

BASIC DETAILS



Government of India
Ministry of Home Affairs

MINISTRY

**Ministry of
Home Affairs**



PS CODE

SIH1440



TEAM NAME

**HACK
LACUNA**



PS TITLE

**An application under
which all rescue
agencies are registered
and which can display
the location of other
rescue relief agencies
during natural/ man
made calamities**



THEME NAME

**DISASTER
MANAGEMENT**



INSTITUTE NAME

**BIT
SINDRI**

PROBLEM STATEMENT

To build such an application. There is need to create a central database where all rescue agencies can register their information, including their location, contact details, and areas of expertise. This information could be entered manually by agency administrators, or automated using GPS or other location tracking technologies. Once the database is populated, the application would need to be designed to display this information in an easy-to-use interface: It could include a map that shows the locations of all registered rescue agencies, along with filters that allow users to narrow down the results based on specific criteria, such as the type of disaster, the resources available, or the time since the last reported activity. In addition to displaying the locations of rescue agencies, the application could also include features for communication and collaboration. For example, agencies could send alerts or requests for assistance to each other directly through the application, or collaborate on shared resources such as medical equipment or transportation. Security and privacy would be major considerations in building such an application. It would be important to ensure that only authorized users have access to the database, and that sensitive information such as personal contact details is protected. Overall, building an application that allows rescue agencies to coordinate their efforts and provide aid more effectively could be a valuable tool for responding to natural or man-made disasters

IDEA APPROACH

Our solution offers two portals, one for rescue agencies and one for users, ensuring data privacy and scalability.

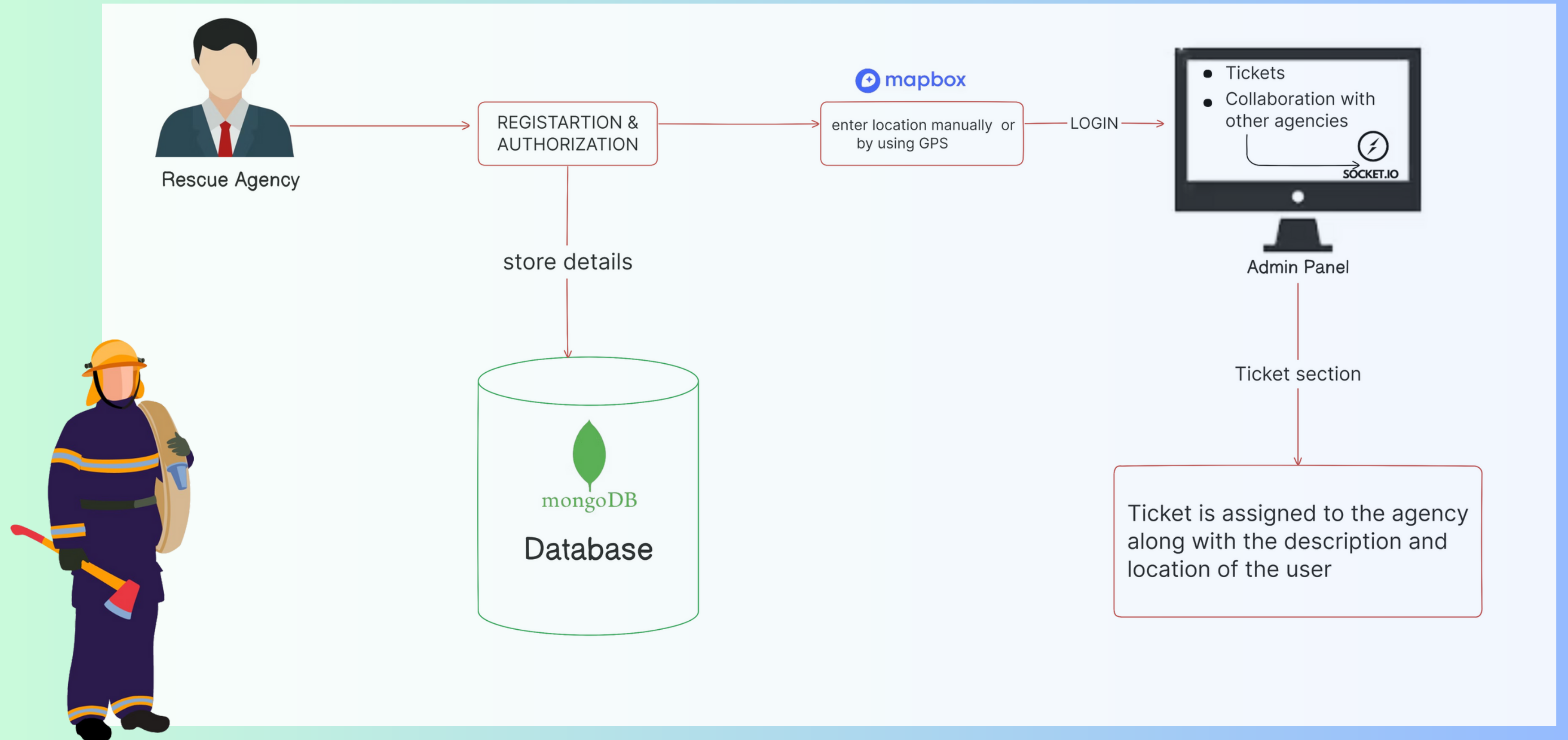
AGENCY PORTAL:

- Agency will register on the portal via a valid document ID.
- Upon successful registration they can enter location either manually or by using GPS.
- Then agency will get access to Admin Panel where they can see raised tickets assigned to them and can act upon it accordingly.
- They can also collaborate with other rescue agencies if necessary.

USER PORTAL:

- Upon successful login and authentication and thereby providing live location(for tracing and security), user will get access of user dashboard.
- User dashboard consists of: Map view interface with location of nearby agencies; Filter options(disaster type, availability, etc); Ticket section; Do's and Don'ts.
- User selects the agency and gives description of incidence along with photos or videos (for evidence) and raises a ticket.
- After raising ticket they will get a unique ticket ID along with the contact details of the selected rescue agency.
- User can contact the rescue agency and can follow up with reference to the ticket ID.

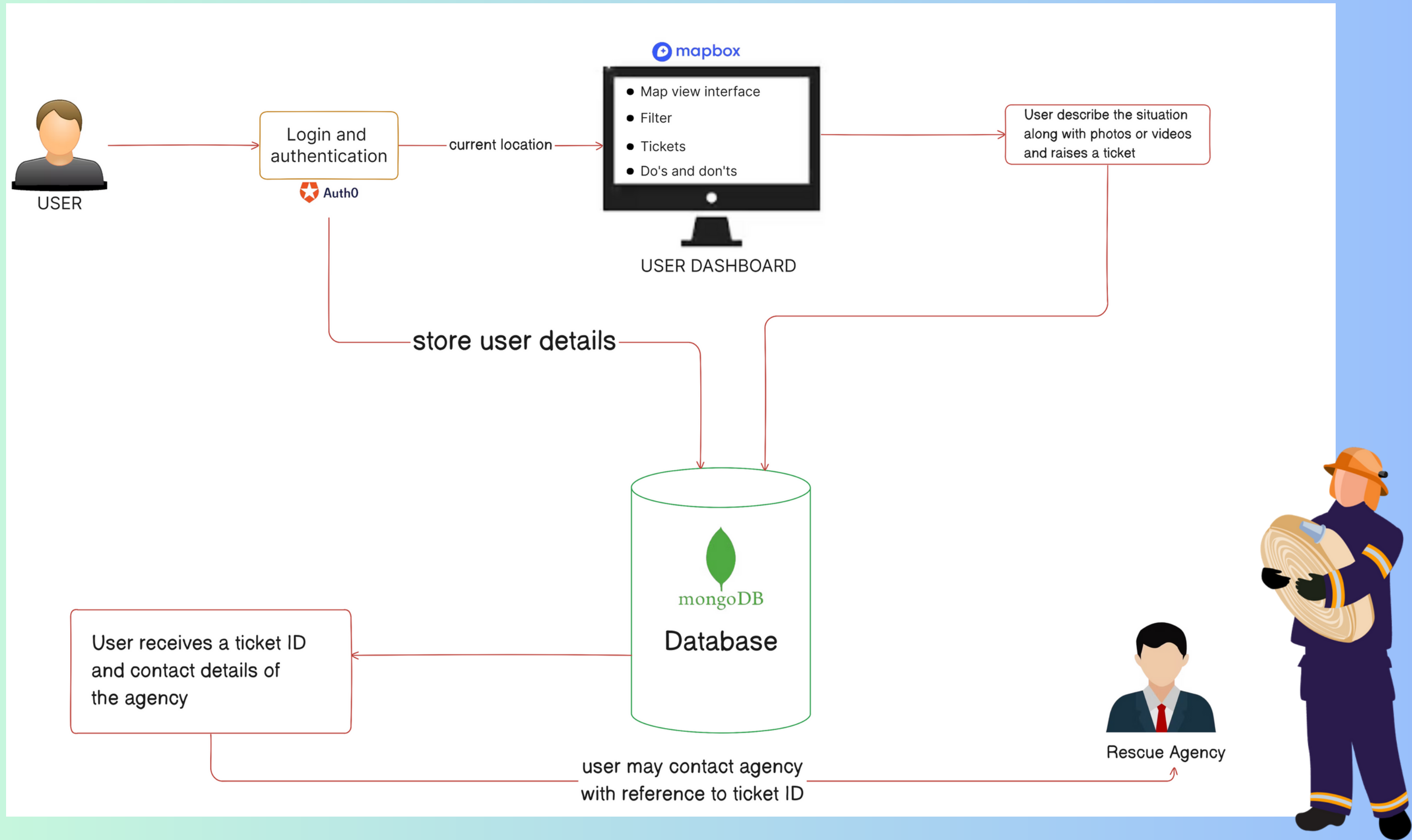
AGENCY FLOWCHART



AGENCY FLOW DETAILS

- Rescue agencies must register on the portal using a valid document ensuring their credibility.
- Upon successful registration Registered agencies can input their geographical location manually or, for precision, they can use GPS coordinates to mark their exact location.
- After successful registration, agencies will have access to the Admin Panel, which will consist of two sections one is raised ticket section where agencies can see all the tickets assigned to them provided by a description and can act upon it. The Admin Panel provides a secure and user-friendly interface.
- Tickets will be generated by user requesting an assistance.
- Each ticket will have Vital information such as disaster type, location of incidence, photos and videos.
- Our platform also provide real time communication support between agencies in case of emergency.
- Agencies can share resources, information, and coordinate with each other seamlessly.

