

Project Title

BloodLink

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(Project Guide)

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Introduction

BloodLink A Lifesaving Blood Donation Eco-system. In times of emergency, access to blood can be a matter of life and death. BloodLink, a revolutionary platform, serves as a vital lifeline during such critical situations by seamlessly connecting individuals in need of blood with willing donors. This abstract provides a detailed overview of the key features and functionalities that make BloodLink an indispensable tool in the world of emergency blood donations.

1. Problem Statement

There are limited sites for finding donors. But this is an android app that can make the job much easier and can save time.

2. Objectives

- Emergency Blood Access
- Mobile Accessibility
- Security and Privacy
- Community Building
- Enhanced Healthcare
- Lifesaving Platform

3. Existing System

- Lack of Efficient Blood Matching
- Only Web Apps are present
- Limited Donor Visibility
- Communication Challenges
- Emergency Response Gaps
- Inefficient Data Management

4. Proposed System

- User-Friendly Mobile Application.
- Real-time Blood Matching.
- Secure and Confidential Communication.
- Community Building.
- Efficiency in Healthcare Response

5. Hardware Specifications

- Processor : 2.0 GHZ i3 11th gen or above
- Hard Disk : 500 GB or above
- RAM : 4.00 GB or above
- Input Device : Standard Mouse and Keyboard
- Output Device : HD Monitor, Android Device

6. Software Specifications

- Operating System: windows 11
- Editor: Visual Studio, Android studio
- Programming Language: Dart
- Frontend: Material design, Dart
- Backend: Firebase
- Framework: Flutter

