**Blood Bank Management System**

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#### Project Introduction

BloodBud (Final)



BloodBud is a blood management system created for the sole purpose of managing the blood pints from receivers and donors and facilitating the health care sector. The software is designed so that the receivers and donors can sign up and login also it can handle the daily transactions of the blood bank and search the details when required. It stores the list of regular donors separately so they can be contacted during emergency moreover it contains an emergency inventory as well for the fast delivery of blood pints. The donors can be searched by locations as well hence contacting them during emergency becomes easier. The system also generates a free blood report CBC at the end through which the donor gets an overview of amount of each component present in his/her blood. The application is designed in such a manner that it can suit all the needs of the blood bank requirements in the course of future.

Previously the project focused on managing the research inventory as the blood pints that are expired get moved from the normal/emergency inventory to the research inventory. Research inventory had more features as well such as view the list of pints, show total count, show count by type. And also, an implementation to display Emergency contacts of regular donors.

This iteration added certain additional features to the project where the administrator can view a complete dashboard of summarized numbers for each case; such as, total number of donors, blood types availability with count and much more. BloodBud also generates a free blood report for the people who donate their blood; after every donation the free blood report is provided to the respective donor.

**Deliverable Promised in Iteration 3:**

Donor’s Blood Report.

Donor’s Eligibility Check after donation. BloodBank Analytics

Laboratory (Research) Inventory (Done in Iteration 2)

**Features Promised in Iteration 3:**

View Dashboard values for inventories. Provide Blood Report to Donor, post-donation

Display if not eligible to donate blood using blood test

**Page 1**

# All User Stories

## (Sprint Backlogs)

**Page 2**

**Sprint Backlog No.1**

Story ID: 0001 Story Title: Donor - Signup

**User Story:**

**Acceptance Criteria:**

And I know I am done when: I see a confirmation message that sign up is successful

As a: Donor

I want: to sign up for an account So That: I am a registered donor

Story ID: 0002 Story Title: Receiver- Signup

**User Story:**

**Acceptance Criteria:**

And I know I am done when: I see a confirmation message that sign up is successful

As a: Receiver

I want: to sign up for an account

So That: I am a registered receiver

###### Page 3

Story ID: 0003 Story Title: Donor – Log In

**User Story:**

**Acceptance Criteria:**

And I know I am done when: I see a confirmation message that log in is successful

As a: Donor

I want: to log in to an account

So That: I can log in to my account

Story ID: 0004 Story Title: Receiver – Log In

**User Story:**

**Acceptance Criteria:**

And I know I am done when: I see a confirmation message that log in is successful

As a: Receiver

I want: to log in to an account

So That: I can log in to my account

**Page 4**

Story ID: 0005 Story Title: Validate Log In

**User Story:**

**Acceptance Criteria:**

And I know I am done when: No unregistered donor/receiver gets log in access

As a: Manager

I want: to validate the log in process

So That: no unregistered user may log in

Story ID: 0006 Story Title: Collect Details

**User Story:**

**Acceptance Criteria:**

And I know I am done when: My database holds the name, age, blood type and location of the registered donor/receiver

As a: Manager

I want: to collect the following user details:

1. Name
2. Age
3. Blood Type
4. Location

So That: I have comprehensive knowledge of each user

###### Page 5

Story ID: 0007 Story Title: View User Details

**User Story:**

**Acceptance Criteria:**

And I know I am done when: I see a list of my donations

As a: Donor

I want: to see my donation record

So That: I have a report of my past donations

Story ID: 0008 Story Title: View All Donors

**User Story:**

**Acceptance Criteria:**

And I know I am done when: I see a list of donors of my blood bank

As a: Manager

I want: to view list of all donors

So That: I can see a list of active/past donors

**Page 6**

Story ID: 0009 Story Title: Search a donor

**User Story:**

**Acceptance Criteria:**

And I know I am done when: I see a detail of the searched user

As a: Manager

I want: to search for a particular donor So That: I can see their details

Story ID: 0010 Story Title: View Regular Donors

**User Story:**

**Acceptance Criteria:**

And I know I am done when: I see a list of regular donors and their details

As a: Manager

I want: to view the information of regular donors

i. A regular donor has > 6 donations So That: I can contact them in emergency cases

###### Page 7

Story ID: 0011 Story Title: Search donors by location

**User Story:**

**Acceptance Criteria:**

And I know I am done when: I see a list of donors in an area, if any

As a: Manager

I want: to search donors by location

So That: I get a list of donors in a particular area

Story ID: 0012 Story Title: Emergency Stock

**User Story:**

**Acceptance Criteria:**

And I know I am done when: I have a list of blood pints for urgent use

As a: Manager

I want: to want to store an emergency stock So That: I have some pints in spare

**Page 8**

Story ID: 0013 Story Title: Count Types in Emergency Inventory

**User Story:**

**Acceptance Criteria:**

And I know I am done when: I can see a count of blood types available

As a: Manager

I want: to view a list of stock in emergency inventory So That: I get a list of available blood types

Story ID: 0014 Story Title: View available blood types

**User Story:**

**Acceptance Criteria:**

And I know I am done when: I have a list of available blood groups in emergency stock

As a: Manager

I want: to view the list of blood groups available So That: I know which blood groups are in stock

###### Page 9

Story ID: 0015 Story Title: Running out types in stock

**User Story:**

**Acceptance Criteria:**

And I know I am done when: I know about the shortage of blood groups

As a: Manager

I want: to view a list of blood groups that are running out

i. Less than 5 pints left

So That: I know which blood groups are needed

Story ID: 0016 Story Title: Update inventory

**User Story:**

**Acceptance Criteria:**

And I know I am done when: the inventory is up to date upon every activity

As a: Manager

I want: to update the inventory

So That: that inventory is updated upon donation/giving

**Page 10**

Story ID: 0017 Story Title: Check availability of a blood type

**User Story:**

**Acceptance Criteria:**

And I know I am done when: I can see if the blood I need is available

As a: Receiver

I want: to check availability for my respective blood type So That: I know if my blood type is available or not

Story ID: 0018 Story Title: Only registered donors donate

**User Story:**

**Acceptance Criteria:**

And I know I am done when: the user sees a popped-up message to first sign up or log in

As a: Manager

I want: to ensure that registered donors can donate So That: I can log their history

###### Page 11

Story ID: 0019 Story Title: Check availability of a blood type

**User Story:**

**Acceptance Criteria:**

And I know I am done when: I can see if the blood I need is available

As a: Receiver

I want: to check availability for my respective blood type So That: I know if my blood type is available or not

Story ID: 0020 Story Title: Blood Receiving History

**User Story:**

**Acceptance Criteria:**

And I know I am done when: I can see my history of receiving blood

As a: Receiver

I want: to view my blood receiving history So That: I can see the times I received blood

**Page 12**

Story ID: 0021 Story Title: View list of receivers

**User Story:**

**Acceptance Criteria:**

And I know I am done when: I can see a complete of people who have received blood from the blood bank

As a: Manager

I want: to view a list of all receivers So That: I see a list of blood receivers

Story ID: 0022 Story Title: Search Particular Receiver

**User Story:**

**Acceptance Criteria:**

And I know I am done when: I see the targeted user’s detail, if exists

As a: Manager

I want: to search for a particular receiver So That: I can see their details

###### Page 13

Story ID: 0023 Story Title: Search receivers by type

**User Story:**

**Acceptance Criteria:**

And I know I am done when: I can see a list of relevant recipients

As a: Manager

I want: to search receivers by blood type

So That: I get a list of receivers for a corresponding blood type

Story ID: 0024 Story Title: Update Location of user

**User Story:**

**Acceptance Criteria:**

And I know I am done when: I see a confirmation text box message

As a: user

I want: to update my location

So That: my current location is up to date for receiving/giving

**Page 14**

Story ID: 0025 Story Title: Disallow until details known

**User Story:**

**Acceptance Criteria:**

And I know I am done when: I can only allow people with respect to their location

As a: Manager

I want: to disallow the user from receiving or donating without searching for blood type and location

So That: exact receiving/donation details are known

**Page 15**

#### Sprint Backlog No.2

Story ID: 0026 Story Title: Store Research Inventory

**User Story:**

**Acceptance Criteria:**

And I know I am done when: Expired pints are sent to the research onventory, from both.

As a: Manager

I want: to store a research inventory

So That: the expired blood pints are moved to this inventory

Story ID: 0027 Story Title: Move Expired Pints

**User Story:**

**Acceptance Criteria:**

And I know I am done when: no expired pints exist in the other inventories

As a: Manager

I want: to ensure that expired blood pints (from either emergency list

or normal list) are moved to the research inventory.

So That: No expired blood is kept in donating inventories

###### Page 16

Story ID: 0028 Story Title: View Blood Types in Research

**User Story:**

**Acceptance Criteria:**

And I know I am done when: I see a list of available blood groups in research inventory

As a: Manager

I want: to view a list of blood groups available in research inventory So That: I know what types are available for research and experimentation

Story ID: 0029 Story Title: Count Blood Types (Research)

**User Story:**

**Acceptance Criteria:**

And I know I am done when: I can view a count of each blood types in the research inventory

As a: Manager

I want: to see count of each blood group in the research inventory So That: I can list down which blood groups expired in greater quantity

**Page 17**

Story ID: 0030 Story Title: Total Count (Research)

**User Story:**

**Acceptance Criteria:**

And I know I am done when: I can view a total count of how many blood groups are available in the research inventory.

