MIT APP INVENTOR

SAFEROUTE

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SUMMER APPATHON

OVERVIEW

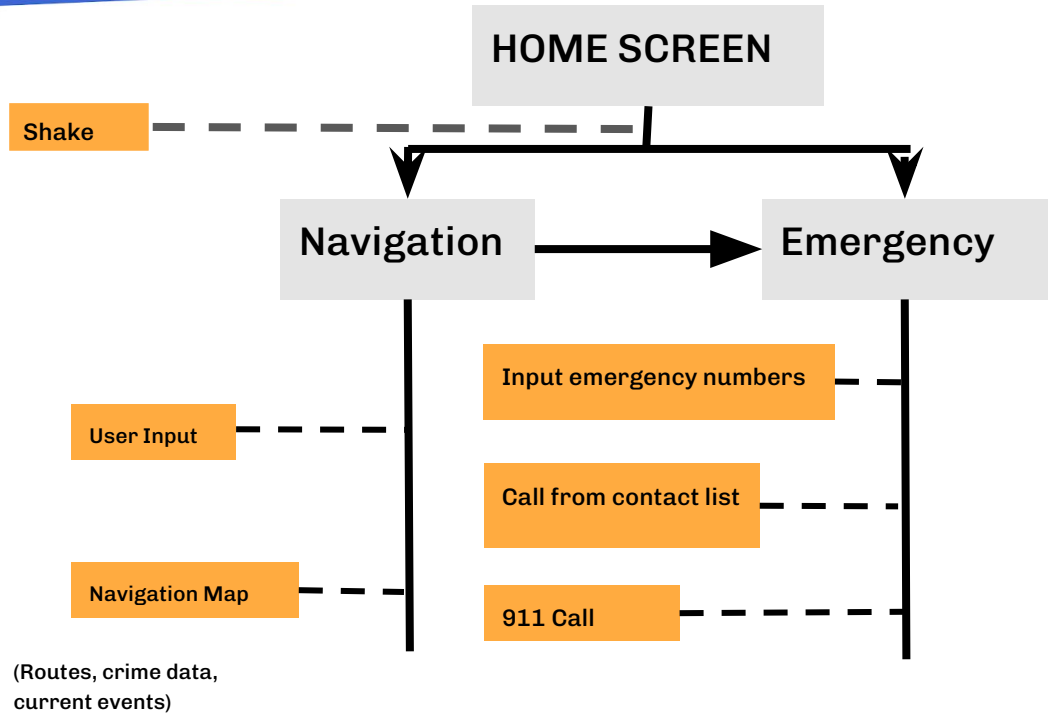
- **App Name:** SafeRoute
- **App Description:** SafeRoute is an app that will help you stay safe while walking, considering crime and ongoing events nearby in real-time. In addition to calling 911 or notifying close contacts in emergencies, the device can also be shaken 3 times to send a distress signal to the contacts.
- **Track:** Youth Team
- **Category:** Civic Engagement & Justice

THEME

In 100 words or less, describe the problem that you chose to address, and why you were interested in solving it. Please note that this portion of your submission will be published if you are selected as a finalist or winner.

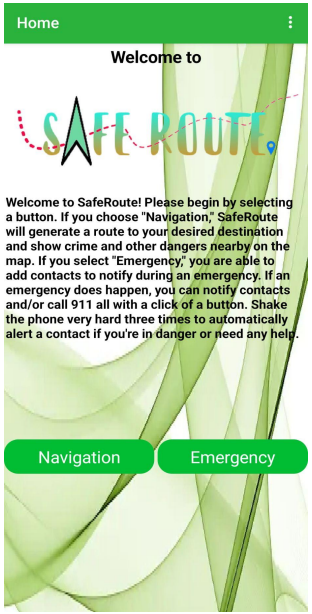
Almost all of us have experiences in a downtown area where you decide to walk, you might end up passing questionable individuals or serious events. This can lead to unsettling or even dangerous encounters which cause concerns about your safety. Unlike conventional navigation systems that merely provide directions and potential traffic updates, our app intends to provide safe solutions for pedestrians and is meticulously crafted to incorporate three layers of safety features, including crime data from the past 12 months, updates on ongoing events such as concerts, weather conditions, terror incidents, and a distress signal option for potential dangers.