7. Modules

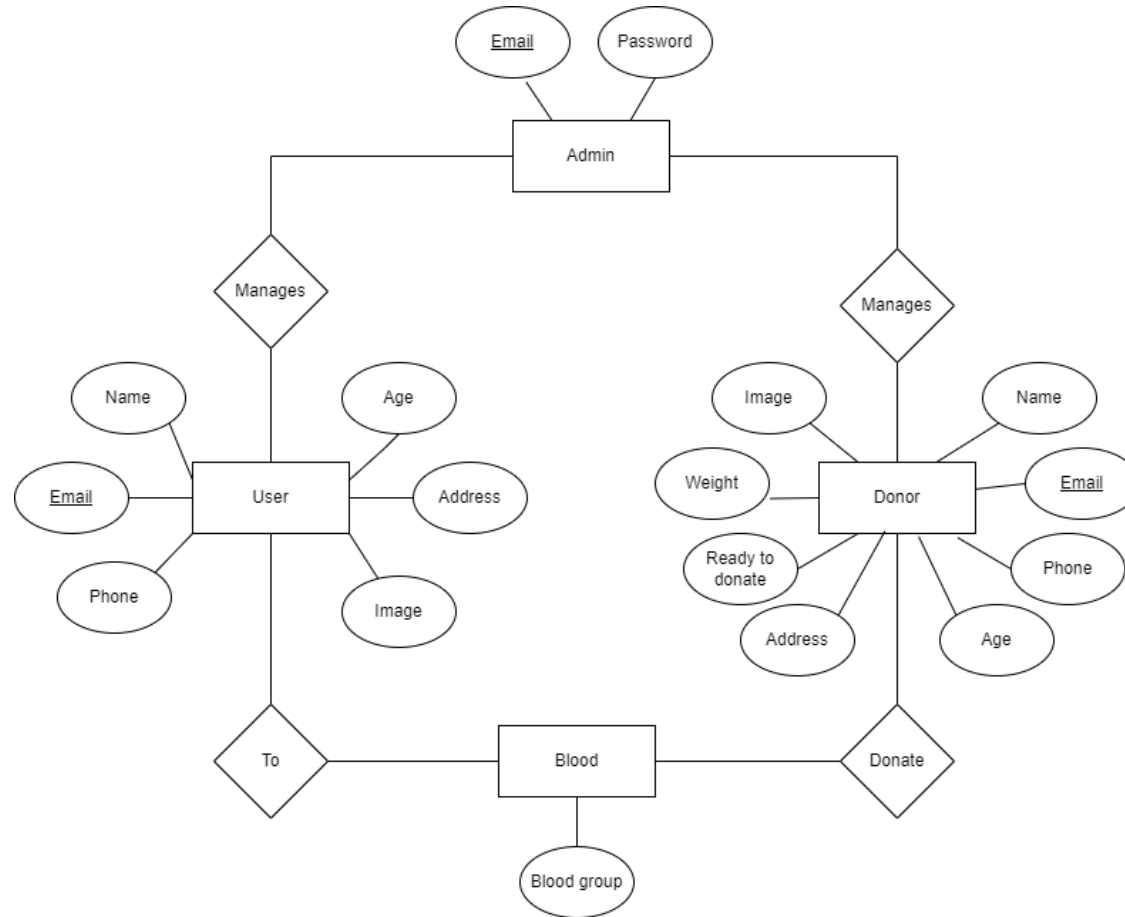
Admin

- Donor Management.
- Actions based on feedback and complaints.
- Delete the donors.
- Can communicate with donors.

Donors

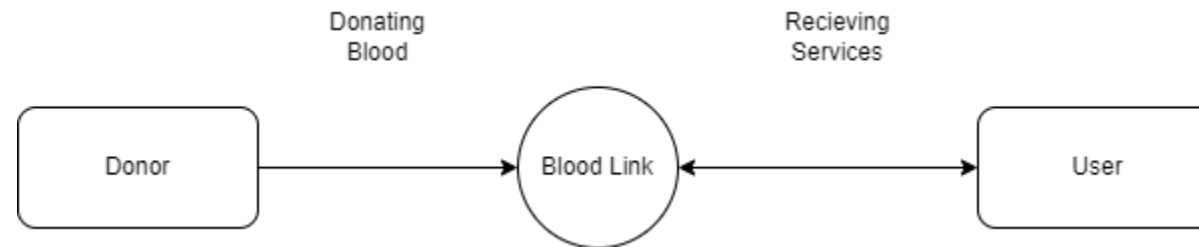
- Can search other donors.
- Donate blood.
- Update profile.
- Communication between donors.