As a: Manager

I want: to see a total count of pints available in the research inventory

So That: I can see a final count of how many blood pints are held by the research inventory at any given time.

Story ID: 0031 Story Title: View Frequent Donors by Type

**User Story:**

**Acceptance Criteria:**

And I know I am done when: I have hold of details of each donor who donates frequently

As a: Manager

I want: to see names of frequent donors of each type

So That: I can access their details

###### Page 18

Story ID: 0032 Story Title: View Frequent Donors by Location

**User Story:**

**Acceptance Criteria:**

And I know I am done when: I can view a list of frequent donors specific to a city.

As a: Manager

I want: to extract a list of frequent donors by location So That: I know who frequent donors in the city are

Story ID: 0033 Story Title: Frequent Donors by Type in city

**User Story:**

**Acceptance Criteria:**

And I know I am done when: I view a list of donors on a

particular location, based on blood type

As a: Manager

I want: to group frequent donors in a city by blood types

So That: I can see what blood groups are frequently accessible in a city

**Page 19**

Story ID: 0034 Story Title: Frequent Donors - Contact

**User Story:**

**Acceptance Criteria:**

And I know I am done when: I can get their contact details and contact them using the details

As a: Manager

I want: to view frequent donors’ contact details So That: I can contact them

Story ID: 0035 Story Title: Frequent Donors - Address

**User Story:**

**Acceptance Criteria:**

And I know I am done when: I can view the address of donors

who frequently donate.

As a: Manager

I want: to view frequent donors’ address

So That: I can see address of frequent donors

**Page 20**

#### Sprint Backlog No.3

Story ID: 0037 Story Title: Provide Blood Report

**User Story:**

**Acceptance Criteria:**

And I know I am done when: When the donor gets a report of his/her blood on screen after donating

As a: Manager

I want: provide a blood report to my donor

So That: the donor can view his/her free blood report

Story ID: 0038 Story Title: View Blood Report (Eligibility Message)

**User Story:**

**Acceptance Criteria:**

And I know I am done when: When the donor views a blood test report and eligibility

As a: Manager

I want: to ensure that the donor can see his/her complete blood details

So That: to see if next donation is possible (if haemoglobin level > 12.8)

###### Page 21

Story ID: 0039 Story Title: View Blood Report

**User Story:**

**Acceptance Criteria:**

And I know I am done when: When I can view my free generated blood report after a donation

As a: Donor

I want: to view my blood donation report So That: I can see my health status

Story ID: 0040 Story Title: View Eligibility

**User Story:**

**Acceptance Criteria:**

And I know I am done when: I can see a message if I am not eligible to donate given my low haemoglobin.

As a: Donor

I want: to see if I am eligible to donate So That: I can see if I can donate or not

**Page 22**

Story ID: 0041 Story Title: General Dashboard

**User Story:**

**Acceptance Criteria:**

And I know I am done when: When I can view the summary of my blood bank’s activities

As a: Manager

I want: to see a summary of my blood bank’s activities So That: I can track the activities

Story ID: 0042 Story Title: Research Inventory Dashboard

**User Story:**

**Acceptance Criteria:**

And I know I am done when: I can view a graphical demonstration of each blood type count available

As a: Manager

I want: to see a count of each blood type in Research Inventory So That: I can see which type is available in which quantity

###### Page 23

Story ID: 0043 Story Title: Emergency Inventory Dashboard

**User Story:**

**Acceptance Criteria:**

And I know I am done when: I can view a graphical demonstration of each blood type count available

As a: Manager

I want: to see a count of each blood type in Emergency Inevntory So That: I can see which type is available in which quantity

Story ID: 0044 Story Title: Recipient & Donor Dashboard

**User Story:**

**Acceptance Criteria:**

And I know I am done when: I can view a graphical demonstration of each blood type counts donated and receieved

As a: Manager

I want: to see a count of each blood types that are donated and received

So That: I can see which type is given/taken in which quantity

**Page 24**

# Design Items

## (Sprint 2)

**Page 25**

Case: A user cannot register as donor if Age > 60, Age <18, User is Thalassemia Patient,

Cancer Patient

#### Input User Details

**Age >60 Or**

**<18**

**No**

#### Is user a Thalassemia

**Yes**

### Yes

#### Show Message Not Eligible

**patient?**

### No

#### Show Message Cannot signup as donor

**Is user a Cancer patient?**

### Yes

**No**

#### Show Message

**Signed Up as Donor**

**Page 26**

Case: A registered donor donates blood The blood goes to Emergency Inventory if

Count < 5, else it goes to Available Inventory

#### Donor registered

**and logged No**

**in?**

**Yes**

#### Donate Blood

**Blood type > 5 in**

**emergency inventory?**

### No

**Add the blood pint availability to emergency inventory**

### Yes

#### Add the blood pint availability to regular inventory

**Page 27**

Case: Admin can update inventory

to move all expired pints to research inventory, checking one pint after other

#### Logged in as Admin

**View Admin Panel**

#### Click “Update Inventories”

**Start Reading “Available Records”**

**Not End of Records**

### Yes

#### Current date

**>**

**Expiry Date**

### Yes

#### Add Pint to Research Inventory

###### Page 28

**Use Case Diagram**

**Update Inventories**

**<<includes>>**

Store Blood Inventory

**<<includes>>**

Store Regular Donors

**<<extends>>**

Move Expired Blood

**View Running Out Blood Type**

**View Quantity of Each Blood Type**

**View Regular Donors Search by username**

**Manage Research Inventory**

**Admin**

Store Research Inventory

**<<includes>>**

**View Research Inventory**

**Manage Emergency Inventory**

**View Emergency Inventory**

**Show all records**

**View user-specific Receiving**

**Record**

**View user-specific Donation Record**

**Receiver**

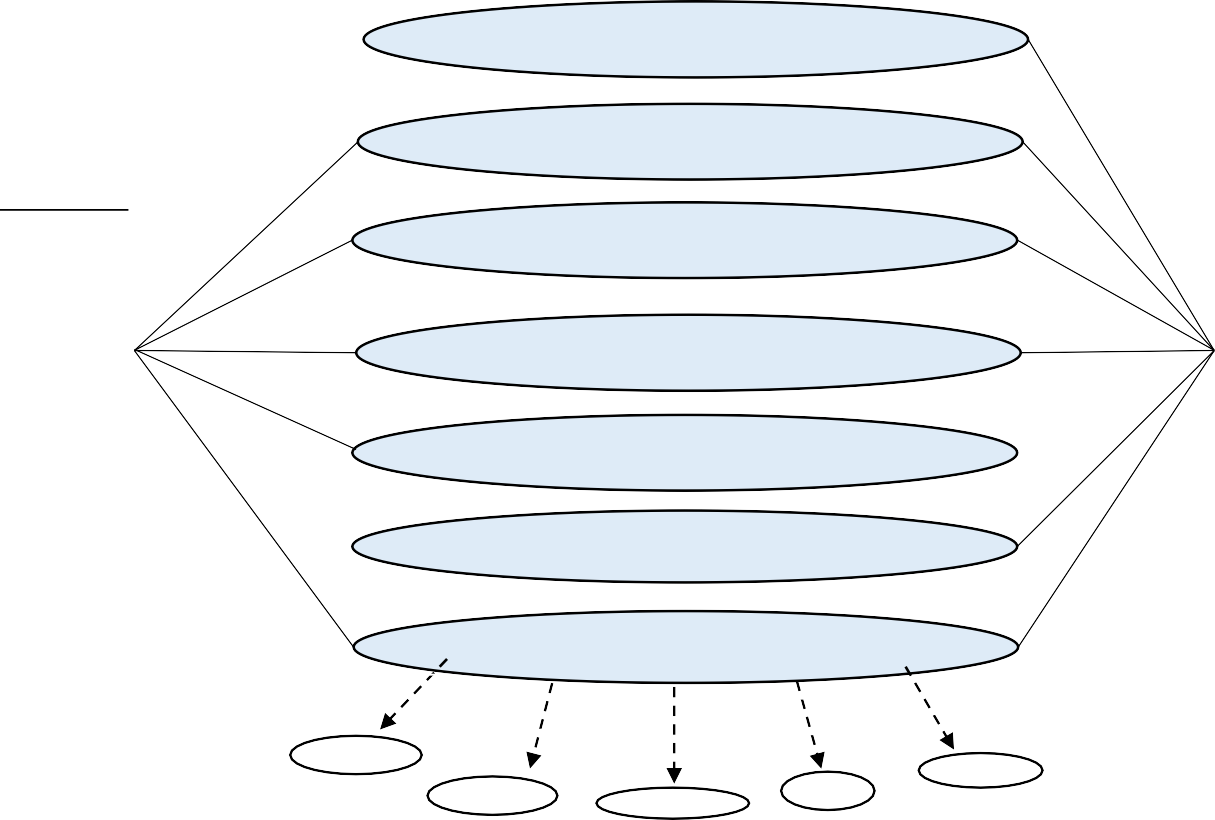
**Change Current Location View About us**

**Donor**

**View FAQ**

**Find Donors by Location & Type**

**Donate Blood**



**<<includes>>**

Username

**Sign up Information**

**<<includes>> <<includes>> <<includes>>**

Password Blood group Age

**<<includes>>**

Location

Not Cancer Patient

**<<extends>>**

**Sequence Diagram 1**



*Register as donor if eligible, then donate. Later, receive blood upon request*.

