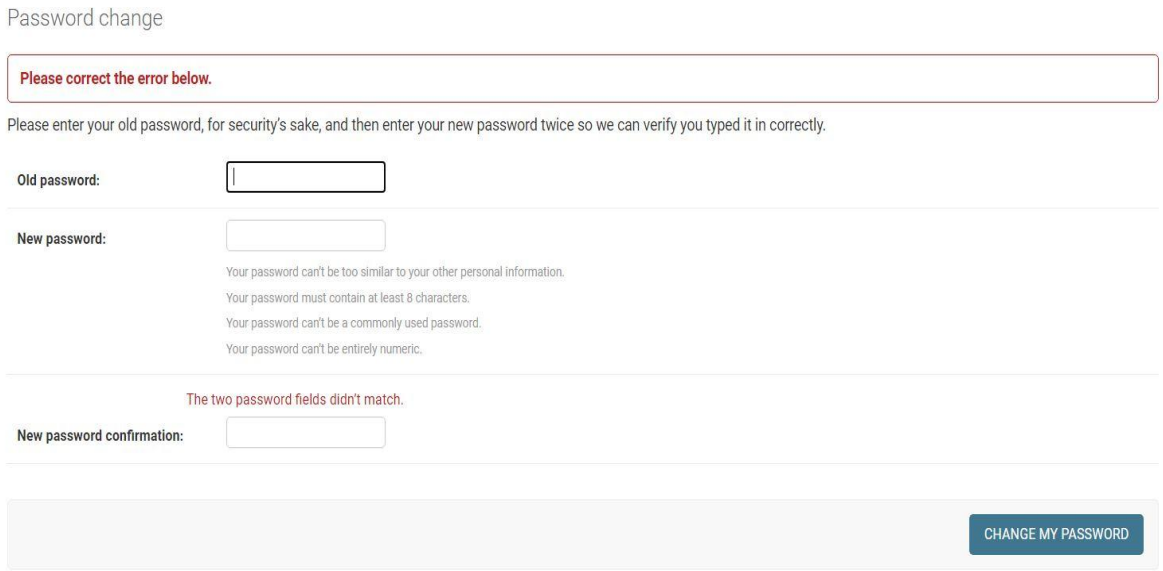


Change Password

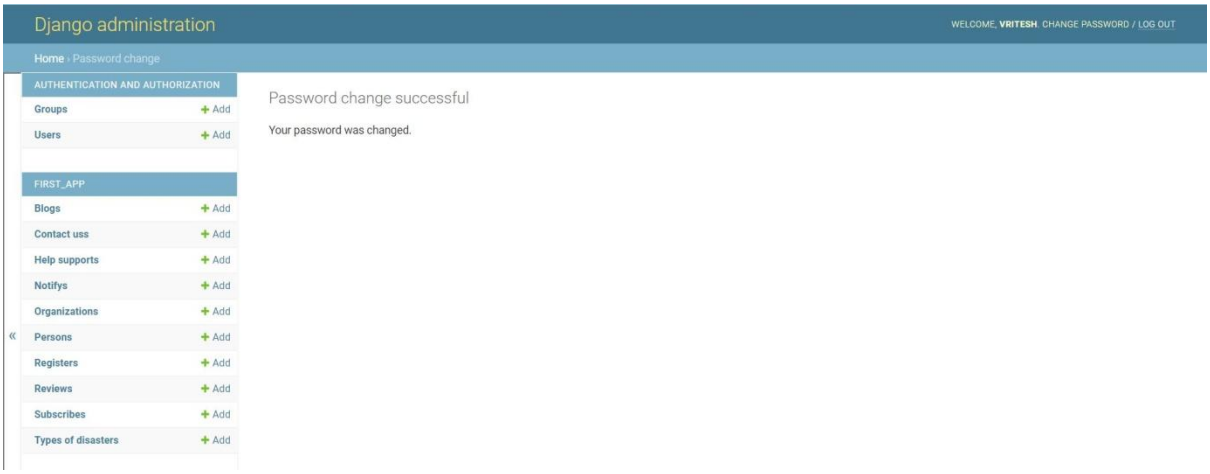
If the length of new password will be lesser than 8 characters then it will show an alert that "length of password must be greater than 8 characters"



If new password and confirm password will not match then it will show an alert "The two password does not match".