8. ER Diagram

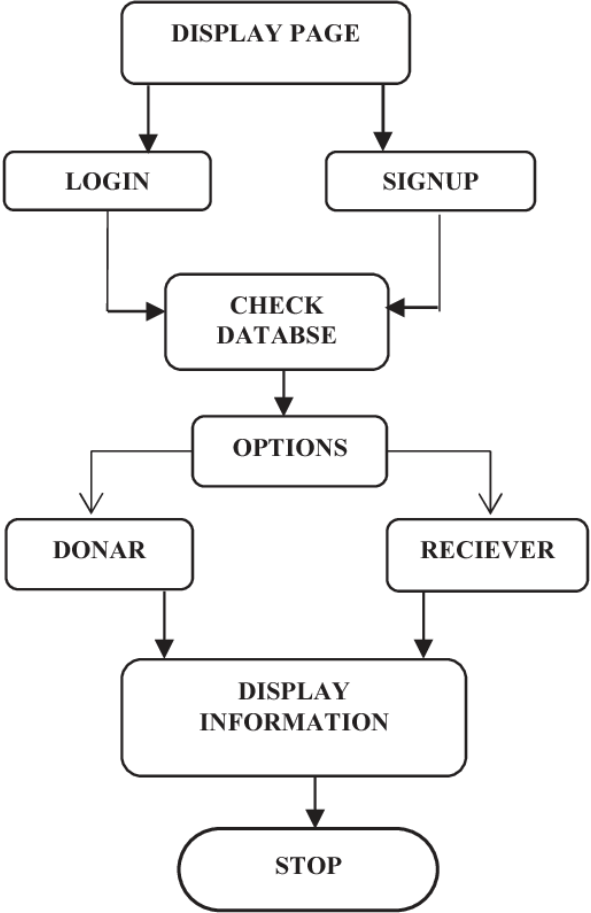


9. DFD(Data Flow Diagram)

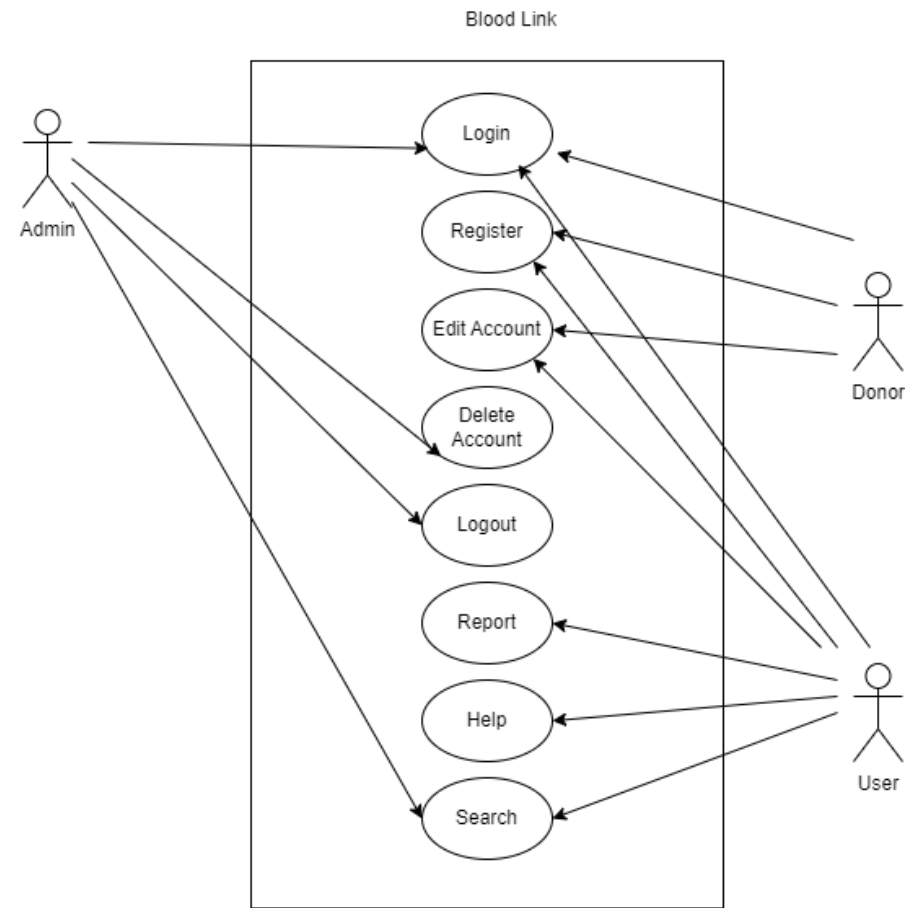
Level 0



Level 1

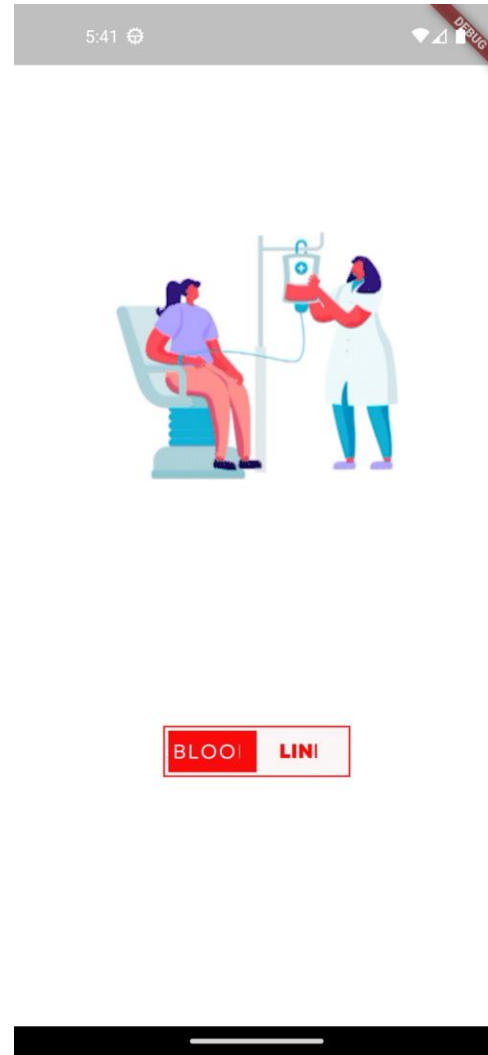


10. Use Case Diagram



11. Work Done

1. Splash Screen



2. Register Screen

5:41

DEMO

BloodLink

Login

Register

0/10

Select Your Blood Group

Email

0/30

Password

0/20

Confirm Password

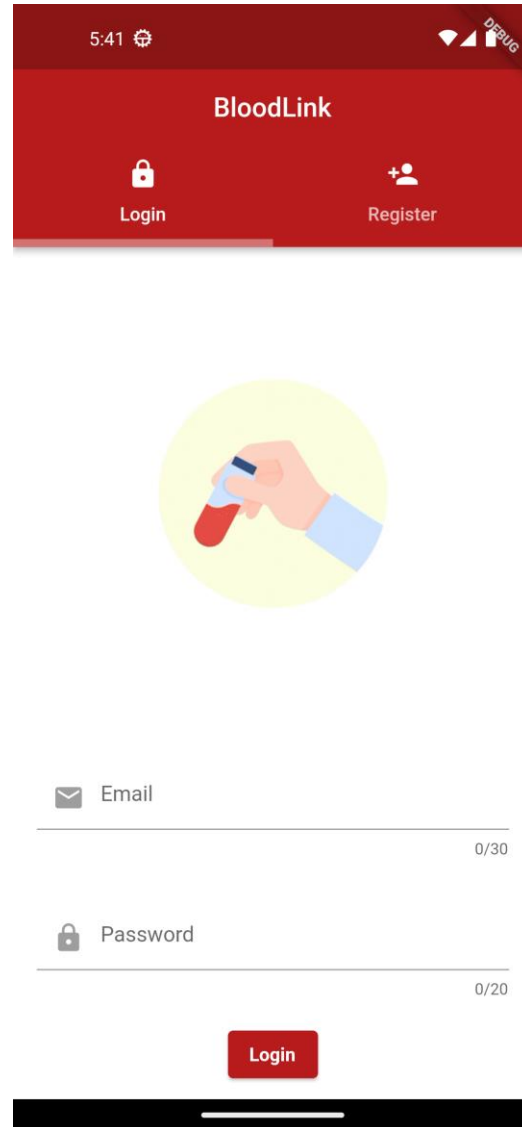
0/20

Your Location

Access My Location

Register

3. Login Screen



The image shows a mobile application interface for "BloodLink". At the top, there is a red header bar with the app name "BloodLink" in white. Below the header, there are two white icons on a red background: a padlock for "Login" and a person with a plus sign for "Register". The main area of the screen is white and features a large, circular illustration of a hand holding a test tube with red liquid. Below this illustration, there are two input fields: "Email" and "Password". Each field has a corresponding icon (envelope for email, padlock for password) and a character count (0/30 for email, 0/20 for password). At the bottom, there is a red "Login" button. The entire screen is framed by a black border at the bottom, which includes a white horizontal line representing the home indicator.