**:Blood Bank :Recipient**

**:Donor**

IF not Thalassemia patient And

Not Cancer patient

And

Age not between 18-60

* 1. **Register as a donor**
  2. **Add donor**
  3. **Donate blood**
  4. **Donation Confirmation**
     1. **Search Request by location and type**
     2. **Show availability**
     3. **Request blood**
     4. **Provide blood**

###### Page 30

**Sequence Diagram 2**

*Blood is donated, then moved to either emergency or available inventory based on count*

**:Blood Bank**

**:Emergency Inventory**

**:Available Inventory**

**:Donor**

1. **Donate blood**
2. **Donation**

**Confirmation**

IF

Blood type count < 5 in store

**3.1**

**New blood pint Record added**



Else

**3.2 New blood pint record added**

###### Page 31

**Sequence Diagram 3**

*Admin updates inventory, by moving all pints to research inventory if expired by checking one by one*

**:Available**

**Inventory**

IF

count < 5

**:Admin**

**1.1 Update Inventory**

**:Emergency Inventory**

**:Research Inventory**

Else

**1.2 Update Inventory**

\* IF

Current Date

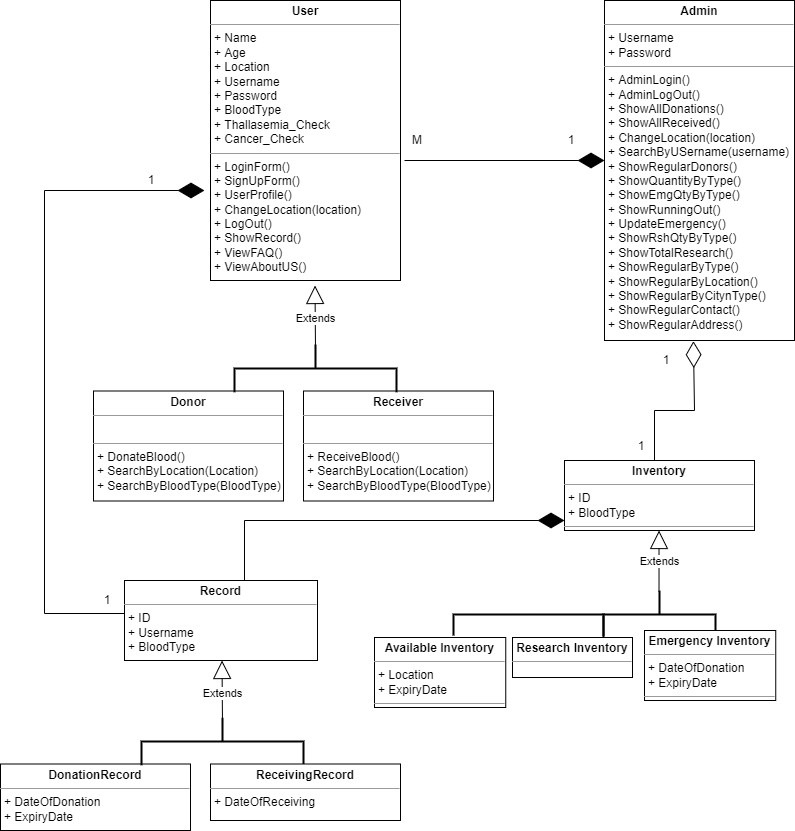
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Expiry Date

* 1. **Forward Blood Pint**
  2. **Forward Blood Pint**

**Page 32**

**Class Diagram**



**Page 33**

# Architecture Diagrams

## (Event-Based Approach)

**Justification:** All of the operations and functionalities go through an event-based approach where the actions are performed

based on the buttons clicked.

Most of the software’s functionalities are

accessed through a central Database

**Page 34**

**User**

**Sign Up as Donor or Receiver**

**Sign Up Confirmation**

**Sign Up as Donor/Receiver Request**

**BloodBank**

**Database**

### Log In as Donor or Receiver

**User**

**Sign Up Confirmation**

**Log In as Donor/Receiver Request**

**BloodBank Database**



**Page 35**

**User**

### Log In as Administrator

**Log In Confirmation**

**Sign Up as Donor/Receiver Request**

**BloodBank**

**Database**

**Donor**

### Donor donates Blood



**Blood Report Generation**

**Click “Donate”**

**BloodBank Database**

**Page 36**

**Receiver**

### Search Donors by Location & Type

**Relevant Records**

**Search Request (Location & Type)**

**BloodBank**

**Database**

**Admin**

### Search by Location or Type



**Relevant Records**

**Search Request**

**BloodBank Database**

**Page 37**

**Admin**

### Update Inventory

**Updated Inventory**

**Update Inventory Request Button**

**BloodBank**

**Database**

### Show Record of User log (Donations/Receiving)

**User**

**Relevant Records of User’s log**

**Show Record Request**

**BloodBank Database**



**Page 38**

**Admin**

### Generic Dashboard

**Dashboard Request**

**BloodBank**

**Database**

**Admin**

### Donor & Receiver Dashboard

**Sub-Dashboard Request**

**BloodBank Database**



**Page 39**

**Admin**

### Inventories’ Dashboard

**Inventory Dashboard Request**

**BloodBank**

**Database**

**Admin**

### User Update Location

**Updated Data**

**Change Location Request**

**BloodBank Database**



**Page 40**

**Admin**

### About Us / FAQ Page

**Webpage Display**

**Inventory Dashboard Request**

**User**

### Show Records of Frequent Donors

**Relevant Records**

**Show Frequent Donor Record Request**

**BloodBank Database**



**Page 41**

**Iteration-Wise Burndown Chart**



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45

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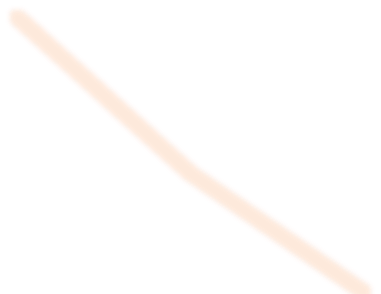
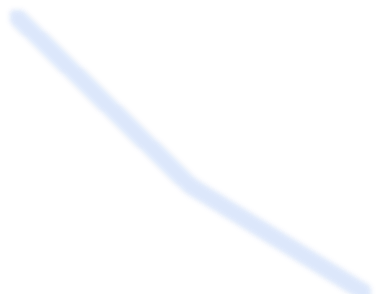
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**User Stories**

