



North South University

Department of Electrical and computer Engineering

Project proposal

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Project name: Emergency app Ric

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INTRODUCTION

In 2020, it is rare to find someone without a smartphone. So, as people are already using smartphones daily, why not make their lives safer by using an Emergency app that helps in medical emergencies and accidents. The app will do that by calling emergency contacts and sending live location feeds to those emergency contacts. So, they can come to help or send help (if badly hurt or unconscious).

When feeling ill or having symptoms of illness like stroke or heart attack. You can quickly ask for help and send your exact location. If you are in risk of being attacked you can instantly send a distress call with current location. If attacked suddenly the struggling will make the app send distress calls on its own. Especially useful for women safety in our current situations. All this can be done with simple gestures. (Social and safety value)

The app helps you find nearby hospitals, police stations and their contact numbers or call ambulance services with a single tap on the designated icon in the app. (Mass use and monthly subscription will help fund this app. Summoning ambulance and other services through our app would also provide a chance to earn money)

FEATURES

- If the user cannot open the app, he can shake his phone three times and it will send a SMS with his location to his emergency contacts.
- Then it will call the emergency contact to make sure they did not miss SMS and let victim talk to his emergency contacts (Automatically)
- In advanced countries like the USA it will call the 911 services for rescue automatically
- If the user can open the app, he will have easy access to other features like finding the nearby hospitals, the shortest route to them, their contact number, ambulance services etc.
- Can notice a person having seizures and send location and Call emergency contacts.
- Easy Sign in/up features, customizable profile.
- The app will have a failsafe if the app is activated unintentionally the user will have 30 seconds to cancel the process.

TECHNOLOGY

The application will be developed by Android Studio. Android Studio is the official integrated development environment for Google's Android operating system, built on JetBrains' IntelliJ IDEA software and designed specifically for Android development Using multiple android sensors typically built in Android devices such as gyroscope,

accelerometer, gesture control. Google API will be used for location services.

Frontend

For the frontend we will be using XML and Java. XML is a markup language much like HTML used to describe data. In Android we use xml for designing our layouts because xml is a lightweight language, so it does not make our layout heavy. It also gives a more premium user interface and smoother experience.

Backend

For the backend we will be using Firebase. Firebase is a platform developed by Google for creating mobile and web applications.

Database

We will also be using the Firebase for Database. It has a Realtime Database feature. The Firebase Realtime Database is a cloud-hosted database. Data is stored as JSON and synchronized in Realtime to every connected client.

Payment method

Only the advanced features will be locked. Like many other apps the premium app can be bought from Google play store. Monthly subscription will also be an option by using Bkash Api to receive payment.

Monetization

As a safety/emergency app it will display ads related to healthcare and fitness only on the button Never blocking the view or interfering with the user's interaction with the app.

Social Value

If you are in risk of being attacked you can instantly send a distress call with current location. If attacked suddenly the struggling will make the app send distress calls on its own. Especially useful for women safety in our current situations. All this can be done with simple gestures.

User Profile

There will be a profile page for every registered user to access their information, where they can track records of their previous incidents with date and time. Also, he can notify us if he has some serious health conditions like risk of stroke, Heart problem etc.

References: Google, YouTube, Eshikhon.