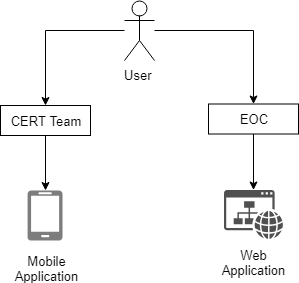
**Background:**

A disaster is an unexpected incident that takes place in an area, causing damage to physical assets and lives of people. A disaster may include incidents such as fire accident, tornado, floods, and a few other natural calamities. Emergency Operation Center (EOC) is a center that works to mitigate with the disasters that occur across a county region. Each county will have its own EOC and access to other region EOC’s information with the help of Common Operating Picture (COP). EOC acts as a brain for this disaster management system (DMS). It has Community Emergency Response Team (CERT) which will comprise of the trained and certified people who visit to the disaster-prone area and send information to the EOC. CERT acts as the eyes of EOC. Upon receiving the information from CERT teams about the situation of a disaster, the EOC will send the required teams to the location to deal with the rescue operations. These teams may include the Fire team, Law Enforcement (LE) team, generally referred to as police, & the Emergency Medical Services (EMS) team, generally referred to as the ambulance. These teams act as the Arms and Legs of EOC.

CERT teams will be formed depending upon the capabilities and expertise of individuals. Almost all the CERT members will have had undergone 25 hours training and obtained certification, prior to registering for the CERT membership. The whole idea behind the concept of CERT teams is to make citizens respond to the disastrous situations rather than the victims.

**UML Diagram:**



**Requirements:**

**Mobile Application**

1. The mobile application shall be able to provide an option of sign up for the mobile application, to the interested CERT applicant who is willing to join the CERT teams.

* The fields of the sign-up form shall be First Name, Last Name, Email-id, Password, Retype Password, Upload Profile Picture, Submit button.

1. The mobile application shall be able to provide an option to the CERT applicant to log in after successful sign up, by entering the email-id and password.
2. The mobile application shall be able to provide an option to the logged in CERT applicant, to fill a CERT registration form and submit it.

* The fields of the registration form shall be First Name, Last Name, Email-id, Phone Number, DOB, Skills, License/Certification number, License/Certificate attachment (Camera button/Attach file of type JPEG, PNG, PDF), Address, Limitations (such as Night blindness, Speech issues, Asthama or others), Submit button.

1. The mobile application shall be able to display a status bar that shows the status (Submitted, Under-Review, Decision) of CERT registration form submitted by the CERT applicant.
2. The mobile application shall be able to receive the decision confirmation made on the submitted CERT registration form by CERT applicant.
3. The mobile application shall be able to provide the dashboard to the CERT applicants whose registration form is accepted.
4. The mobile application shall be able to provide a button to the CERT member to know the CERT team name that he/she belongs to.

* The CERT team name shall be alphanumeric/numeric/alphabetic.

1. The mobile application shall be able to display the dashboard with different types of disasters showing an appropriate thumbnail/icon (such as Floods, Tornado, Wild Fires, Earthquake).
2. The mobile application shall be able to receive notifications regarding disasters sent by the web application and display it on the notification icon. The CERT team member shall be able to respond to the notification by clicking on accept or decline button.
3. The mobile application shall be able to provide an option to the CERT team member to click on a disaster thumbnail on the dashboard, to view report about the disaster.

* The disaster report form shall consist of type of disaster, its brief description, related image/video (Camera button/Attach file of type JPEG, PNG, MP4) and accurate GPS location (current location button).

**Web Application**

1. The web application shall be able to provide an option to the admin to review the application submitted by user by clicking on each application received.

* The web application shall be able to provide option to admin to edit user profile?

1. The web application shall be able to provide option to the admin to approve or reject the user application.

* The web application shall be able to send an email to the user conveying if his/her application got approved or rejected.

1. The web application shall be able to provide option to the admin to create, modify or delete the CERT teams, based on the expertise and user location.

* The web application shall be able to provide a filter option to the admin to list people with certain expertise and certain location.
* The web application shall be able to generate a unique id for every team created by admin.

1. The web application shall be able to provide option to the admin to send the notifications about a disaster to the CERT teams present in disaster-prone location.
   * The mobile application shall be able to provide the availability confirmation to the user by clicking yes/no and if yes, then provide the earliest availability?
2. The mobile application shall be able to provide an option to the CERT team members to report regarding the disaster impact by providing the type of disaster, its brief description, related images/videos and accurate GPS location.
3. The web application shall be able to provide option to the admin to view all the reports sent by CERT teams by clicking on each report.

* The web application shall be able to provide an option to the admin to view the detailed information of a report, assign it a priority, assign the arms required.

1. The web application shall be able to move the above requests to the ‘To do tasks’ list on the dashboard, which can be viewed by anyone from anywhere.
2. The web application shall be able to provide option to the admin to mark the requests as completed, which will be moved to the completed tasks list.