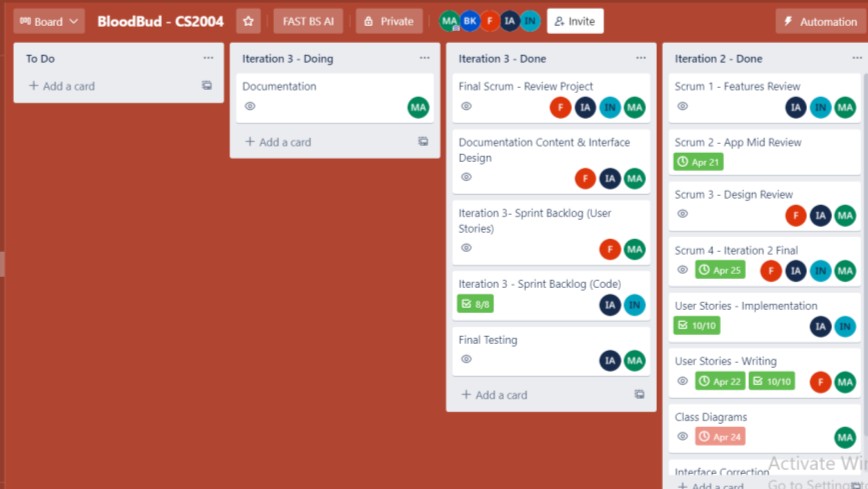
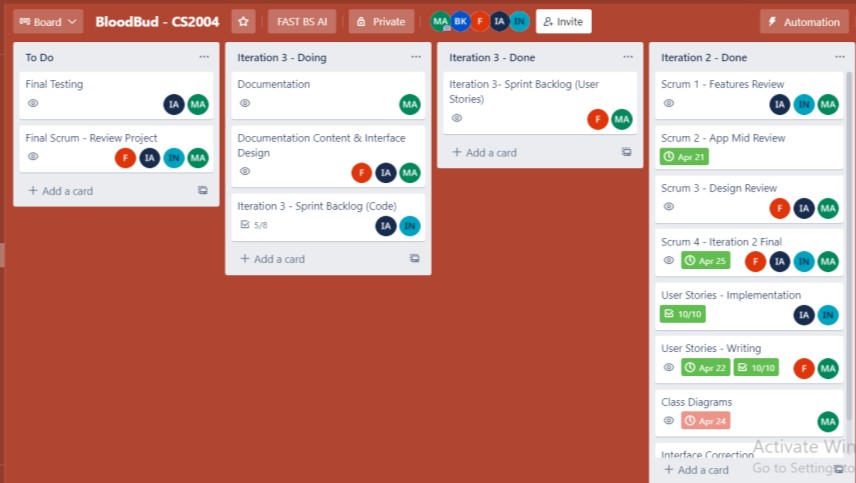
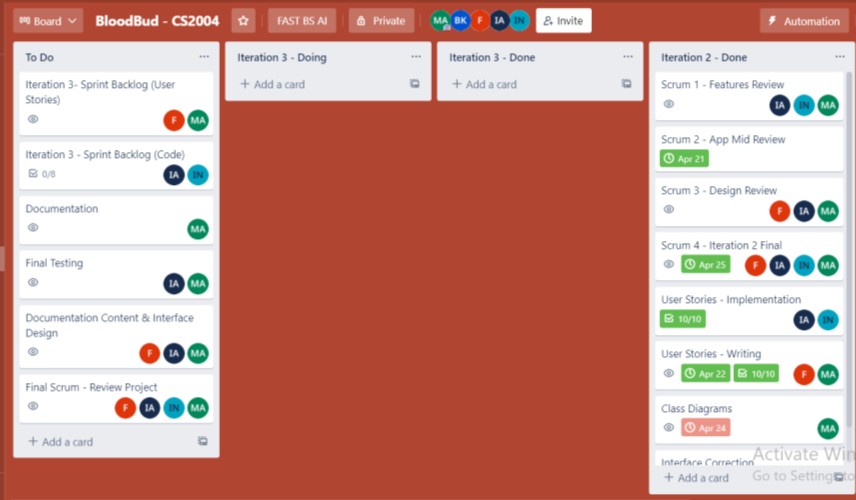


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| Iteration 1 | Iteration 2 | Iteration 3 |
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| Left | 44 | 19 | 0 |

In conclusion, we completed all of the desired user stories that covered the initially decided features for BloodBud in Iteration 0.

**Page 42**

**Scrum Board**



**Start**

**Middle**

**End**

**Page 43**

# Boundary Value Analysis Testing

###### Page 44

**Choose a Username Check**

**Constraint:** Length >= 5 and <=20

**Constraint:** username should not exist already

**Test Case ID:** 0001

**Test Item:** Username Range Check

**Wrote By:** Maaz Ali **Date:** 25/05/2022

**Product Name:** BloodBud **Release and Version: Final (3.0)**

**Test Case Description:** Checking if system accepts a username with length 4

**Operation Procedure:**

Enter Full Name “Maaz Ali” Choose Blood Type “B+” Choose Location “Lahore” Enter Age “25”

Enter Username **“maaz”**

Enter Password “MAaZ1\*li”

Enter Contact Number “03145258971” Click on “Sign Up as Donor”

**Pre-Condition:** username does not already exist

**Post-Condition:** message displayed

**Expected Output:** username length not in range

**Input Data:** “Maaz Ali”, “B+”, “Lahore”, “25”, “maaz”, “MAaZ1\*li”, “03145258971”, CLICK “Sign Up as Donor”.

###### Page 45

**Choose a Username Check**

**Test Case ID:** 0002

**Test Item:** Username Range Check

**Wrote By:** Maaz Ali **Date:** 25/05/2022

**Product Name:** BloodBud **Release and Version: Final (3.0)**

**Test Case Description:** Checking if system accepts a username with length 5

**Operation Procedure:**

Enter Full Name “Maaz Ali” Choose Blood Type “B+” Choose Location “Lahore” Enter Age “25”

Enter Username **“maaza”**

Enter Password “MAaZ1\*li”

Enter Contact Number “03145258971” Click on “Sign Up as Donor”

**Pre-Condition:** username does not already exist

**Post-Condition:** message displayed

**Expected Output:** Signed Up

**Input Data:** “Maaz Ali”, “B+”, “Lahore”, “25”, “maaza”, “MAaZ1\*li”, “03145258971”, CLICK “Sign Up as Donor”.

**Page 46**

**Choose a Username Check**

**Test Case ID:** 0003

**Test Item:** Username Range Check

**Wrote By:** Maaz Ali **Date:** 25/05/2022

**Product Name:** BloodBud **Release and Version: Final (3.0)**

**Test Case Description:** Checking if system accepts a username with length 6

**Operation Procedure:**

Enter Full Name “Maaz Ali” Choose Blood Type “B+” Choose Location “Lahore” Enter Age “25”

Enter Username **“maazal”**

Enter Password “MAaZ1\*li”

Enter Contact Number “03145258971” Click on “Sign Up as Donor”

**Pre-Condition:** username does not already exist

**Post-Condition:** message displayed

**Expected Output:** Signed Up

**Input Data:** “Maaz Ali”, “B+”, “Lahore”, “25”, “maazal”, “MAaZ1\*li”, “03145258971”, CLICK “Sign Up as Donor”.

###### Page 47

**Choose a Username Check**

**Test Case ID:** 0004

**Test Item:** Username Range Check

**Wrote By:** Maaz Ali **Date:** 25/05/2022

**Product Name:** BloodBud **Release and Version: Final (3.0)**

**Test Case Description:** Checking if system accepts a username with length 19

**Operation Procedure:**

Enter Full Name “Maaz Ali” Choose Blood Type “B+” Choose Location “Lahore” Enter Age “25”

Enter Username **“**maazali\_SE\_BloodBud**”**

Enter Password “MAaZ1\*li”

Enter Contact Number “03145258971”

Click on “Sign Up as Donor”

**Pre-Condition:** username does not already exist

**Post-Condition:** message displayed

**Expected Output:** Signed Up

**Input Data:** “Maaz Ali”, “B+”, “Lahore”, “25”, “maazali\_SE\_BloodBud”,

“MAaZ1\*li”, “03145258971”, CLICK “Sign Up as Donor”.

**Page 48**

**Choose a Username Check**

**Test Case ID:** 0005

**Test Item:** Username Range Check

**Wrote By:** Maaz Ali **Date:** 25/05/2022

**Product Name:** BloodBud **Release and Version: Final (3.0)**

**Test Case Description:** Checking if system accepts a username with length 20

**Operation Procedure:**

Enter Full Name “Maaz Ali” Choose Blood Type “B+” Choose Location “Lahore” Enter Age “25”

Enter Username **“**maazali\_SE\_BloodBud1**”**

Enter Password “MAaZ1\*li”

Enter Contact Number “03145258971”

Click on “Sign Up as Donor”

**Pre-Condition:** username does not already exist

**Post-Condition:** message displayed

**Expected Output:** Signed Up

**Input Data:** “Maaz Ali”, “B+”, “Lahore”, “25”, “maazali\_SE\_BloodBud1”,

“MAaZ1\*li”, “03145258971”, CLICK “Sign Up as Donor”.

###### Page 49

**Choose a Username Check**

**Test Case ID:** 0006

**Test Item:** Username Range Check

**Wrote By:** Maaz Ali **Date:** 25/05/2022

**Product Name:** BloodBud **Release and Version: Final (3.0)**

**Test Case Description:** Checking if system accepts a username with length 6

**Operation Procedure:**

Enter Full Name “Maaz Ali” Choose Blood Type “B+” Choose Location “Lahore” Enter Age “25”

Enter Username **“**maazali\_SE\_BloodBud10**”**

Enter Password “MAaZ1\*li”

Enter Contact Number “03145258971” Click on “Sign Up as Donor”

**Pre-Condition:** username does not already exist

**Post-Condition:** message displayed

**Expected Output:** username length not in range

**Input Data:** “Maaz Ali”, “B+”, “Lahore”, “25”, “maazali\_SE\_BloodBud10”, “MAaZ1\*li”, “03145258971”, CLICK “Sign Up as Donor”.

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**Boundary Value Analysis Testing**

**Choose a Username Check**

Already taken usernames

|  |
| --- |
| **Username** |
| Maazali2301 |
| SE\_bloodbud |
| Saleh\_Ahmed |

**Constraint:** username should not exist already

1. username: Maazali230 result: **Accepted**

##### username: Maazali2301

result: **Username already exists**

1. username: Maazali23012 result: **Accepted**
2. username: SE\_bloodbu result: **Accepted**

##### username: SE\_bloodbud

result: **Username already exists**

##### username: SE\_bloodbudd

result: **Accepted**

1. username: Saleh\_Ahme result: **Accepted**

##### username: Saleh\_Ahmed

result: **Username already exists**

##### username: Saleh\_Ahmedd

result: **Accepted**

###### Page 51

**Choose a Username Check**

Already taken usernames

|  |
| --- |
| **Username** |
| Maazali2301 |
| SE\_bloodbud |
| Saleh\_Ahmed |

**Test Case ID:** 0007

**Test Item:** Username exist check

**Wrote By:** Maaz Ali **Date:** 25/05/2022

**Product Name:** BloodBud **Release and Version: Final (3.0)**

**Test Case Description:** Checking if system accepts a username that does not already exists

**Operation Procedure:**

Enter Full Name “Maaz Ali” Choose Blood Type “B+” Choose Location “Lahore” Enter Age “25”

Enter Username **“Maazali230”**

Enter Password “MAaZ1\*li”

Enter Contact Number “03145258971” Click on “Sign Up as Donor”

**Pre-Condition: -**

**Post-Condition:** message displayed

**Expected Output: Signed Up**

**Input Data:** “Maaz Ali”, “B+”, “Lahore”, “25”, “**Maazali230**”, “MAaZ1\*li”, “03145258971”, CLICK “Sign Up as Donor”.

