Description

Intended User

Features

User Interface Mocks

Screen 1

Screen 2

Key Considerations

How will your app handle data persistence?

Describe any edge or corner cases in the UX.

Only One Donor will be registered with gmail account from one Smartphone.

Describe any libraries you'll be using and share your reasoning for including them.

Describe how you will implement Google Play Services or other external services.

Task 1: Project Setup

Task 2: Context Diagram

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Blood Call App

Description

Blood Call App is developed aiming to find the blood donors for patients in the case of emergency. The blood deficit in developing countries like Nepal is very high that means many patients die due to lack of blood transfusion. Android application blood call will encourage people to connect with the health care society and get detailed information about recent camps. For this the smart phone users have to register them through the blood call android applications with their blood group, name as well as address.

When there is emergency of blood in any of the hospital, the hospital official can enter the type of blood needed and number of units through the website which is the part of this project. Then this sends the callout to the people who had register into the area near that hospital, and they are encouraged to donate through the application.

The only requirement for people who wants to be the part of this society is the smart phone and the internet which is nowadays commonly used by people. And the most is heart to contribute for social service.

Intended User

This app is mainly intended for Blood donors and Patients.

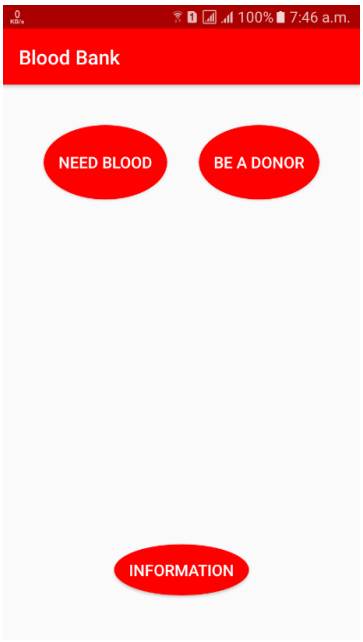
Features

The main features of the app are

- Send alerts to potential blood donors
- Find blood donors with specific blood group
- Call donors directly from the App
- Receive notification alerts if your blood type is needed.
- Make calls to the blood seeker.

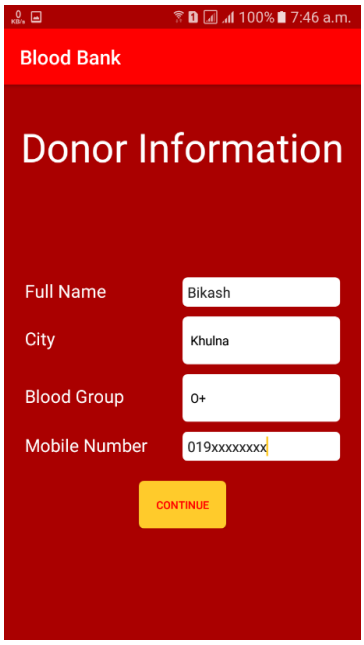
User Interface Mocks

Screen 1



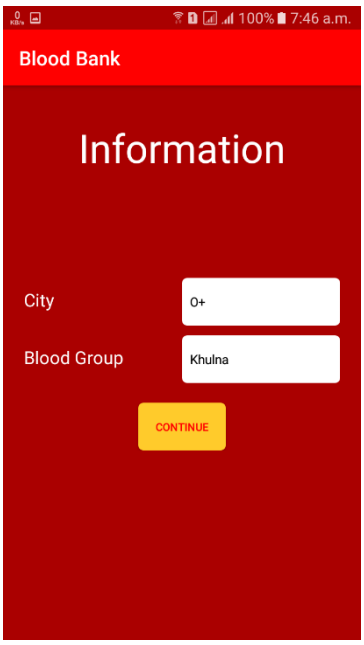
Mock Screen for Main UI.