5:41

BloodLink

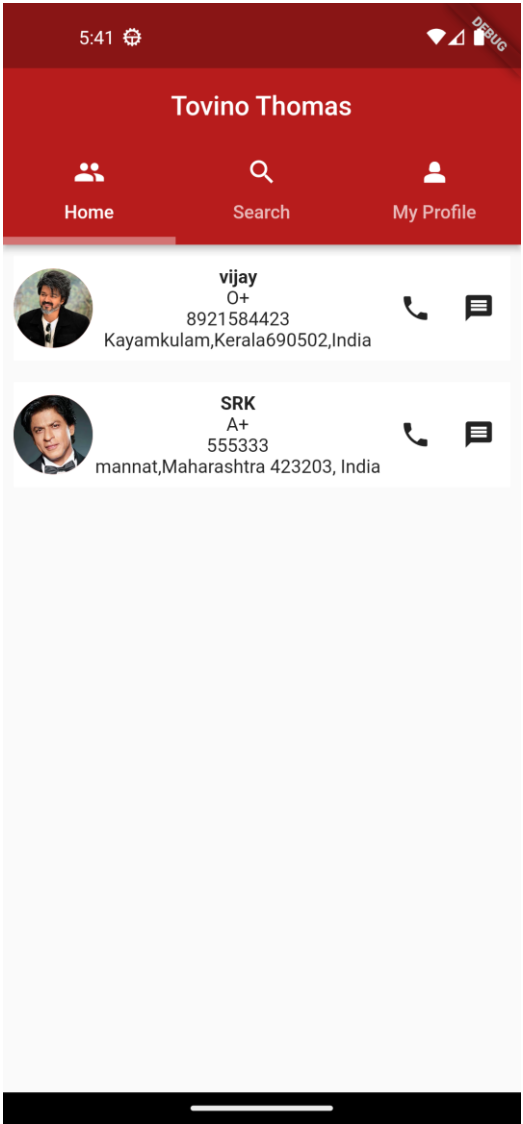
Login Register

Email 0/30

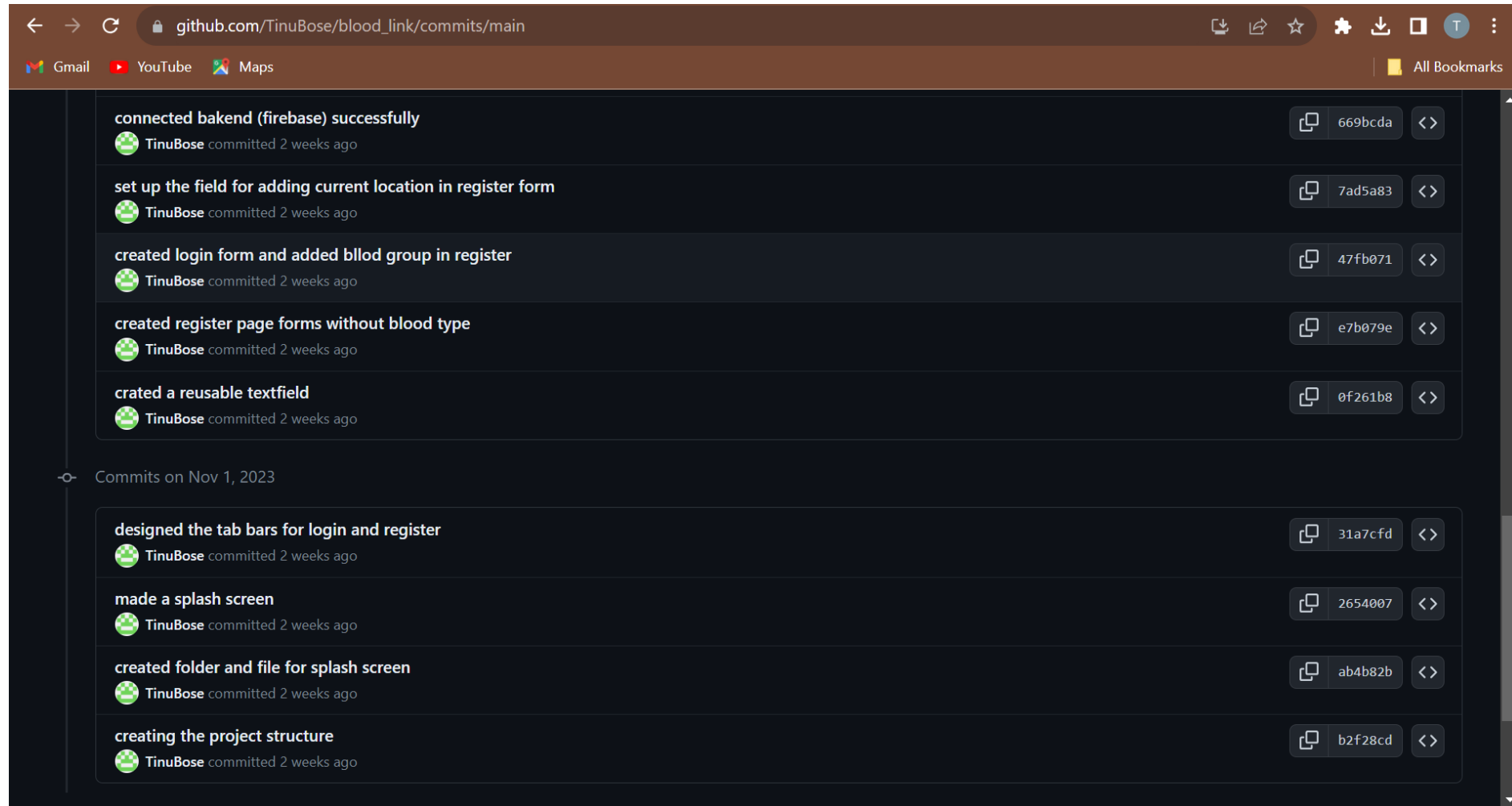
Password 0/20

Login

4. Home Screen



12. Git History



github.com/TinuBose/blood_link/commits/main

Gmail YouTube Maps All Bookmarks

connected bakend (firebase) successfully
TinuBose committed 2 weeks ago 669bcd <>

set up the field for adding current location in register form
TinuBose committed 2 weeks ago 7ad5a83 <>

created login form and added bllood group in register
TinuBose committed 2 weeks ago 47fb071 <>

created register page forms without blood type
TinuBose committed 2 weeks ago e7b079e <>

crated a reusable textfield
TinuBose committed 2 weeks ago 0f261b8 <>

Commits on Nov 1, 2023

designed the tab bars for login and register
TinuBose committed 2 weeks ago 31a7cfd <>

made a splash screen
TinuBose committed 2 weeks ago 2654007 <>

created folder and file for splash screen
TinuBose committed 2 weeks ago ab4b82b <>

creating the project structure
TinuBose committed 2 weeks ago b2f28cd <>

github.com/TinuBose/blood_link/commits/main

Gmail

YouTube

Maps

All Bookmarks

Commits on Nov 12, 2023

caller

TinuBose

committed 3 days ago

5fcb4e1

<>

set caller button

TinuBose

committed 3 days ago

1b22fef

<>

fetch data from firestore

TinuBose

committed 3 days ago

44d8888

<>

search implemented

TinuBose

committed 4 days ago

34b0680

<>

trying to implement search donor

TinuBose

committed 4 days ago

899fdbe

<>

Commits on Nov 11, 2023

created login and registration form successfully with firebase

TinuBose

committed 4 days ago

1a16647

<>

Commits on Nov 2, 2023

get data from shared preferences

TinuBose

committed 2 weeks ago

0446868

<>

connected to firebase successfully

TinuBose

committed 2 weeks ago

b876e81

<>

Conclusion

Blood Link is an android app developed in Dart as front end and uses Firebase as database. Blood Link A Lifesaving Blood Donation Eco-system. In times of emergency, access to blood can be a matter of life and death. The Admin can delete donors based on complaints and take actions based on feedback. Donors can update their profile and can depict they can donate or not. Blood Link, a revolutionary platform, serves as a vital lifeline during such critical situations by seamlessly connecting individuals in need of blood with willing donors. Its real-time matching, user-friendly mobile application, vast donor network, emergency alerts, and commitment to secure communication make it a life-saving platform during critical situations.

References

- <https://pub.dev/>
- <https://github.com/>
- <https://firebase.google.com/>