###### Page 52

**Choose a Username Check**

Already taken usernames

|  |
| --- |
| **Username** |
| Maazali2301 |
| SE\_bloodbud |
| Saleh\_Ahmed |

**Test Case ID:** 0008

**Test Item:** Username exist check

**Wrote By:** Maaz Ali **Date:** 25/05/2022

**Product Name:** BloodBud **Release and Version: Final (3.0)**

**Test Case Description:** Checking if system accepts a username that does already exists

**Operation Procedure:**

Enter Full Name “Maaz Ali” Choose Blood Type “B+” Choose Location “Lahore” Enter Age “25”

Enter Username **“Maazali2301”**

Enter Password “MAaZ1\*li”

Enter Contact Number “03145258971” Click on “Sign Up as Donor”

**Pre-Condition: -**

**Post-Condition:** message displayed

**Expected Output:** username already exists

**Input Data:** “Maaz Ali”, “B+”, “Lahore”, “25”, “**Maazali2301**”, “MAaZ1\*li”, “03145258971”, CLICK “Sign Up as Donor”.

###### Page 53

**Choose a Username Check**

Already taken usernames

|  |
| --- |
| **Username** |
| Maazali2301 |
| SE\_bloodbud |
| Saleh\_Ahmed |

**Test Case ID:** 0009

**Test Item:** Username exist check

**Wrote By:** Maaz Ali **Date:** 25/05/2022

**Product Name:** BloodBud **Release and Version: Final (3.0)**

**Test Case Description:** Checking if system accepts a username that doesnot exist

**Operation Procedure:**

Enter Full Name “Maaz Ali” Choose Blood Type “B+” Choose Location “Lahore” Enter Age “25”

Enter Username **“Maazali23012”**

Enter Password “MAaZ1\*li”

Enter Contact Number “03145258971” Click on “Sign Up as Donor”

**Pre-Condition: -**

**Post-Condition:** message displayed

**Expected Output: Signed Up**

**Input Data:** “Maaz Ali”, “B+”, “Lahore”, “25”, “**Maazali23012**”, “MAaZ1\*li”, “03145258971”, CLICK “Sign Up as Donor”.

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**Constraint:**

**Choose a Password Check**

* Length >= 8 and <20

1. Length 7

password: FASTuni

result: **Length not In range**

1. Length 8

password: FASTc1\*\* result: **Accepted**

1. Length: 9

password: SEproj1\_1

result: **Accepted**

1. Length: 18

password: SEproject1\_1bloodbu result: **Accepted**

1. Length: 19

password: SEproject1\_1bloodbud result: **Accepted**

1. Length: 20

password: SEproject1\_1bloodbudd result: **Length not In range**

1. Length: 21

password: SEproject1\_1bloodbuddd result: **Length not In range**

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**Choose a Password Check**

**Test Case ID:** 0010

**Test Item: Password Length Check**

**Wrote By:** Maaz Ali **Date:** 25/05/2022

**Product Name:** BloodBud **Release and Version: Final (3.0)**

**Test Case Description:** Checking if system accepts a password of length 7

**Operation Procedure:**

Enter Full Name “Maaz Ali” Choose Blood Type “B+” Choose Location “Lahore” Enter Age “25”

Enter Username **“Maazali23012”**

Enter Password “FASTuni”

Enter Contact Number “03145258971” Click on “Sign Up as Donor”

**Pre-Condition: -**

**Post-Condition:** message displayed

**Expected Output: Password length not in range**

**Input Data:** “Maaz Ali”, “B+”, “Lahore”, “25”, “**Maazali23012**”, “FASTuni”, “03145258971”, CLICK “Sign Up as Donor”.

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**Choose a Password Check**

**Test Case ID:** 0011

**Test Item: Password Length Check**

**Wrote By:** Maaz Ali **Date:** 25/05/2022

**Product Name:** BloodBud **Release and Version: Final (3.0)**

**Test Case Description:** Checking if system accepts a password of length 8

**Operation Procedure:**

Enter Full Name “Maaz Ali” Choose Blood Type “B+” Choose Location “Lahore” Enter Age “25”

Enter Username **“Maazali23012”**

Enter Password “FASTc1\*\*”

Enter Contact Number “03145258971” Click on “Sign Up as Donor”

**Pre-Condition: -**

**Post-Condition:** message displayed

**Expected Output: Signed Up**

**Input Data:** “Maaz Ali”, “B+”, “Lahore”, “25”, “**Maazali23012**”, “FASTc1\*\*”, “03145258971”, CLICK “Sign Up as Donor”.

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**Choose a Password Check**

**Test Case ID:** 0012

**Test Item: Password Length Check**

**Wrote By:** Maaz Ali **Date:** 25/05/2022

**Product Name:** BloodBud **Release and Version: Final (3.0)**

**Test Case Description:** Checking if system accepts a password of length 9

**Operation Procedure:**

Enter Full Name “Maaz Ali” Choose Blood Type “B+” Choose Location “Lahore” Enter Age “25”

Enter Username **“Maazali23012”**

Enter Password “SEproj1\_1”

Enter Contact Number “03145258971” Click on “Sign Up as Donor”

**Pre-Condition: -**

**Post-Condition:** message displayed

**Expected Output: Password length not in range**

**Input Data:** “Maaz Ali”, “B+”, “Lahore”, “25”, “**Maazali23012**”, “SEproj1\_1”, “03145258971”, CLICK “Sign Up as Donor”.

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**Choose a Password Check**

**Test Case ID:** 0013

**Test Item: Password Length Check**

**Wrote By:** Maaz Ali **Date:** 25/05/2022

**Product Name:** BloodBud **Release and Version: Final (3.0)**

**Test Case Description:** Checking if system accepts a password of length 18

**Operation Procedure:**

Enter Full Name “Maaz Ali” Choose Blood Type “B+” Choose Location “Lahore” Enter Age “25”

Enter Username **“**SEproject1\_1bloodbu**”**

Enter Password “FASTuni”

Enter Contact Number “03145258971” Click on “Sign Up as Donor”

**Pre-Condition: -**

**Post-Condition:** message displayed

**Expected Output: Signed Up**

**Input Data:** “Maaz Ali”, “B+”, “Lahore”, “25”, “**Maazali23012**”, “SEproject1\_1bloodbu”, “03145258971”, CLICK “Sign Up as Donor”.

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**Choose a Password Check**

**Test Case ID:** 0014

**Test Item: Password Length Check**

**Wrote By:** Maaz Ali **Date:** 25/05/2022

**Product Name:** BloodBud **Release and Version: Final (3.0)**

**Test Case Description:** Checking if system accepts a password of length 19

**Operation Procedure:**

Enter Full Name “Maaz Ali” Choose Blood Type “B+” Choose Location “Lahore” Enter Age “25”

Enter Username **“**SEproject1\_1bloodbud**”**

Enter Password “FASTuni”

Enter Contact Number “03145258971” Click on “Sign Up as Donor”

**Pre-Condition: -**

**Post-Condition:** message displayed

**Expected Output: Signed Up**

**Input Data:** “Maaz Ali”, “B+”, “Lahore”, “25”, “**Maazali23012**”, “SEproject1\_1bloodbud”, “03145258971”, CLICK “Sign Up as Donor”.

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**Choose a Password Check**

**Test Case ID:** 0015

###### Test Item: Password Length Check

**Wrote By:** Maaz Ali **Date:** 25/05/2022

###### Product Name: BloodBud Release and Version: Final (3.0)

**Test Case Description:** Checking if system accepts a password of length 20

###### Operation Procedure:

Enter Full Name “Maaz Ali” Choose Blood Type “B+” Choose Location “Lahore” Enter Age “25”

Enter Username **“**SEproject1\_1bloodbudd**”**

Enter Password “FASTuni”

Enter Contact Number “03145258971” Click on “Sign Up as Donor”

###### Pre-Condition: -

**Post-Condition:** message displayed

###### Expected Output: Password Length not in range

**Input Data:** “Maaz Ali”, “B+”, “Lahore”, “25”, “**Maazali23012**”, “SEproject1\_1bloodbudd”, “03145258971”, CLICK “Sign Up as Donor”.