If admin will add all the fields correctly then the password will be changed with a message "password changed successfully"

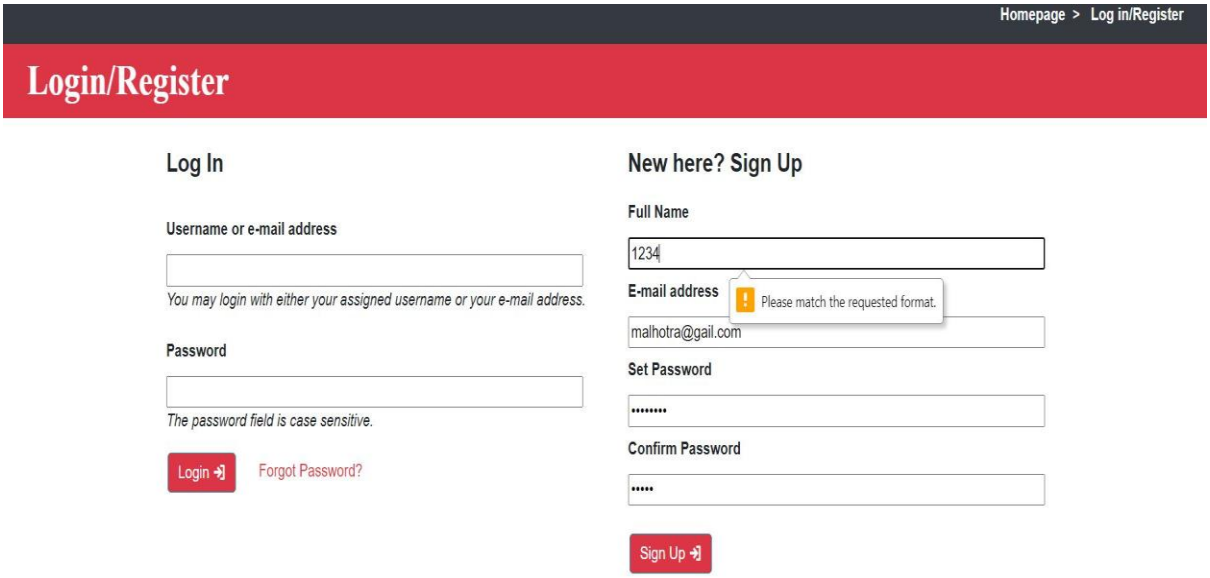


User Interface:

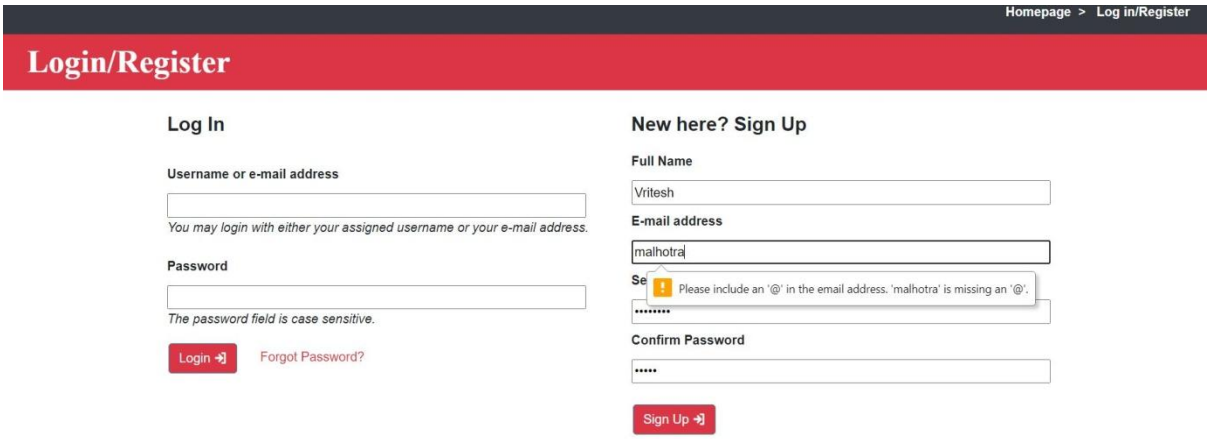
User Sign Up

Here are some validations which user has to pass while registering to the website.

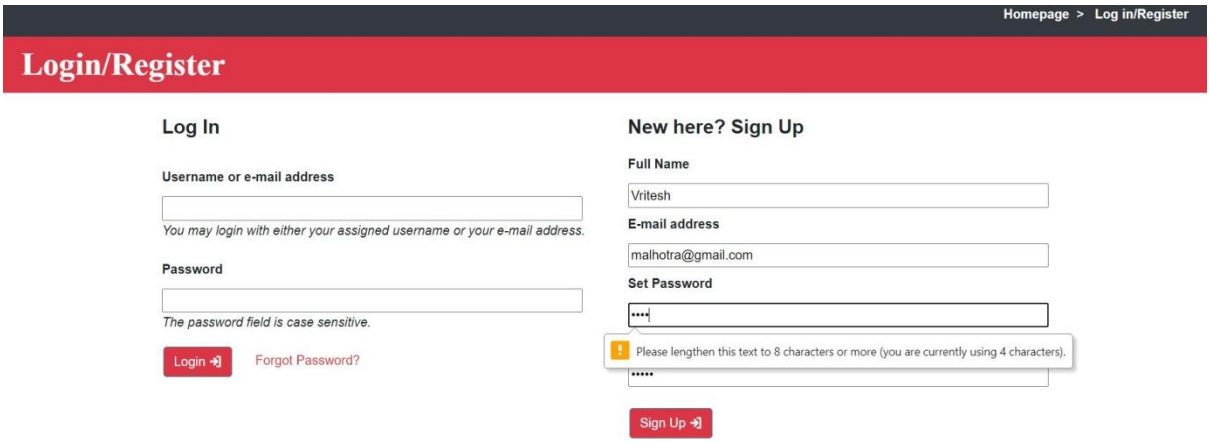
Full name can only have alphabets in it.



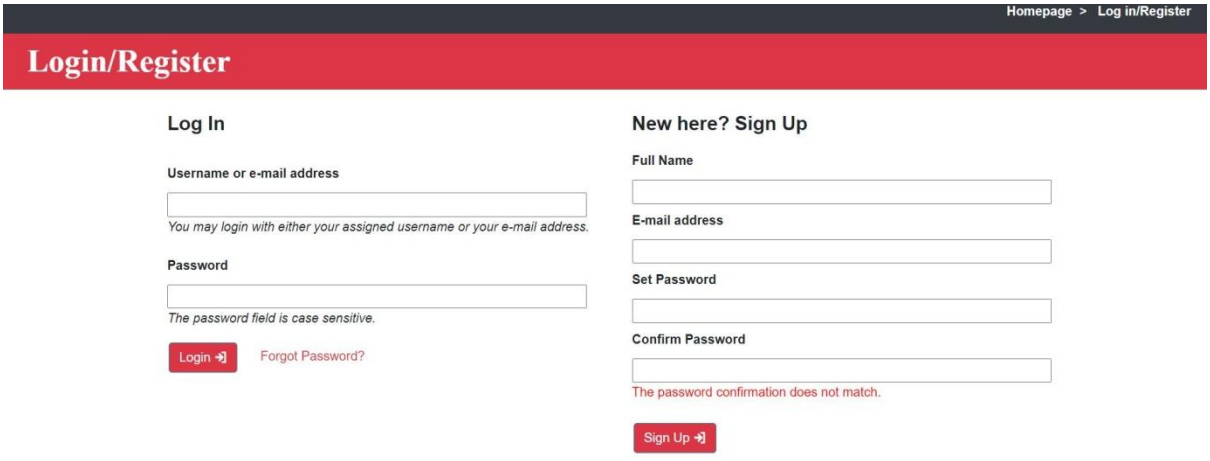
Email Field should have a particular format.



Password Field should have a at least 8 digits.

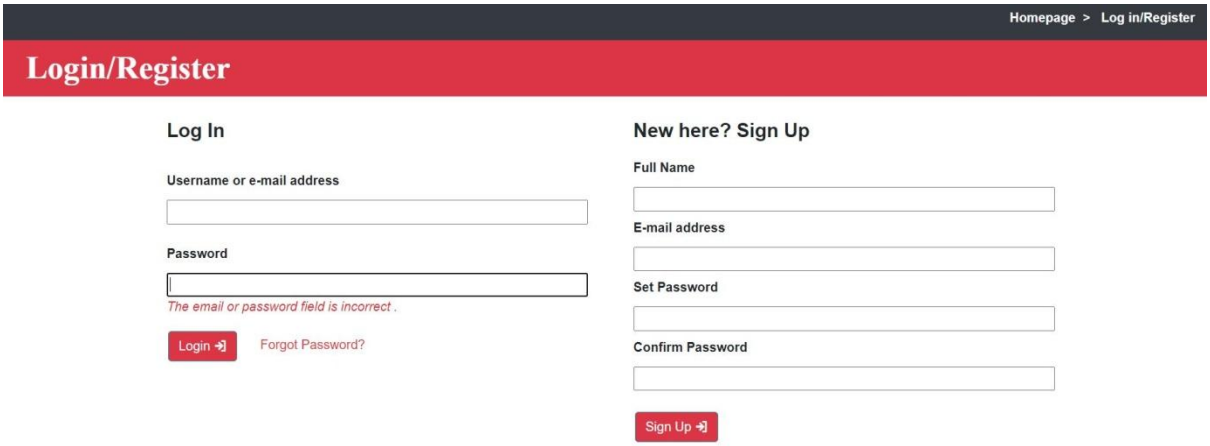


Confirm Password field should match Set Password field



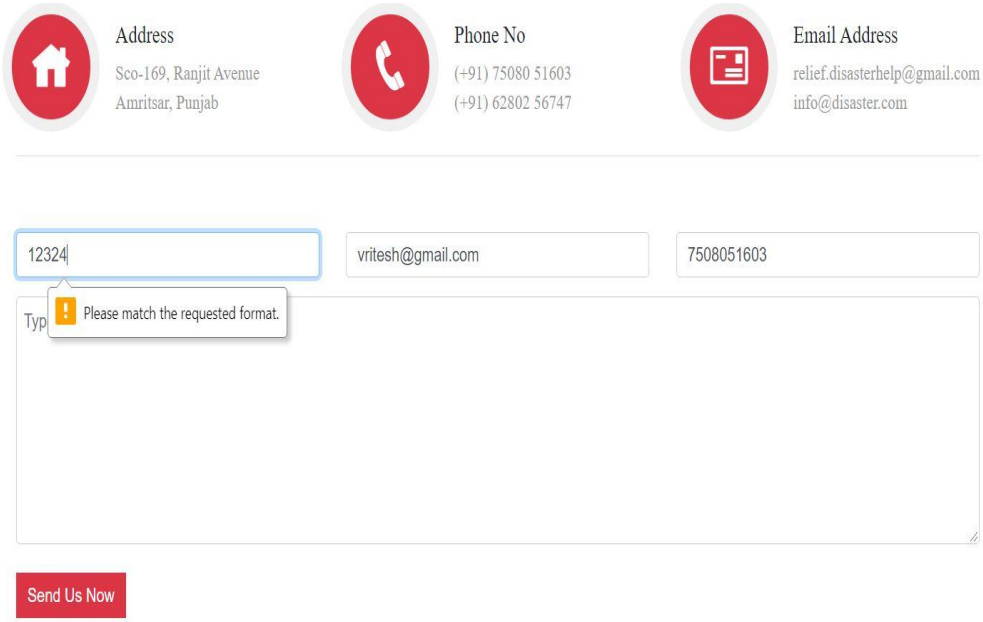
User Login

If user will add username or password incorrectly then he will not be able to login and a message will be shown as given in the screenshot below.

