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Containment Zone Alert Application

An application that is intended to provide information about containment zones in a particular region by alerting people, through continuous monitoring of an individual's location. Key benefits of the application are monitoring people's activity and alerting them of their safety movements.

PROBLEM

How might we alert people of Covid Containment Zones?

Solution Requirement

The project aims at building an application that provides information about the containment zones of a particular region by continuously monitoring an individual's location. Location of the individual must be stored in the Database. Alerts are sent using the notification service.

Features

Admin App (portal):

They should login to the app and update the containment zones locations in the portal. Based on the location a Geofence will be created within a 100 meters radius. They should be able to see how many people are visiting that zone.

User App (Mobile App):

The app should have a user registration and login. After the user logged into the app it will track the user's location and update the database with the current location. If the user is visiting the containment zone he will get an alert notification.

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Brainstorming

Ideas that came to our mind that address our problem statement.

Manikantan R V

- Map Integration using Google API's
- Customizable Alerts can be a plus!
- Get Data from Open Source API's
- Security in Location sharing
- Cloud data enables syncing
- Automate syncing for flexibility
- Allow user to search containment zones
- Self explanatory UI
- Lively Interface in a pannable view

Priyan J

- Easy Identification of containment zones
- No complicated process involved
- No privacy related issues
- Assist to stop spreading of dreadful pandemic
- What if it doesn't support all devices?
- Notifications to avoid entering the red zone is provided
- Visualize statistics
- Offline data storage
- Interactive map for containment zones

Vikneysh Raj G G A

- Include a Referral Program
- Don't require personal info unnecessarily
- Instant alert delivery
- Hashing of passwords
- Have a news feed with current COVID statistics
- Allow user to store search data
- Support for almost all devices irrespective of android version
- What if location service fails?
- Getting user feedback

Jebas Winston E

- Privacy concerns
- What if phone runs out of battery?
- Allow user to see live COVID statistics
- Allow users to Recommend the app
- Focus on performance improvements
- Overcome Latency Factors
- Encourage users to install app
- Observe changes impacted
- Support provision will be generous

Rishi P

- App promotions
- Simple and clear UI
- Real time alerts
- Test the app throroughly
- Frequent Updates & Bug Fixes
- How does it replace other priorly existing app?
- Helpful in finding nearby containment zones
- Precision of User Flows
- Let the users feel the functions visually

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Grouping of ideas

Each group is a collection of similar ideas from the brainstorm that has a title which describes what the ideas have in common.

Features

- Easy Identification of containment zones
- Map Integration using Google API's
- No complicated process involved

Pros

- No privacy related issues
- Customizable Alerts can be a plus!
- Cloud data enables syncing
- Assist to stop spreading of dreadful pandemic
- Security in Location sharing
- Offline data storage

Issues

- What if location service fails?
- What if phone runs out of battery?
- What if it doesn't support all devices?

Extra features that can be added

- Getting user feedback
- Have a news feed with current COVID statistics
- Hashing of passwords
- App promotions
- Include a Referral Program

Concerns

- Overcome Latency Factors
- Allow user to store search data
- No privacy related issues
- Simple and clear UI
- Frequent Updates & Bug Fixes

Uses

- Helpful in finding nearby containment zones
- Instant alert delivery
- Allow user to store search data
- Allow user to search containment zones
- Visualize statistics

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Priorities

An importance - feasibility graph about what's important moving forward.