Screen 2



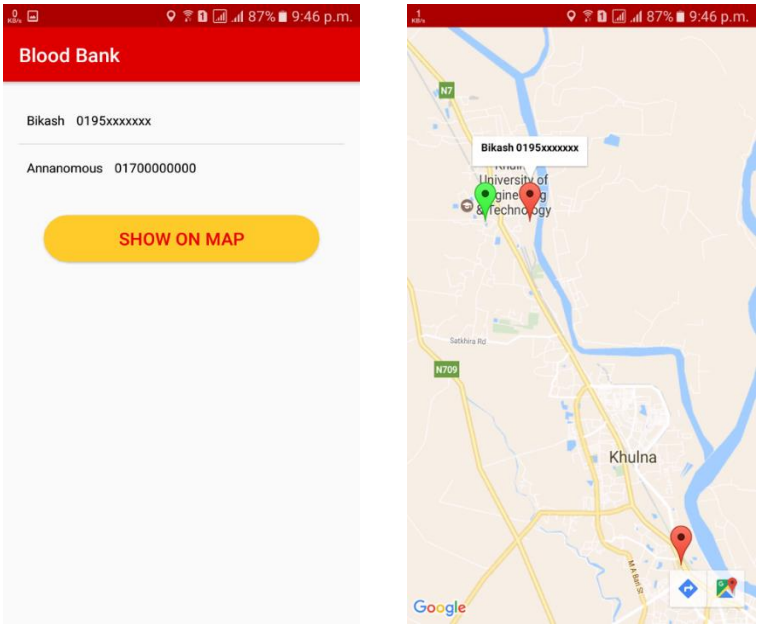
Mock Screen for Donor Info..

Screen 3



Mock Screen for Donor Info(Continued)

Screen 4 **Screen 5**



Mock Screen for Google Map

Key Considerations

How will your app handle data persistence?

For Data persistence we will be using Firebase Real-time Database.

Describe any edge or corner cases in the UX.

Only One **Donor will be registered with gmail account from one Smartphone.**

Describe any libraries you'll be using and share your reasoning for including them.
Google Maps for locating Real time registered donors.
Picasso or Glide to handle the loading and caching of images.
Butter knife for view binding.
Gson or Volley for serializing and deserializing Java objects from and into JSON. This is needed if we communicate with APIs frequently.

Describe how you will implement Google Play Services or other external services.
Google Maps for locating Location based donors.
Google Firebase database for Data handling.
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Task 1: Project Setup

Similar to Blood Call, there are some other social applications which also aim to communicate between donors and seekers. Apps like Fastblood, SocialBlood etc. are popular apps. SocialBlood is a facebook application aimed at solving the problem of mismatch between the blood donors and receivers. SocialBlood began as a facebook hack hearing the story of a young girl who died because of not getting enough blood when needed. It involve creating multiple groups catering to the different blood types.

Users of facebook who are interested to donate blood can sync with this service and add information like city (where they are currently residing), their blood type etc. Then it pulls up list of connections that are already using this service.

The beauty of a social platform like this is the fact that, it helps democratize and populate the system with the known network. We can scan the network for blood relations (known people with the same blood type as ours) and invite members which can be extremely useful during the time of distress.

The user can also make a blood request using a quick form asking critical questions. The user adds information like what component (red blood cells, plasma or whole blood) along with type is required and adding other details like the number of units required, the date of requirement and hospital name.

SocialBlood is a great webapp that is distributed over the world. However our app could be slightly more effective because we have embedded it to the smart phones. It is easy and effective to notify in smart phone instantly when there is requirement of blood to patient.

TOOLS AND PLATFORM

The application is being strictly developed using HTML, CSS and PHP. The tools used for this application are Android developer's toolkit and MySQL server.

1.1) Android SDK

The Android software development kit (SDK) includes a comprehensive set of development tools. These include a debugger, libraries, a handset emulator based on QEMU, documentation, sample code, and tutorials. Currently supported development platforms include computers running Linux (any modern desktop Linux distribution), Mac OS X 10.5.8 or later, Windows XP or later; for the moment one can develop Android software on Android itself by using [AIDE - Android IDE - Java, C++] app and [Android java editor] app. The officially supported integrated development environment (IDE) is Eclipse using the Android Development Tools (ADT) Plugin, though IntelliJ IDEAIDE (all editions) fully supports Android development out of the box, and NetBeans IDE also supports Android development via a plugin. Additionally, developers may use any text editor to edit Java and XML files, then use command line tools (Java Development Kitand Apache Ant are required) to create, build and debug Android applications as well as control attached Android devices (e.g., triggering a reboot, installing software package(s) remotely).

For commercial use, several paid editions are available, and offer additional functionality. Applications which use MySQL databases include: TYPO3, MODx, Joomla, WordPress, phpBB, MyBB, Drupal and other software. MySQL is also used in many high-profile, large-scale websites, including Wikipedia, Google (though not for searches), Facebook, Twitter, Flickr, and YouTube.

Task 2: Context Diagram

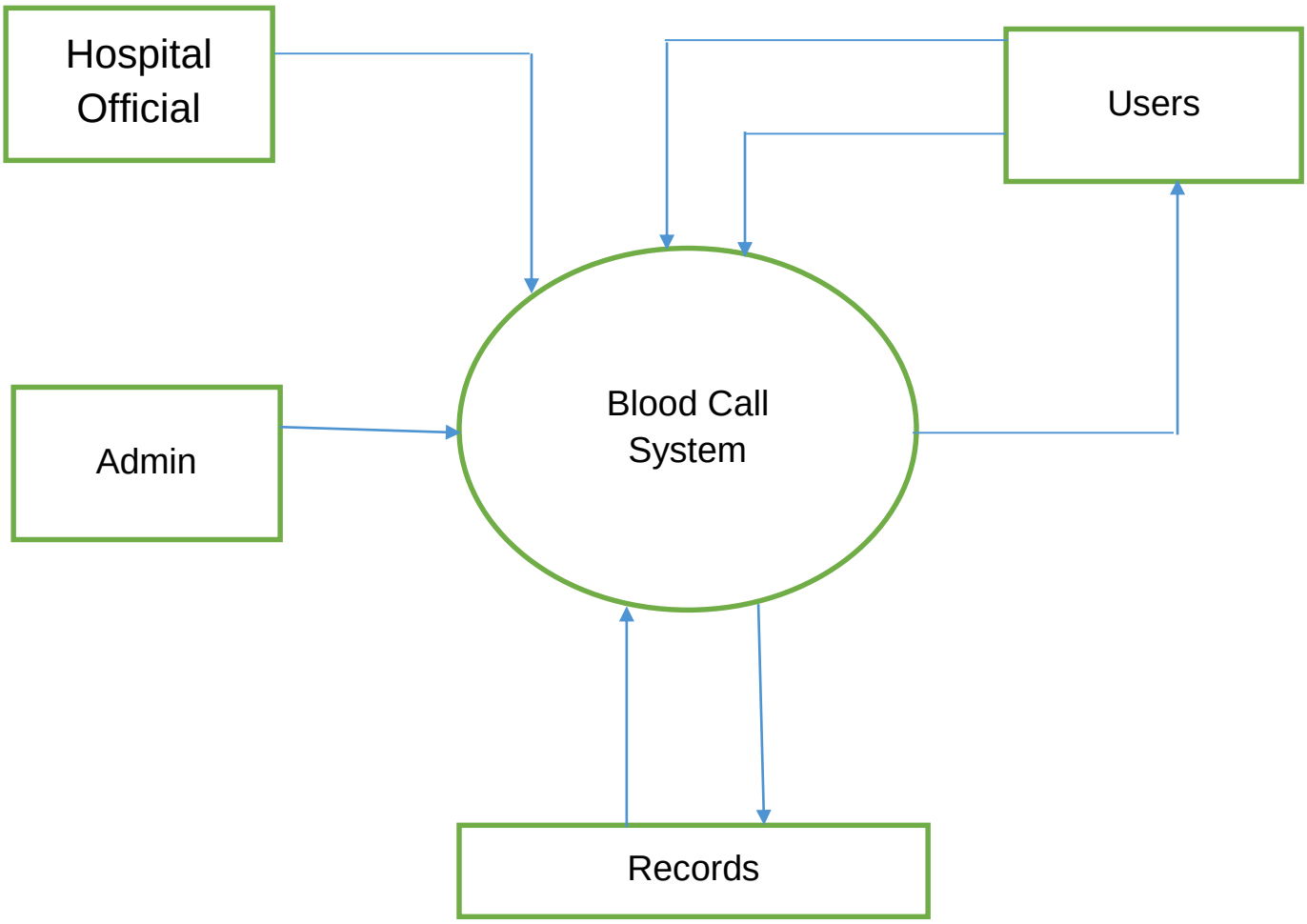

Fig: Context Diagram of Blood Call System