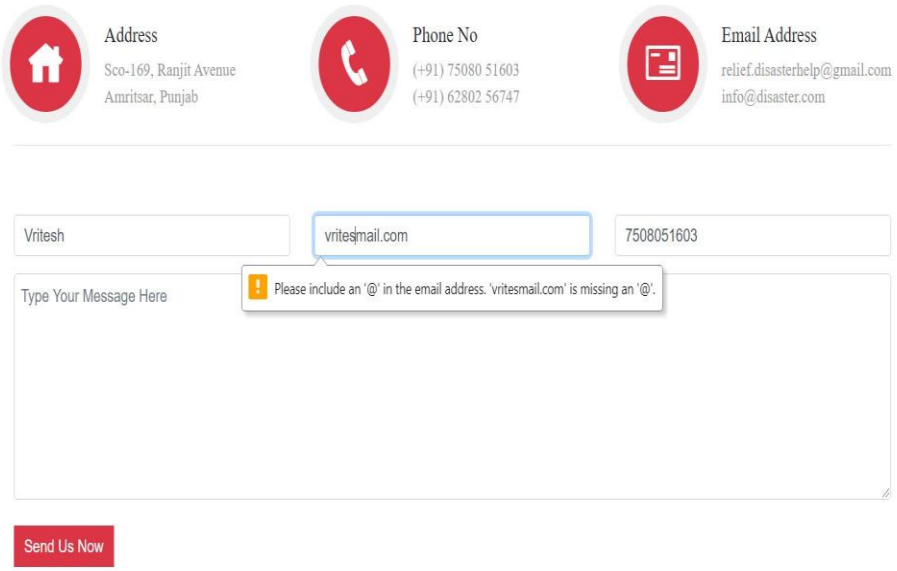


Contact Us

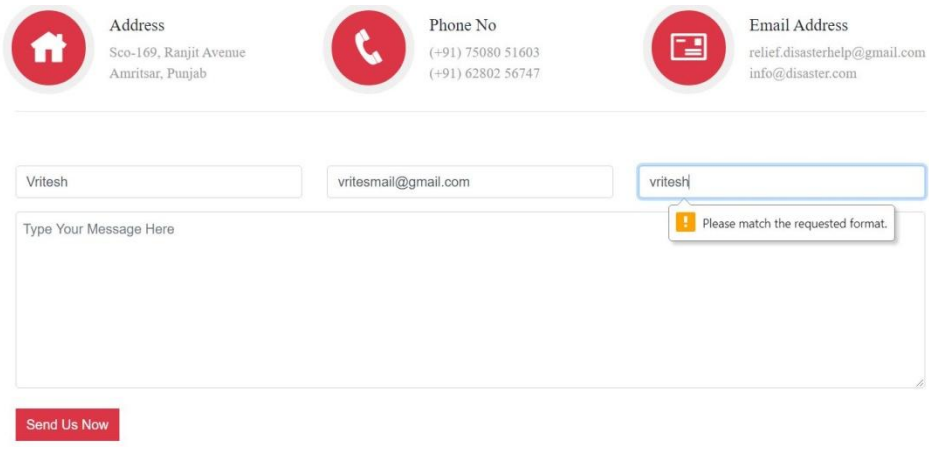
Name should have only alphabets.



Email Field should have a particular format.



Phone Number Field should have a particular format.



7. IMPLEMENTATION

A crucial phase in SYSTEM DEVELOPMENT LIFE CYCLE is the successful implementation of a new system design. Implementation simply means converting a new system design into operation.

1.) Implementation is the stage in the project where the theoretical design is turned into the working system and is giving confidence to the new system for the users i.e. will work efficiently and effectively. It involves careful planning, investigation of the current system and its constraints on implementation, design of method to achieve the change over, an evaluation, of change over methods.

2.) A part from planning major task of preparing the implementation is education of users. The more complex system is implemented, the more involved will be the system analysis and design effort required just for implementation. An implementation coordinating committee based on policies of individual organization has been appointed.

3.) The implementation process begins with preparing a plan for the implementation for the system. According to this plan, the activities are to be carried out, discussions may regarding the equipment has to be acquired to implement the new system.

4.) Implementation is the final and important phase. The most critical stage is in achieving a successful new system and in giving the users confidence that the new system will work and be effective. The system can be implemented only after thorough testing is done and if it found to working according to the specification. This method also offers the greatest security since the old system can take over if the errors are found or inability to handle certain types of transaction while using the new system.

5.) The major elements of implementation plan are test plan, training plan, equipment installation plan, and a conversion plan..

8. EPILOGUE

As no system design is ever perfect as communication problem, programmer's lack of knowledge or time constraints creates error . A perfect project is that in which there is a minimum key punching. The number of errors in future in a new design depends upon sereval factors.

Some of responsible factors are :

- Communication between user and designer .
- The programmer's ability to generate a code that reflects easily the system specification.
- The timer frame for the design.

In our project entitled " Disaster Aid" we have tried our best to cover each aspect carefully and accurately . On further analysis , the drawbacks of the system will show themselves which will further need modifications.

9. MY GAINS

I have a great experience in six months training and learnt a lot of new design and technologies.

some key points are given below :-

- This project was a learning experience. I have tried my best to build an website as per requirements .
- These technologies are very helpful for making my career in IT sector.
- A part from technology I also learnt how to work on combine project in team.
- How to efficiently manage the time while making the project .

I learnt that conceptualizing and designing the project is very important . Guidance and suggestions of my guide were quite helpful in steering my mind in the right direction whenever I got reckless.

10. BIBLIOGRAPHY

To bring the system to verge of completion the following books have been referred .

NAME OF THE BOOK	AUTHOR'S NAME
PYTHON FOR EVERYBODY	CHARLES SERVERANCE
LET US PYTHON	YASHAVANT KANETKAR

Some websites referred are :-

- www.google.com
- www.stackoverflow.com
- www.tutorialspoints.com