SCREEN MAP

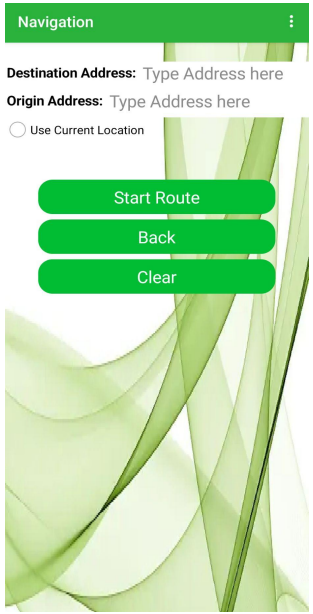


*orange = function, not a screen

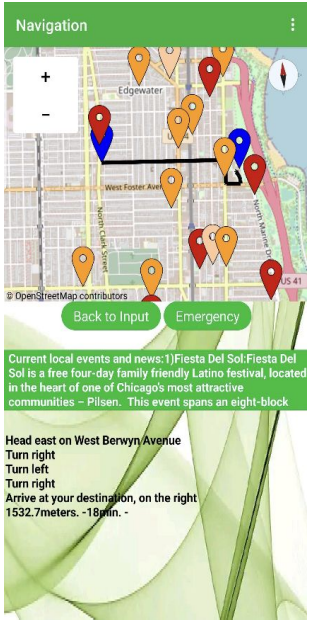
INSTRUCTIONS



Step 1: There will be 2 buttons, Navigation and Emergency. Select the desired button. Shake the phone hard 3 times to automatically text emergency contacts.

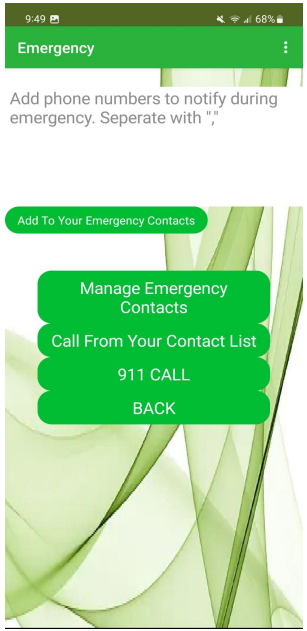


Step 2: If you selected the navigation button, input desired destination and starting area

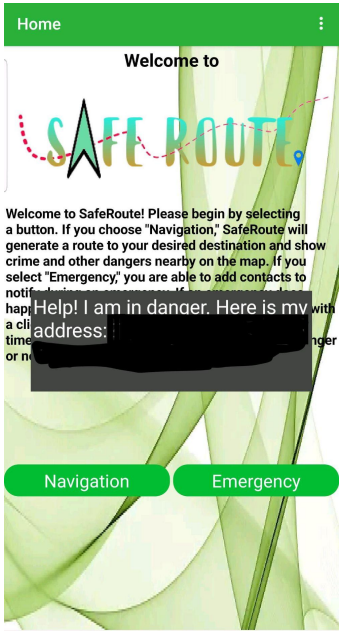


Step 3: The directions will be written on the bottom. The blue markers is your start and end route, and the orange markers represent emergency data. The darker the color, the higher the risk. The text box contains information about current events.

INSTRUCTIONS



If you selected an emergency button, you will be brought to this screen. Add phone numbers to notify during an emergency. You can also call from your contact list and/or call 911.



If you shake the phone hard 3 times, this message will be sent to your emergency contacts.

LIMITATIONS

In 100 words or less, describe the limitations of your app and what people should carefully consider when using it.

Our application aims to enhance user awareness of potential dangers in their vicinity. The accuracy of other databases, such as Crimeometer, PredictHQ, and Open Route Service will impact the outcome of the app. For example, if one of those databases has technical issues one day, or doesn't have the latest info updates, it would affect the accuracy of our app. There might be insufficient crime data in certain areas, so our app may not show expected outcomes.

ACKNOWLEDGEMENTS

Please list the names of anyone who helped you with developing your app, and describe what type of help they provided.

- Ron Zhang: Team Coach
- Fen Lu: Providing guidance with code when we are really stuck
- Dr. Yu Meng: Organized groups, reviewed ideas, and provided technical guidance

TECHNOLOGIES USED

- Crimeometer
- Open Route Service
- PredictHQ
- AccelerometerSensor/TinyDB/Navigation/Location Sensor/Notifier/Clock/Texting/Phone Call