

SaveBlood



SaveBlood

SaveBlood is an app that allows easy connection between hospitals and potential blood donors.

The app gives the option to find a blood centres and hospitals.

The users can find out if their eligible to donate and see what kind blood needed the most.



My process

1 Introduction

Purpose
Industry/domain
Stakeholders

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6 Open Questions/Out of Scope

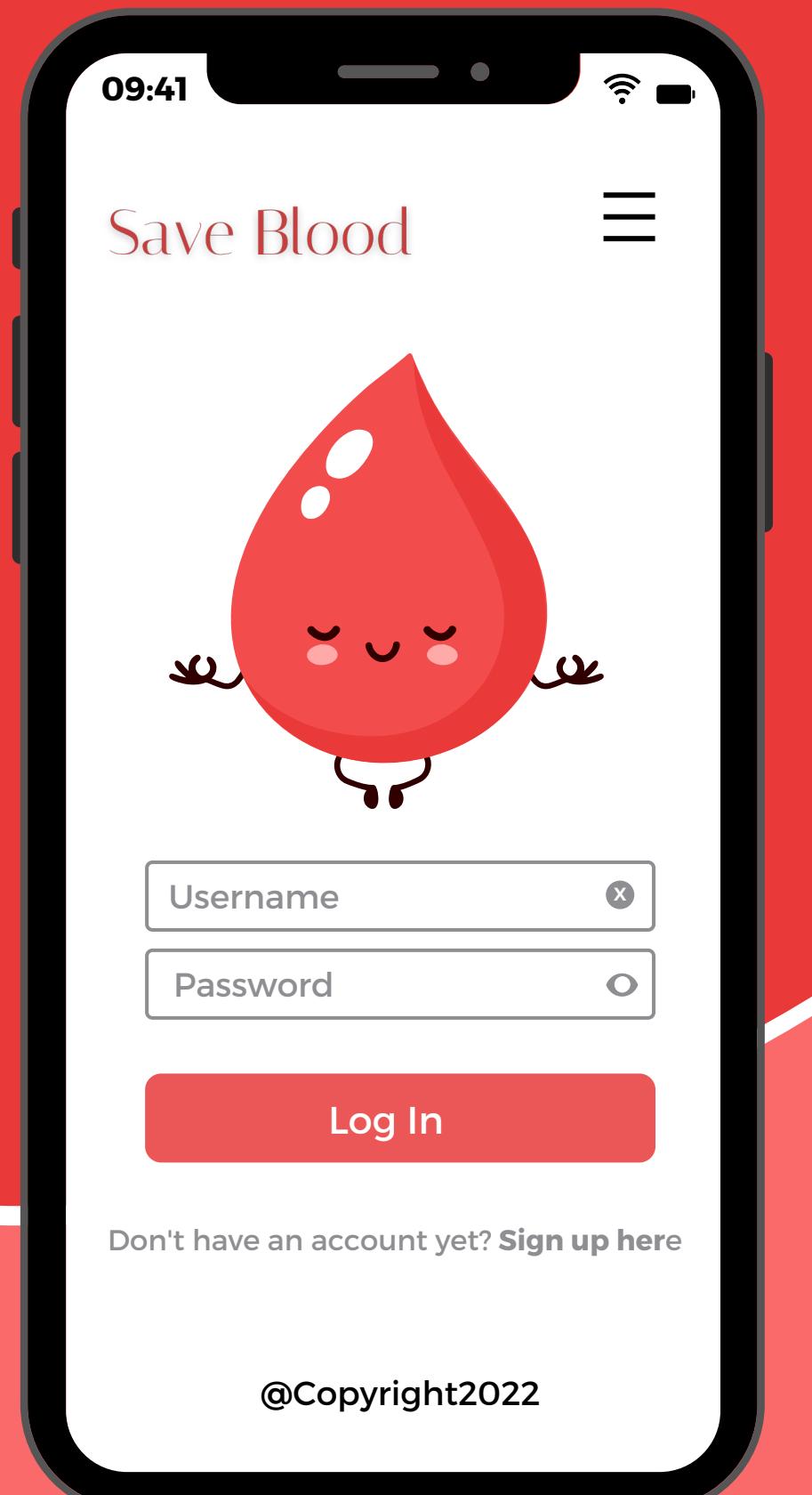
7 Non-functional Requirements

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1 Introduction

Purpose

What is the problem or the opportunity that the project is investigating?