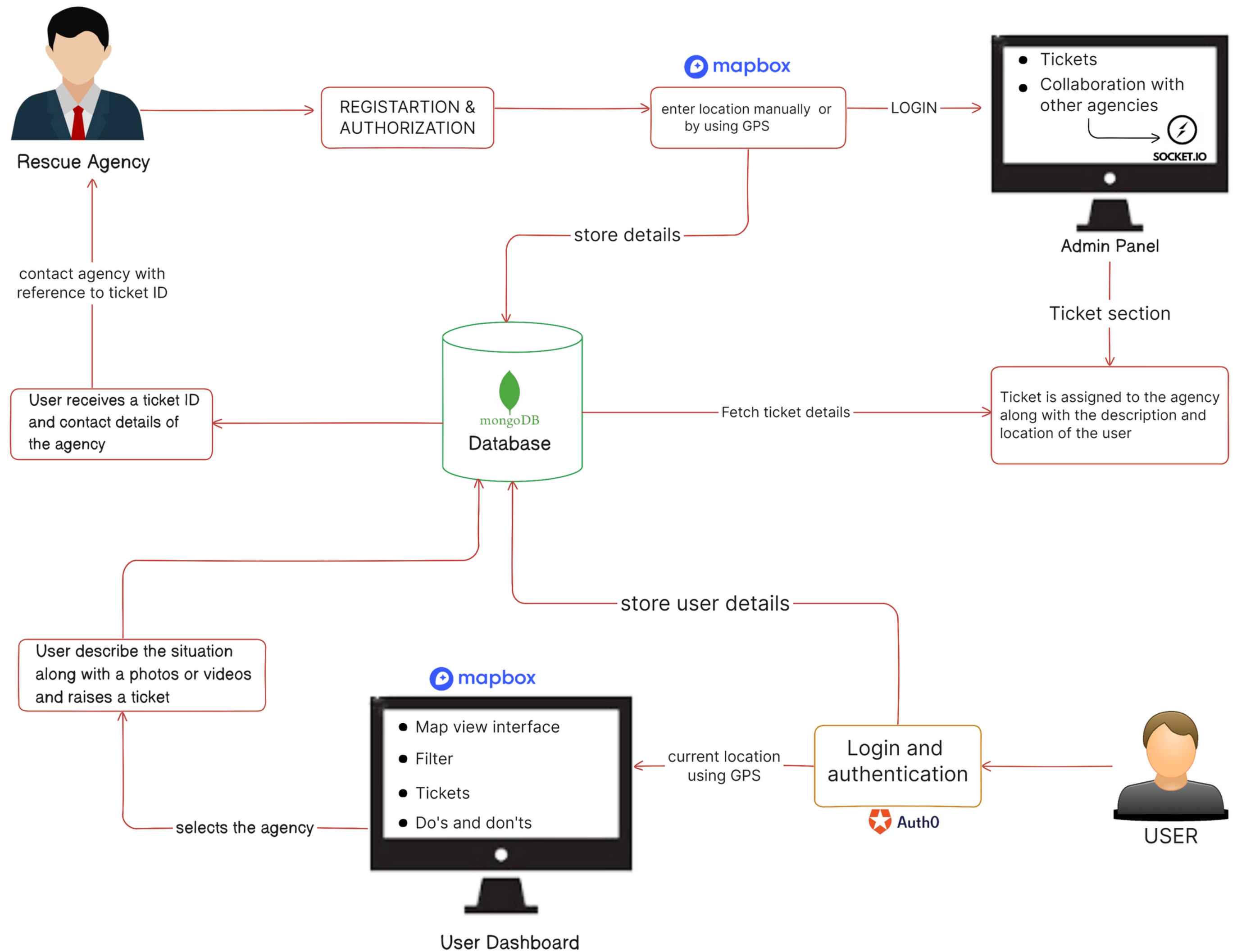
USER FLOWCHART



USER FLOW DETAILS

- User needs to login with their details and mobile number and after successful authentication and thereby providing live location (for tracing and security).
- User will get access to the user dashboard which comprise of four sections :
 - Map Interface : All the nearby agencies will be displayed on a map.
 - Filter : User can filter the agencies according to disaster type, resources and availability.
 - Ticket Section : User can see all the raised tickets and their status.
 - Do's and Don'ts : This section's sole motive is to make people aware at the time of calamity.
- After selecting the agency , user needs to give a brief description of the incidence along with photos and videos and thereby raises a ticket.
- Then the server will generate a unique ticket ID along with the contact details of the selected rescue agency.
- User can contact the rescue agency and can follow up with reference to the ticket ID.

WORKFLOW



TECHNOLOGY STACK

Front-end



Back-end



Database



Authentication



Collaboration



Map API



USE CASE

GOAL

Requesting help during a disaster.

FLOW

- User logs in and accesses the application.
- User shares live location and sees nearby agencies on the map.
- User selects the agency according to the disaster.
- User gives description along with photos or videos.
- The system generates a unique ticket ID for the request.

POST CONDITION

User's request is sent to the agency, and a ticket ID is provided for tracking.

SOLUTION BENEFITS

Efficient Resource allocation

The application helps rescue Agency agencies quickly identify and collaborate with nearby by agencies, ensuring. efficient allocation of resources.

Faster Response Times

By streamlining communication and collaboration, the solution reduces response times, allowing agencies to save more lives.

Privacy and security

The solution ensures that sensitive information remains confidential and only authorized users access the agency details.

Scalability

It can scale to accommodate a growing number of agencies and users, making it adaptable for various disaster scenarios.

Public Awareness

The application raises. public awareness about disaster preparedness and increases trust in the capabilities of rescue agencies.

Reducing cost

By optimizing resource utilization and response time efficiency, the solution can potentially reduce the overall cost associated with disaster response efforts.