

# Women's Safety App using Android

## Introduction

In today's world it is very unsafe to travel alone, especially for women. Since lots of unexpected, and shameful incidents are happening around the globe. Problems may come from anywhere and anytime, as women are also growing equally like men so for that purpose they have to travel alone at night where ever they go, they have to travel alone in public transport as well, and for that reason we need to understand and solve this problem of women so they also should not feel any fear regarding their safety. This report represents an android application which will serve the purpose to rescue the women from unsafe conditions. As we all know that nowadays every individual carry their own smartphones and the uses of android applications have been increased rapidly so it is better to have such an android application which will provide a safe environment in public transport.

### Pros

This app continuously fetch the location for an interval of every 30 sec and send it to registered contact. So we can easily track the user and it will also send the location in form of URL or latitude and longitude coordinates of location.

### Cons

This app will work at the time of the danger so it is not that feasible for a user to instantly react if he or she is in trouble. The whole process of the system is done only when the device is connected to proper mobile network, data connection of the device is on and location service in the device is switched on (GPS).

## Requirement Analysis

### Software Requirement

#### Front End Software Requirement

Android studio

In this project we used Android Studio offers even more features that enhance your productivity when building Android apps

### Hardware Requirement:

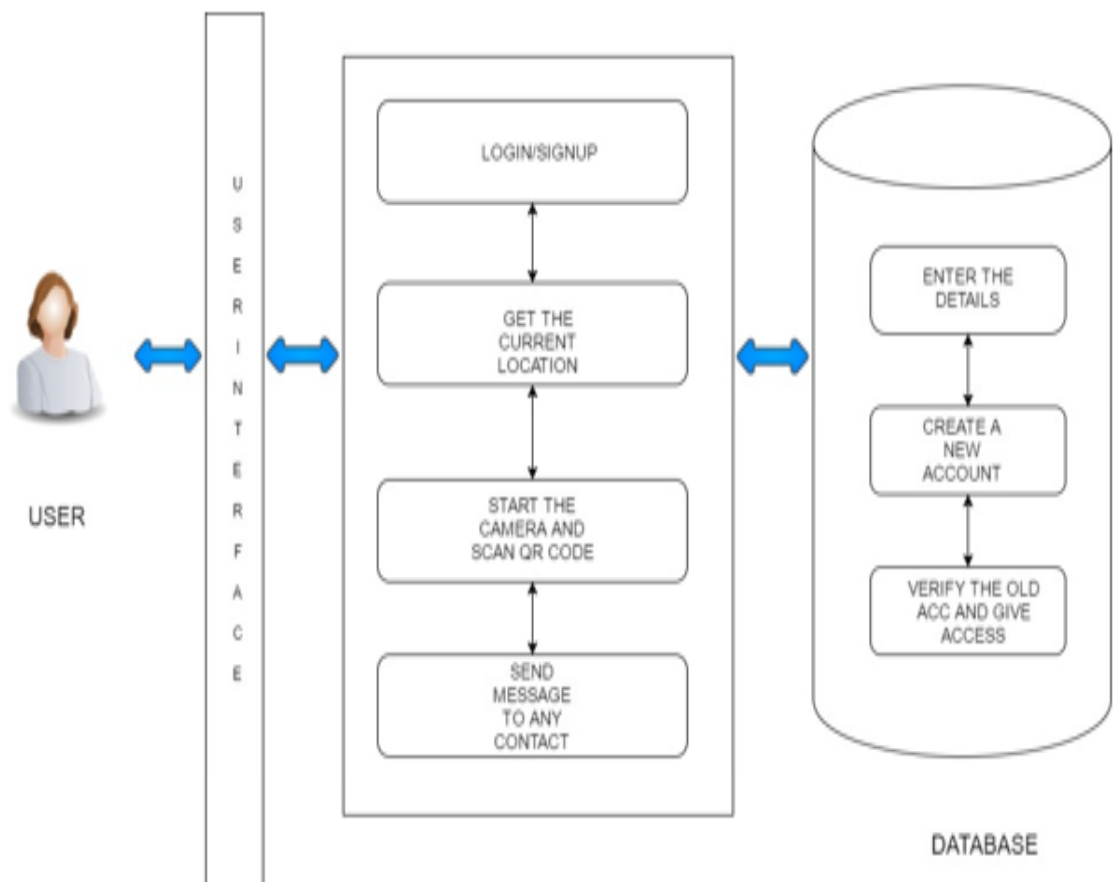
Hardware Required for Implementation

- Device with QR Scanning support
- Device with GPS support
- Device with Text messaging support