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**Choose a Password Check**

**Test Case ID:** 0016

###### Test Item: Password Length Check

**Wrote By:** Maaz Ali **Date:** 25/05/2022

###### Product Name: BloodBud Release and Version: Final (3.0)

**Test Case Description:** Checking if system accepts a password of length 21

###### Operation Procedure:

Enter Full Name “Maaz Ali” Choose Blood Type “B+” Choose Location “Lahore” Enter Age “25”

Enter Username **“**SEproject1\_1bloodbuddd**”**

Enter Password “FASTuni”

Enter Contact Number “03145258971” Click on “Sign Up as Donor”

###### Pre-Condition: -

**Post-Condition:** message displayed

###### Expected Output: Password Length Not in range

**Input Data:** “Maaz Ali”, “B+”, “Lahore”, “25”, “**Maazali23012**”, “SEproject1\_1bloodbuddd”, “03145258971”, CLICK “Sign Up as Donor”.

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**Choose a Password Check**

### Constraint:

* **1 lowercase, 1 uppercase, 1 special, 1 digit**

1. 0 lowercase password: FAST123\_

### result: Must Include atleast 1 uppercase, 1 lowercase, 1 digit, and 1 special character

1. 1 lowercase

password: FASTC1\*\*c result: **Accepted**

1. 2 lowercase

password: ccFASTNU8\_

result: **Accepted**

1. 0 uppercase password: fastnuces

### result: Must Include atleast 1 uppercase, 1 lowercase, 1 digit, and 1 special character

1. 1 uppercase

password: Sproject1\_1bloodbud result: **Accepted**

1. 2 uppercase

password: SE\_1bloodbudd

result: **Accepted**

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**Choose a Password Check**

### Constraint:

* + **1 lowercase, 1 uppercase, 1 special, 1 digit**

1. 0 special case

password: FAST1230f

### result: Must Include atleast 1 uppercase, 1 lowercase, 1 digit, 1 special character

1. 1 special case password: FASTC1\*c result: **Accepted**
2. 2 special case

password: \_ccFASTNU8\_ result: **Accepted**

1. 0 digit

password: fastnuces\_H

### result: Must Include atleast 1 uppercase, 1 lowercase, 1 digit, 1 special character

1. 1 digit

password: Sproject\_1bloodbud

result: **Accepted**

1. 2 digit

password: SE\_16blodbudd result: **Accepted**

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**Login Check**

Available in Database

|  |  |
| --- | --- |
| **Username** | **Password** |
| Maazali2301 | MaazAli123\_ |
| SE\_bloodbud | Se\_BloodBud\*2 |
| Saleh\_Ahmed | salEh\_3232 |

### Constraint:

* **Username and Password should exist**

1. Username does not exist, Password does not exist

username: FAST1230f password: FAST\_BloodBud result: **Wrong Credentials**

1. Username exists, Password does not exist username: Saleh\_Ahmed

password: SEbloodbud

result: **Wrong Credentials**

1. Username does not exist, Password exists username: \_ccFASTNU8\_

password: MaazAli123\_

result: **Wrong Credentials**

1. Username and Password both exist username: SE\_bloodbud password: Se\_BloodBud\*2

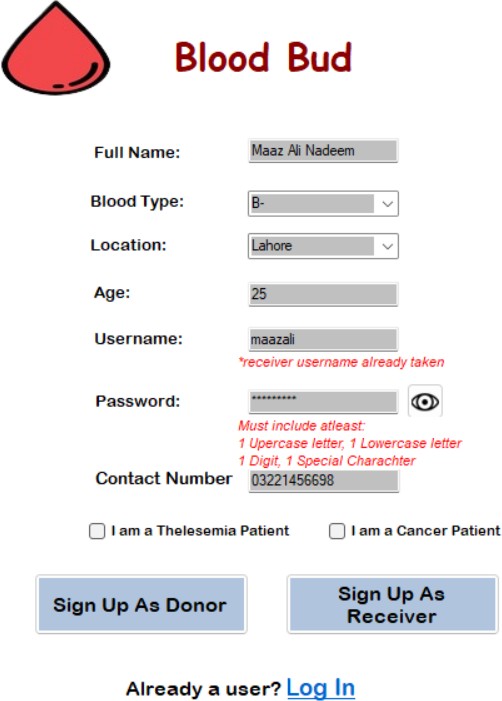
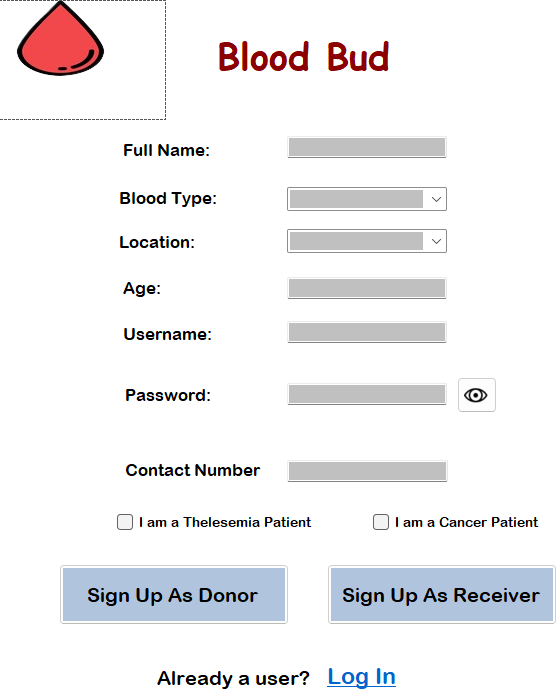
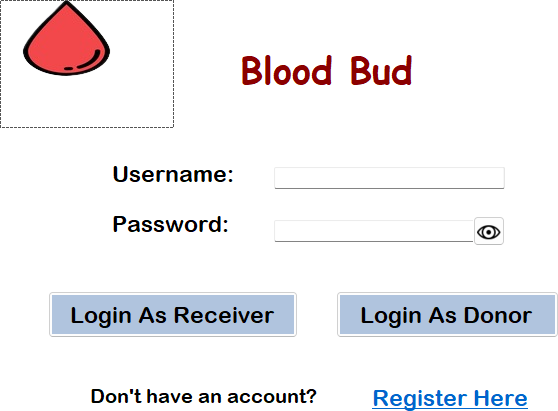
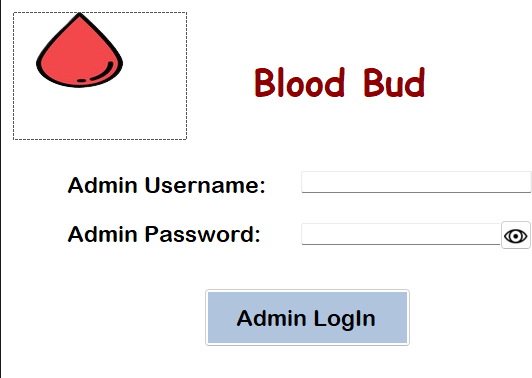
result: **Logged In**

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# Implementation

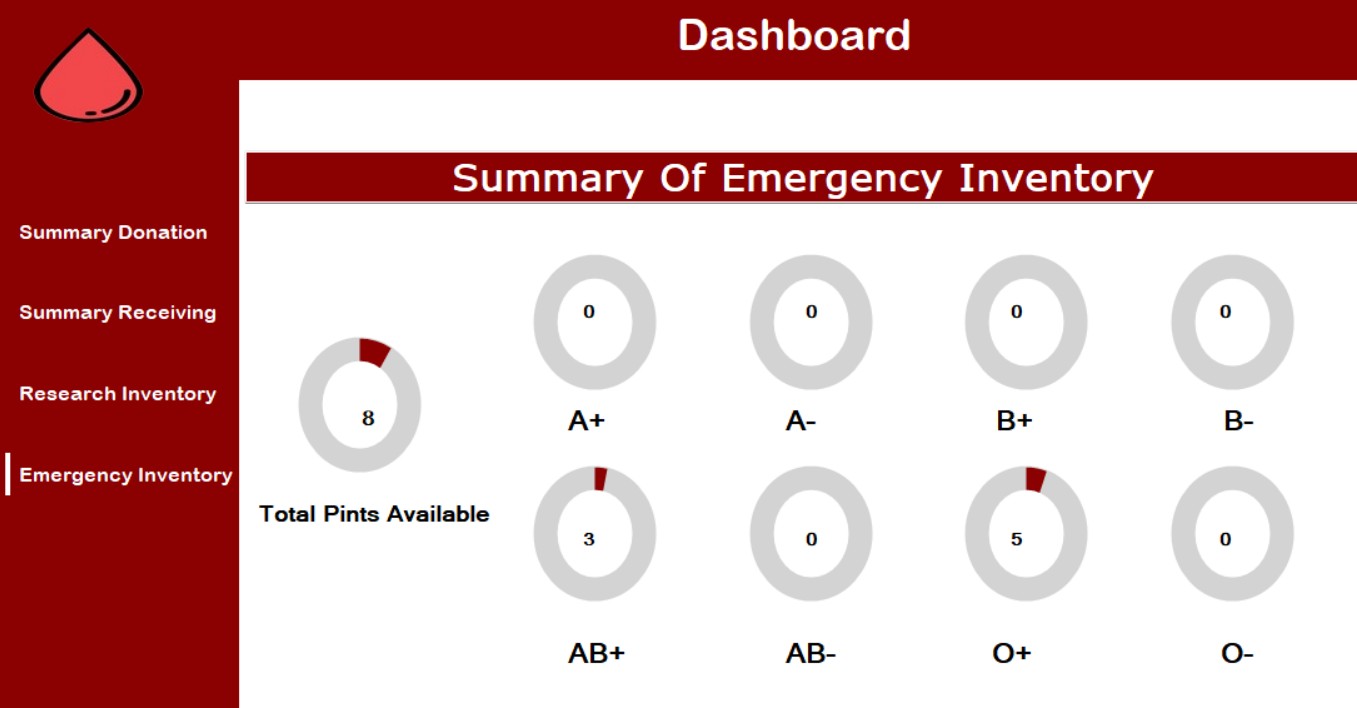
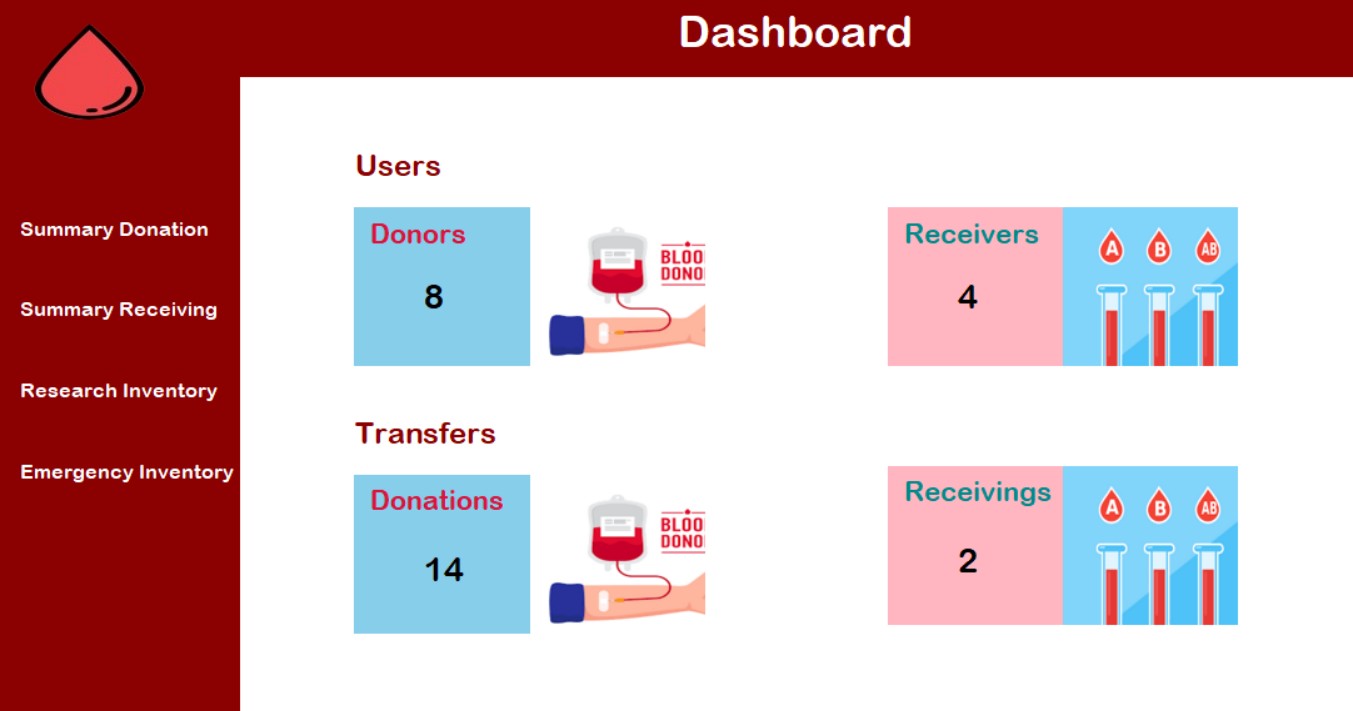
**Page 66**

**Login & Sign Up Pages (For users, and admin)**



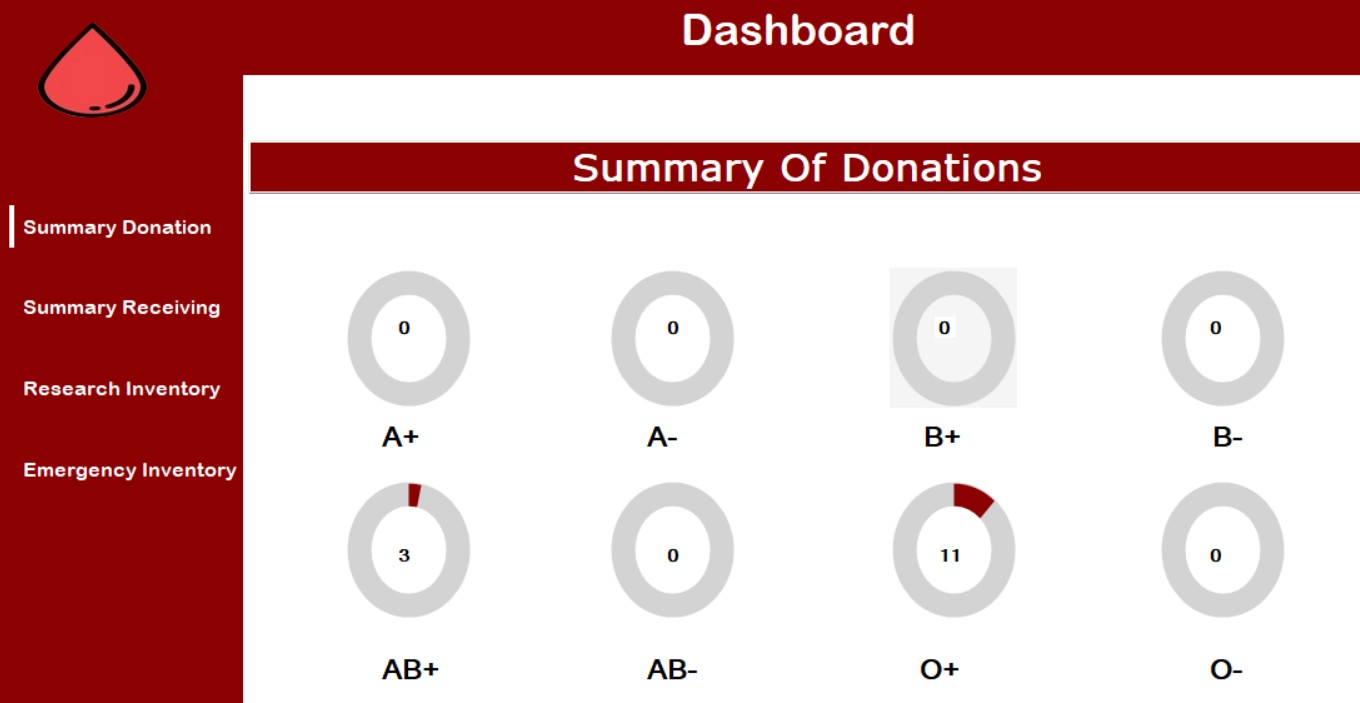
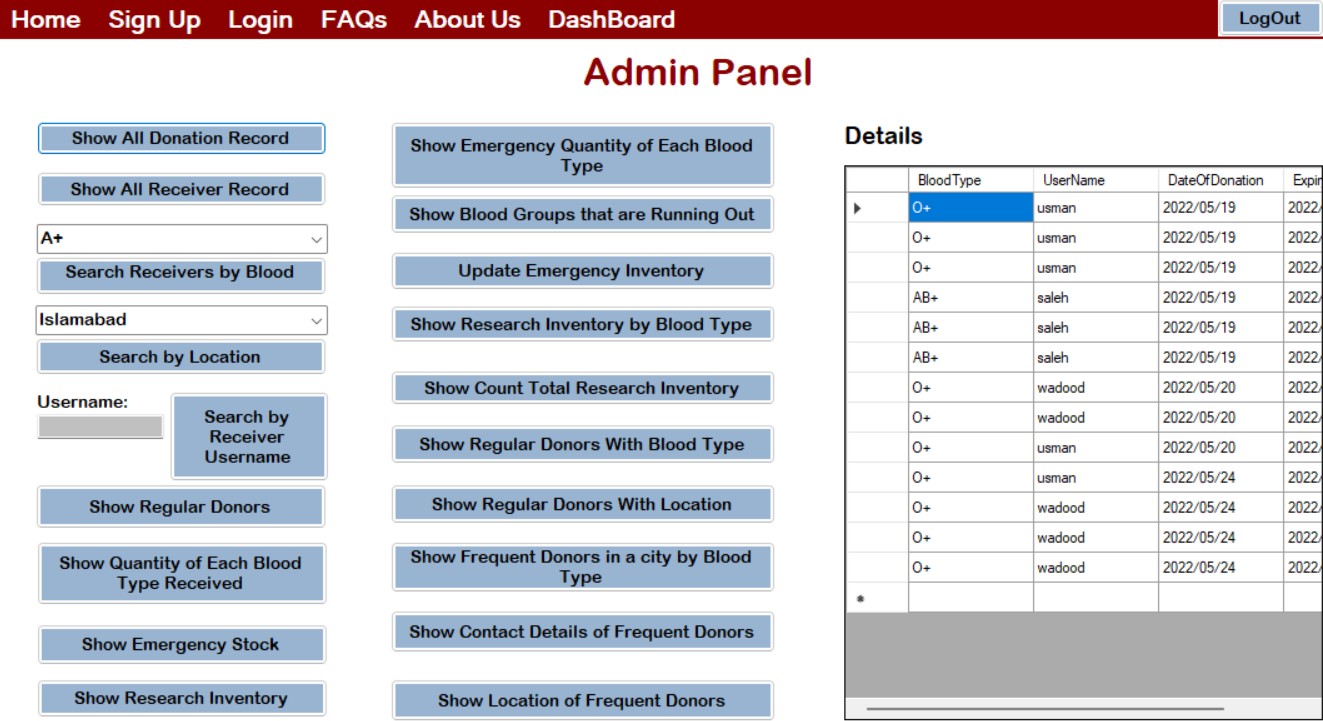
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#### Admin Dashboard