1 -The app offers a simple way for the donor to contact a blood center. And it also shows which type of blood is being needed most.

2 - If the user is registered on the APP and his blood type is what is being needed, an email will be sent inviting him to make a donation if he is eligible

3 - Quiz to find out if the user is eligible to donate or not

Why is this problem valuable to address?

To make it easier for users to donate blood.

And to more quickly detect blood donors of a certain type



What is the current state (e.g. unsatisfied users, lost revenue)?

Loss of donors with all the bureaucracy involved.

Distant contact between donors and blood centres.

What is the desired state?

Direct sustainable platform

Has this problem been addressed by other projects? What were the outcomes?

There are other apps that make contact between the donor and the blood centre, which allows the user make a booking, however, I haven't found any app that tells you which type of blood is most in need.

Industry/ domain

What is the industry/ domain?

Health

Less than 4% of eligible New Zealanders are registered to donate. There are 110,000 wonderful blood donors in New Zealand, 11,000 are plasma donors. To keep up with demand NZBS needs to double the plasma donor registry.

Who are the stakeholders? (be as specific as possible as to who would have access to the software)

Blood Centres, hospitals, government

Why do they care about this software?

Every two seconds, someone needs blood.

But only about 3% of age-eligible people donate blood yearly. Maintaining diversity in the blood supply is essential.

Some blood types are quite rare and are likeliest to be found among people with shared ancestral origins.

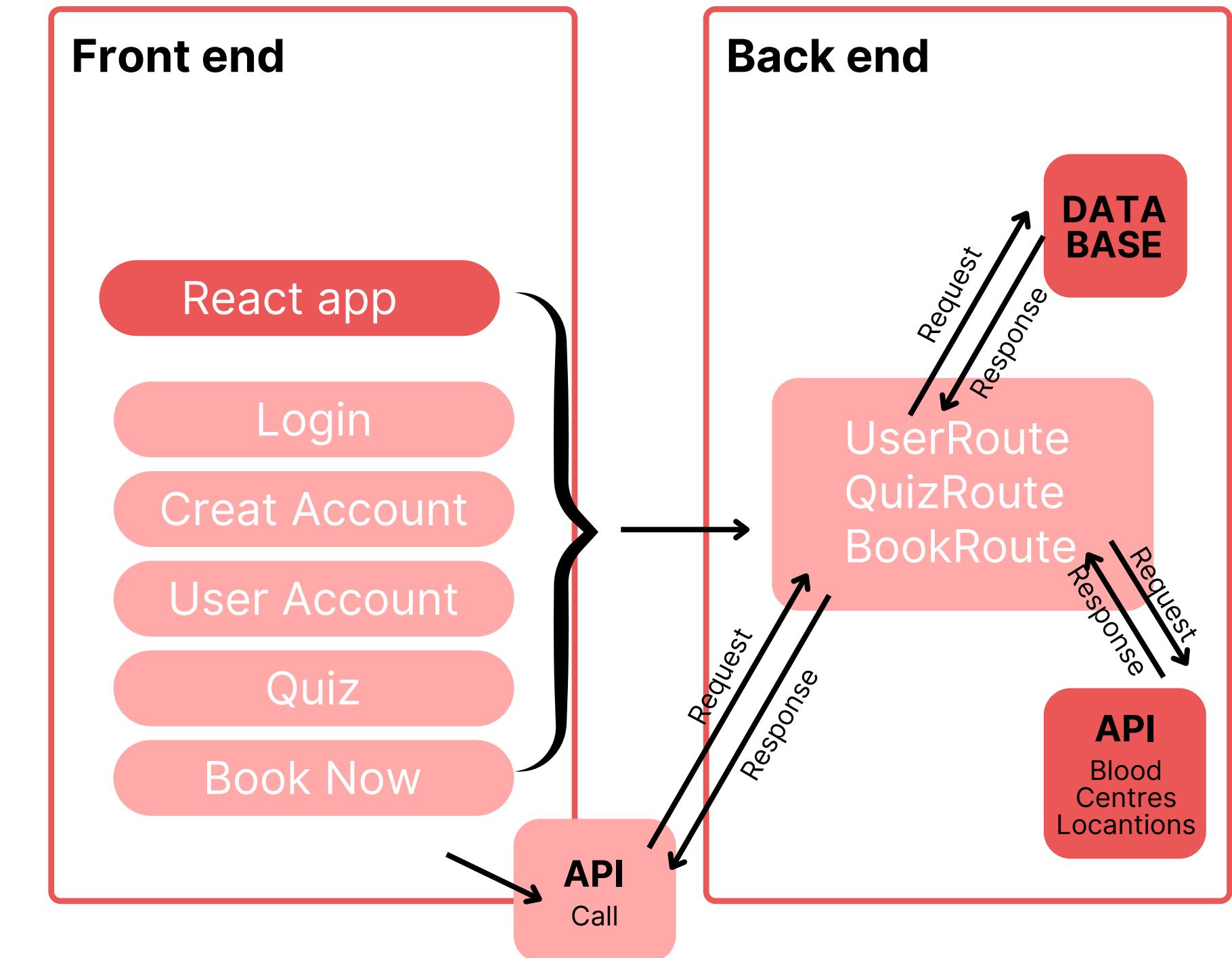
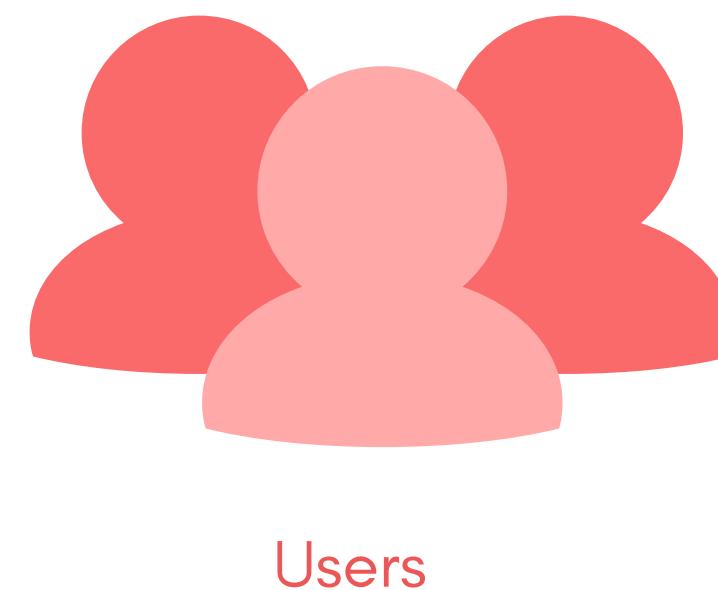
What are the stakeholders' expectations?

Reliable and easy platform to get more donors

2 Product Description

Architecture Diagram

Include a diagram of the building blocks of the design including users and how they interact with the product.



3 User Stories

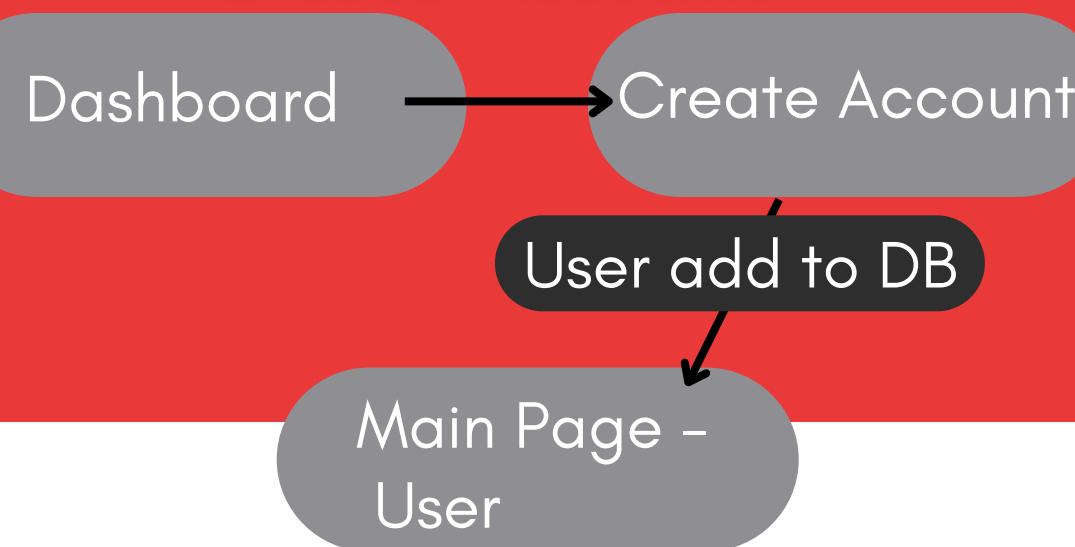
#	User Story Title	User Story Description	Priority	Additional Notes
1	Potential Donor	As a potential donor I want to know if I am eligible to donate or not	High	
2	Eligible Donor	As a User I want to know where I can donate so that I can easily book appointment	High	
3	APP	As an APP, I want to send an e-mail to the users saying what blood type we need the most.	Medium	
4	New User	As a New User, I want to create an account so that I can keep my records on	High	
5	User	As a User, I want to login in to the App so that I can see my dashboard	High	
6	User	As a User, I want to make a booking in the App so that I can donate blood	High	

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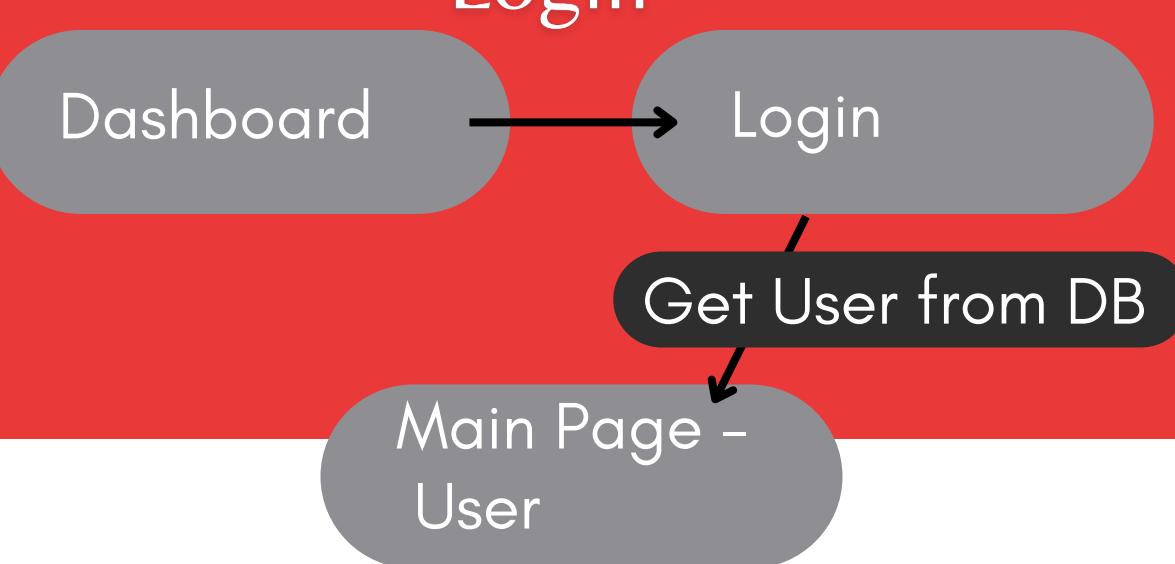
User Flow

Present as a flow diagram the steps a user may make in interacting with the software.

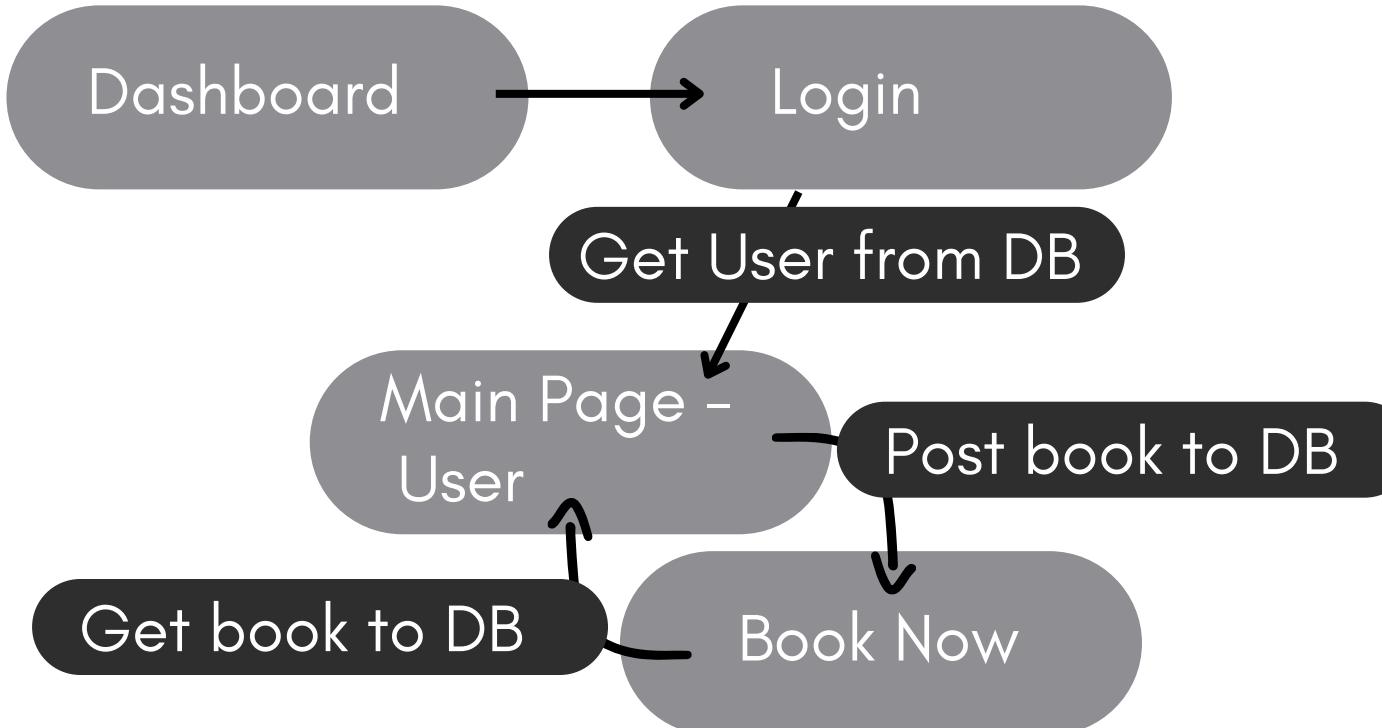
Create Account



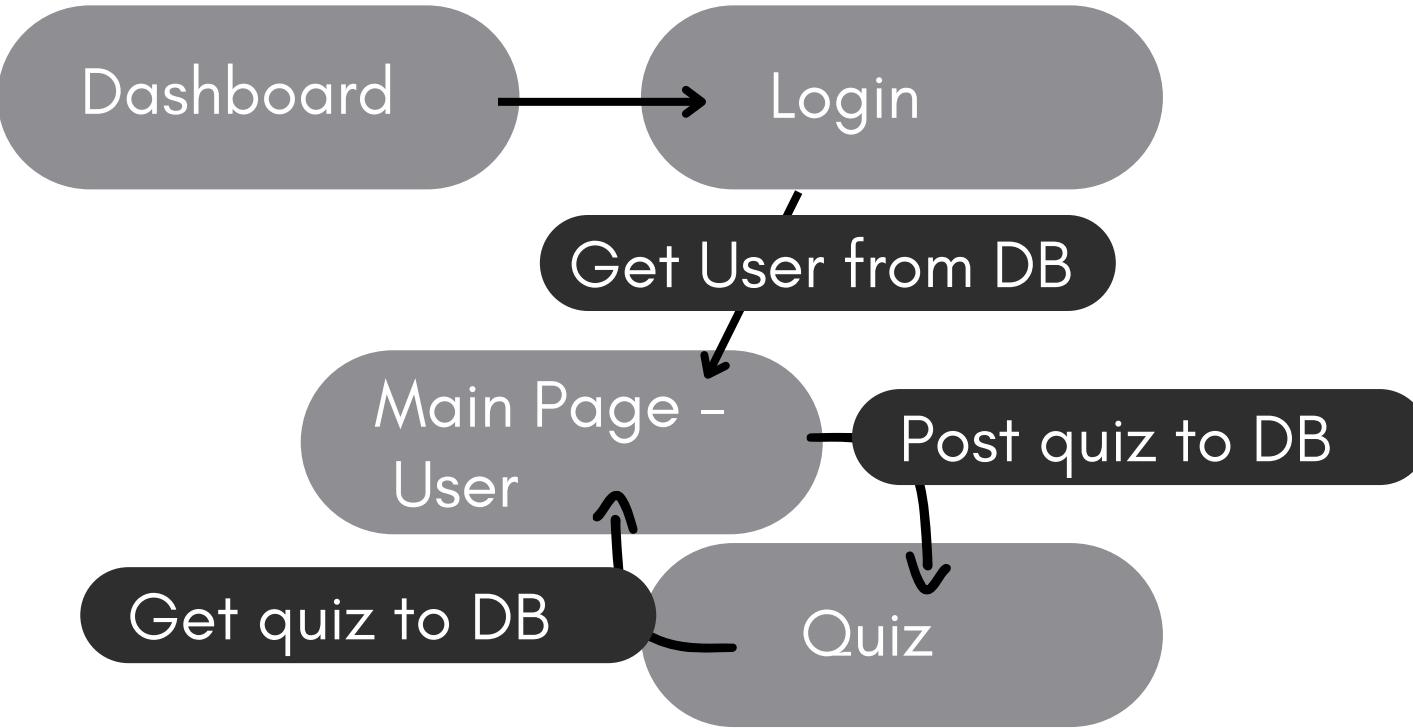
Login



Book Now



Quiz



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Wireframe Design

[CLICK HERE](#)

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Open Questions/Out of Scope

Scope

- Navigate multiple pages
- Create account
- Login
- Make a book
- Quiz - eligible to donate or not

Out of scope

- User customization example: add a profile picture/ type of blood
- Google maps with all blood centres
- API shows the type of blood needed the most
- detect which type of blood you need and send an email to users of that blood type inviting them to donate

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Non-functional Requirements

What are the key security requirements?
(e.g. login, storage of personal details,
inactivity timeout, data encryption)

The App records personal information so should be following HIPAA (Health Insurance Portability and Accountability Act)compliant (protected health information electronically)

How many transactions should be enabled at peak time?

Application sustains traffic of 100,000 reads per second

How easy to use does the software need to be?

Easy

How quickly should the application respond to user requests?

An estimation of less than 1 second (1000 milliseconds)

How reliable must the application be? (e.g. mean time between failures)

As reliable as possible, up-time, security, latency failures would devalue the app

Does the software conform to any technical standards to ease maintainability?

- The code is structured to be easily modifiable.
- It's manifested in a Model-View-Controller (MVC) organization
- Using framework as Bootstrap
- Comments to explain the logic.

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Project Planning

Include a Gantt chart or screenshot of a Trello board showing key milestones (with dates) to complete the project.



Screenshot of a Trello board titled "SaveBlood" showing project planning across four columns: App, Process, Progress, and Done.

App Column:

- Branding

Process Column:

- + Add a card

Progress Column:

- Document - Capstone (Due Sep 23)
- + Add a card

Done Column:

- Figma (Due Sep 12)
- Front End (Due Sep 14)
- Home (Due Sep 14)
- Test - Eligible to donate (Due Sep 14)
- Login (Due Sep 14)
- Book Appointment (Due Sep 14)
- Create Account (Due Sep 14)
- + Add a card

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Testing Strategy

- Making continual testing and development
- Postman was used to testing during API creation.
- Excel - Test List

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End-to-end solution

How well did the software meet its objectives?

I designed the whole app first in Figma looking at the app itself. The app met all requirements defined in both the project brief and user requirements.

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References

Where is the code used in the project? (link to GitHub)

[CLICK HERE](#)

What are the resources used in the project? (libraries, APIs, databases, tools, etc)

- React
- Express
- Node
- MYSQL
- Express
- Cors
- Bootstrap
- Canva
- Figma

Questions?