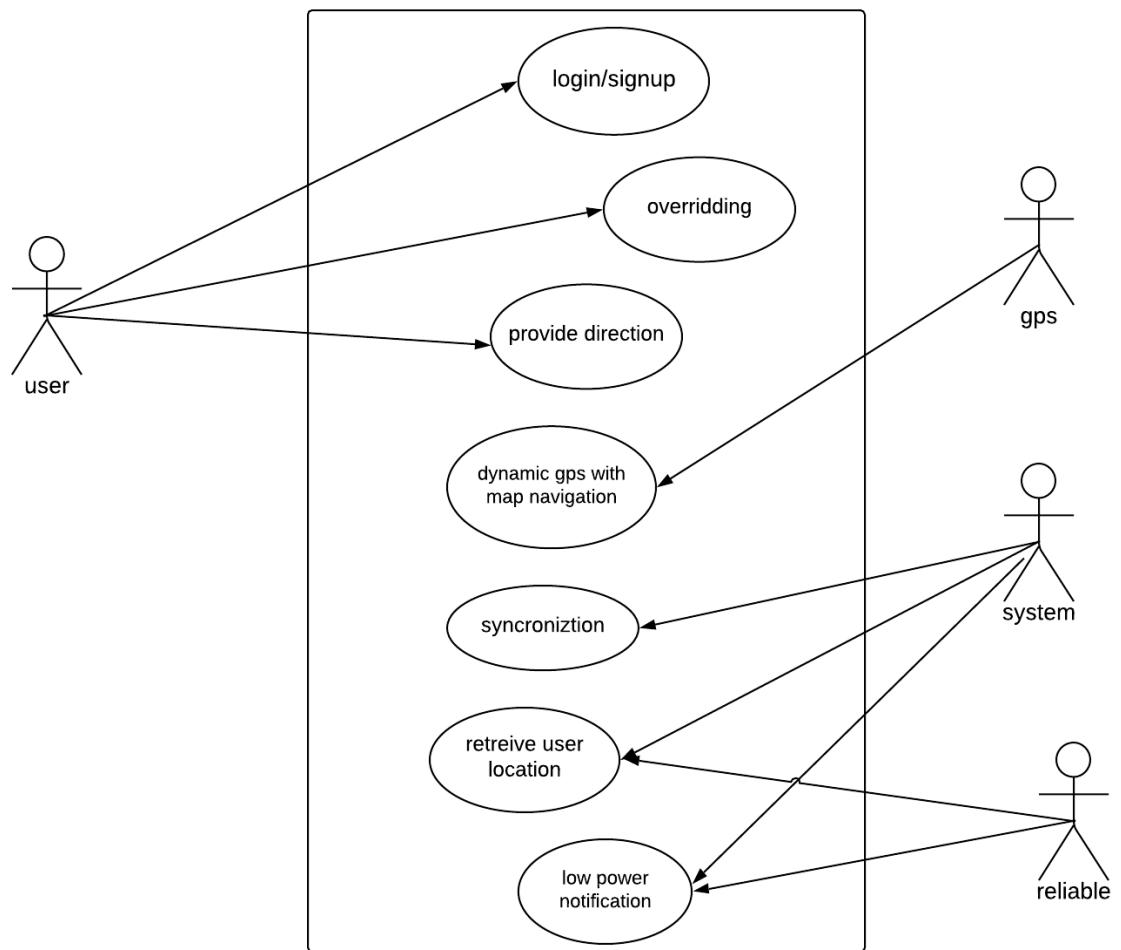
# System Design and Architecture

Design is the first step in the development phase for any techniques and principles for the purpose of defining a device, a process or system in sufficient detail to permit its physical realization. Once the software requirements have been analyzed and specified the software design involves the technical activities design, coding, implementation and testing that are required to build and verify the software. The design activities are of main importance in this phase, because in this activity decision ultimately affecting the success of the software implementation and its ease of maintenance are made. These decision have the final bearing upon reliability and maintainability of the system. Design is the only way to accurately translate the customer requirements into finished software or a system. Software design is a process through which requirements are translated into a representation of software.

## System architecture:



## Usecase diagram:



## Usecase1 (USER):

### 1. Pre-conditions:

The user sign up and login to run the application

### 2. Post-conditions:

The message will send the receiver

### 3. Success Criteria:

The true direction provide to the receiver and message send to receiver until the sender stop the button

### 4. Primary Actor:

User

## Usecase2 (GPS):

1. **Alternative Course:**

2. **Pre-conditions:**

Map Navigate

3. **Post-conditions:**

Identify the correct location

4. **Success Criteria:**

Correct navigation provide to resources

5. **Primary Actor:**

GPS

## Usecase3 (SYSTEM):

1. **Pre-conditions:**

System should be active

2. **Post-conditions:**

Retrieve the current location information

3. **Success Criteria:**

Updated location information send to resources by using messages continuously.

4. **Primary Actor:**

5. **Secondary Actor:**

## Usecase4 (RELIABLE):

1. **Pre-conditions:**

Mobile should not be off

2. **Post-conditions:**

Receiver receive the message with location URL

### 3. Success Criteria:

Receiver receive the message

### 4. Primary Actor:

RELIABLE

## RE Diagram:

