## Use case description

| Use Case<br>Number: | UC-01   |
|---------------------|---|
| Use Case<br>Name:   | User Registration and Profile Management  |
| Overview:           | Login / Signup based on admin/user. update profile information  |
| Actors:             | Admin,User  |
| Pre condition:      | The system is running and accessible to users and admins.   |
| Flow:               | 1)User or admin accesses the system.  |
|                     | 2) If the user is not already registered, they select the "Sign Up" option. 3) The system presents a registration form with fields for essential information, such as name, email, password, etc. |
|                     | 4) User or admin fills in the required information.   |
|                     | 5) The system validates the entered information (e.g., checks for valid email format, strong password).   |
|                     | 6) If the information is valid, the system creates a user account and logs the user in.   |
|                     | 7) User or admin can now access the profile management options.   |
|                     |   |
| Post<br>Condition:  | Enter the condition that must be true when the main flow is completed.  |

| Use Case<br>Number: | UC-02   |
|---------------------|---|
| Use Case<br>Name:   | Issue reporting as posts  |
| Overview:           | creating new issue report. attaching files to illustrate the problem.Include location information(optional).User can post by maintaining anonymity. |
| Actors:             | user,admin  |
| Pre condition:      | user/admin needs to be logged in  |
| Flow:               | 1)User creates a new issue report.  |
|                     | 2) User may attach files to illustrate the problem.   |
|                     | 3) Optionally, user includes location information.  |
|                     | 4) User may choose to post anonymously.   |
|                     | 5) A new issue report is created and added to database.   |
|                     |   |
| Post<br>Condition:  | Other users within the same pincode will be able to view the newly created post.  |
|                     | The user will be redirected to the same posts page.   |
|                     |   |

| Use Case<br>Number: | UC-03   |
|---------------------|---|
| Use Case<br>Name:   | Data analysis and issue categorization  |
| Overview:           | The system processes user generated content to analyze and categorize community issues.                                       |
| Actors:             | Admin , System  |
| Pre condition:      | 1) There is user-generated content available for analysis.  |
| Flow:               | The system collects user-generated content from various sources, such as community forums, social media, or user submissions. |

|                    | The collected content is preprocessed to ensure uniformity and suitability for analysis.  |
|--------------------|---|
|                    | The system employs various techniques based on the type of content:   |
|                    | The system identifies potential community issues, such as hate speech, harassment, spam, or violations of community guidelines. |
|                    | 5) The system categorizes identified issues into specific categories based on their nature.                                     |
|                    |   |
| Post<br>Condition: | Community issues are analyzed and categorized.  |

| Use Case<br>Number: | UC-04   |
|---------------------|---|
| Use Case<br>Name:   | Alerts  |
| Overview:           | alerts are sent to individuals or groups to inform them about important updates, emergencies using email. |
| Actors:             | Admin,System  |
| Pre condition:      | Important updates or emergencies occur. only admin can send alerts.                                       |
| Flow:               | 1)Admin chooses the content of the alert to send.   |
|                     | 2)System sends alerts to individuals via email  |
|                     |   |
| Post<br>Condition:  | Alerts are sent to individuals via email and admin will be redirected back to home page.                  |

| Use Case<br>Number: | UC-05 |
|---------------------|-------|
| Use Case<br>Name:   | Polls |

| Overview:      | Interactive questions for users to vote on preferences, gathering quick opinions |
|----------------|--|
| Actors:        | User , Admin(For creating)   |
| Pre condition: | Poll is created and published.   |
| Flow:          | 1)Admin creates and publishes a poll.  |
|                | 2)Users receive notification of the poll.  |
|                | 3)Users vote on preferences.   |
|                | 4)System records and aggregates the votes.                                       |
|                |  |
| Post           | - Users can vote on preferences.   |
| Condition:     | - Opinions are gathered.   |

| Use Case<br>Number: | UC-06  |
|---------------------|--|
| Use Case<br>Name:   | Announcements  |
| Overview:           | Announcements are formal messages made to convey important news to a targeted audience displayed in website. |
| Actors:             | ADMIN  |
| Pre condition:      | Admin is logged in.  |
| Flow:               | Admin creates an announcement.   |
|                     | A new announcement is created and added to database.   |
|                     | Announcement is published and conveyed to the targeted audience by displaying in the website                 |
|                     |  |
| Post<br>Condition:  | Users can be able to see the announcements posted by the admin   |

| Use Case<br>Number: | UC-07   |
|---------------------|---|
| Use Case<br>Name:   | Viewmarkers   |
| Overview:           | View markers to see the noteworthy incidents occured in that community(of same pincode)   |
| Actors:             | User  |
| Pre condition:      | User selects a specific community (of the same pincode).  |
| Flow:               | The user opens the application or system and specifies a community of interest by providing a pincode or location.  |
|                     | 2)The system queries its database with the provided pincode or location to retrieve data on noteworthy incidents within that community.                   |
|                     | 3)The system displays markers on a map, showing the locations where noteworthy incidents have occurred in the specified community.                        |
|                     | 4)Users can click on the markers to access additional details about each incident, such as descriptions, dates, parties involved, and multimedia content. |
|                     | 5)Users can explore the map, zoom in/out, and filter or sort incidents based on their preferences.  |
|                     |   |
| Post<br>Condition:  | User can view noteworthy incidents in that community.   |

| Use Case<br>Number: | UC-08                                     |
|---------------------|---|
| Use Case<br>Name:   | Mark on map                               |
| Overview:           | user can mark noteworthy incidents on map |
| Actors:             | user                                      |

| Pre condition: | user is logged in and in maps section, he is in "mark on map" section.                      |
|----------------|---|
| Flow:          | 1)user selects a noteworthy incidents.  |
|                | 2)user selects the location using search bar and add title and description to the incident. |
|                | 3)user finally adds it on map.  |
|                | 4) it gets added to database.   |
|                |   |
| Post           | user who posted markers will be redirected to maps section.                                 |
| Condition:     | users living in same pincode area can see the marker in viewmarkers section.                |

| Use Case<br>Number: | UC-09  |
|---------------------|--|
| Use Case<br>Name:   | weekly analysis  |
| Overview:           | weekly analysis of noteworthy incidents by using timestamps of the events.   |
| Actors:             | System,Admin   |
| Pre condition:      | There is data available with timestamps of events.   |
| Flow:               | 1)Gather data on noteworthy incidents, including timestamps of when each incident occurred.  |
|                     | 2)Extract timestamps from the incident data, which indicate when each incident took place.   |
|                     | 3)Group incidents based on weekly intervals using the extracted timestamps.  |
|                     | 4)Analyze the aggregated data to identify trends, patterns, or changes in noteworthy incidents over time.  |
|                     | 5)Based on the analysis, stakeholders may take actions or make decisions to address specific issues or trends identified in the weekly analysis. |
|                     |  |
| Post<br>Condition:  | Weekly analysis of noteworthy incidents is generated.  |

| Use Case<br>Number: | UC-10   |
|---------------------|---|
| Use Case<br>Name:   | Analysis of Existing problems   |
| Overview:           | Using ml techniques,ongoing problems of the community are analysed based on the posts,problems posted by the user.                                  |
| Actors:             | System  |
| Pre condition:      | There is user-generated content available for analysis.   |
| Flow:               | System uses ML techniques to analyze ongoing problems.     Analysis is based on user-generated content.     Then analysis is displayed to the user. |
| Post<br>Condition:  | Ongoing problems of the community are analyzed based on user posts.   |

| Use Case<br>Number: | UC-11   |
|---------------------|---|
| Use Case<br>Name:   | User interface for rural people   |
| Overview:           | using three.js for creating an 3d experience such that the rural area people can easily understand user interface as its 3d environment   |
| Actors:             | User  |
| Pre condition:      | Three.js environment is available.  |
| Flow:               | <ol> <li>Design a 3D UI that suits the needs of rural users.</li> <li>Use Three.js to build the 3D environment, including scene, camera, and lighting.</li> <li>Implement user-friendly controls for navigation and interaction.</li> <li>Test the interface with rural users, gather feedback, and make improvements.</li> </ol> |
| Post<br>Condition:  | Rural area people can interact with the 3D user interface.  |

| Use Case<br>Number: | UC-12   |
|---------------------|---|
| Use Case<br>Name:   | Multilingual Content support  |
| Overview:           | using NLP to allow people across india to actively participate in their community.  |
| Actors:             | System  |
| Pre condition:      | NLP techniques for multilingual support are available.  |
| Flow:               | System uses NLP techniques to enable multilingual support.  People across India can actively participate in their preferred language. |
|                     |   |
| Post<br>Condition:  | user will be able to see the content in his preferred language.   |

| Use Case<br>Number: | UC-13  |
|---------------------|--|
| Use Case<br>Name:   | Chatting with admin  |
| Overview:           | user can interact with admin regarding concerned problems        |
| Actors:             | Admin, User  |
| Pre condition:      | User and admin are logged in and they are in chats section.      |
| Flow:               | 1)User initiates a chat with admin regarding concerned problems. |
|                     | 2) Admin responds to the user's queries or concerns.             |
|                     |  |
| Post<br>Condition:  | User can interact with the admin regarding concerned problems    |