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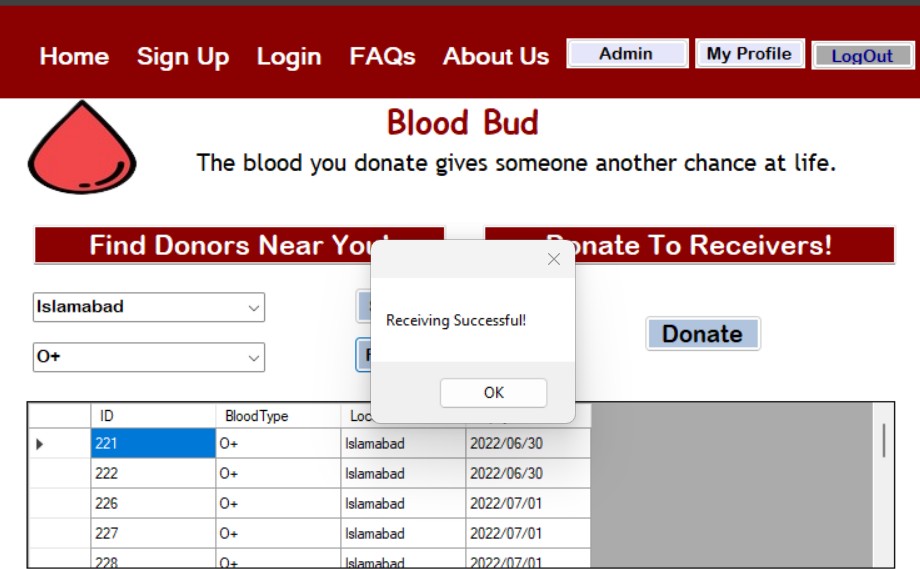
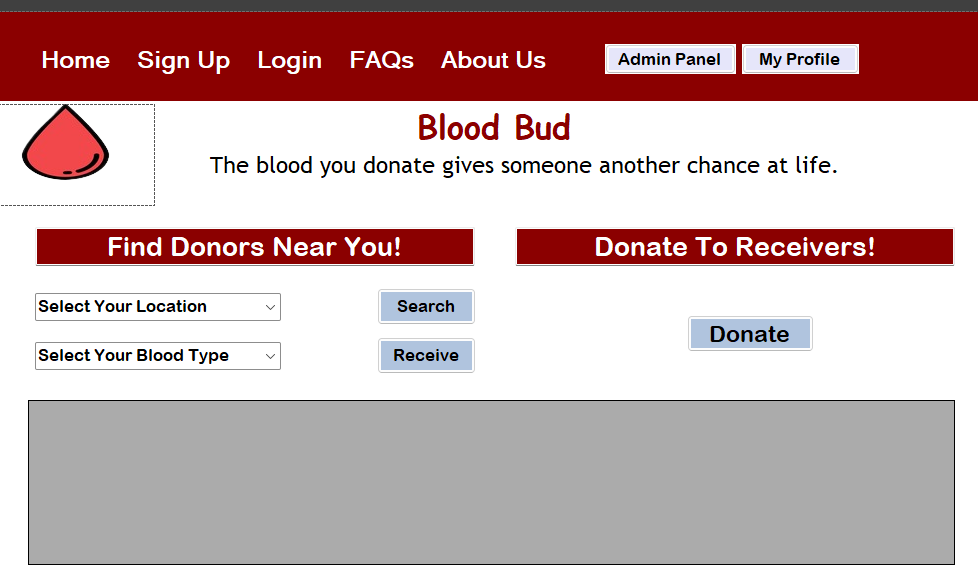
#### Admin Dashboard



**Admin Panel**

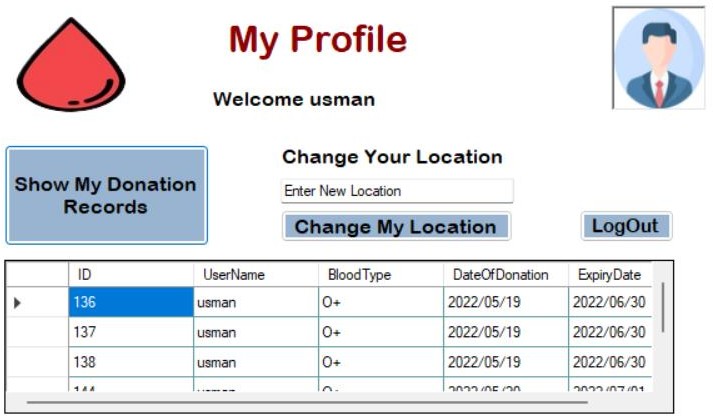
**Page 69**

#### Receiver View



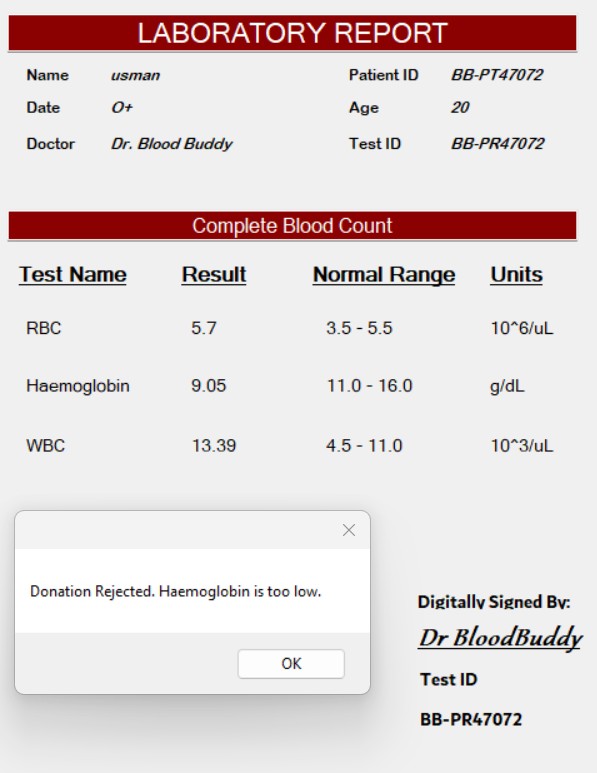
**Page 70**

#### User Profile



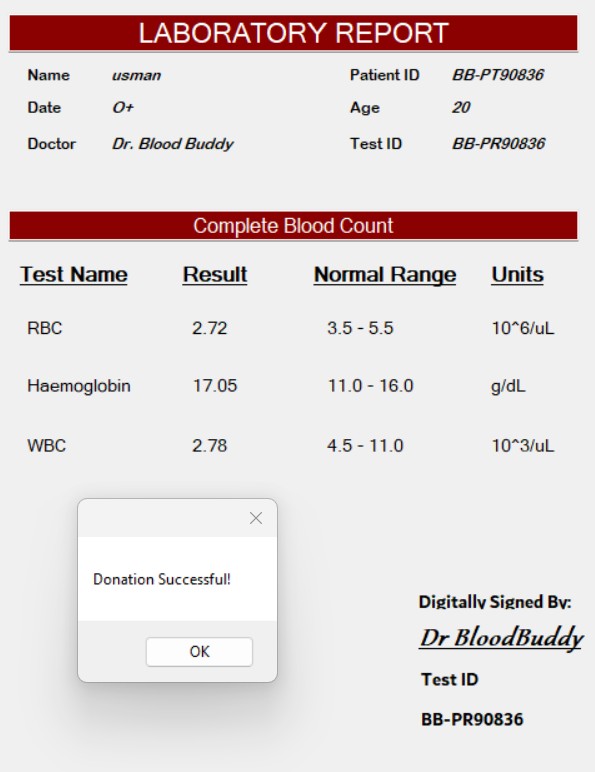
**Page 71**

#### Lab Report after donation (Rejected Donation)

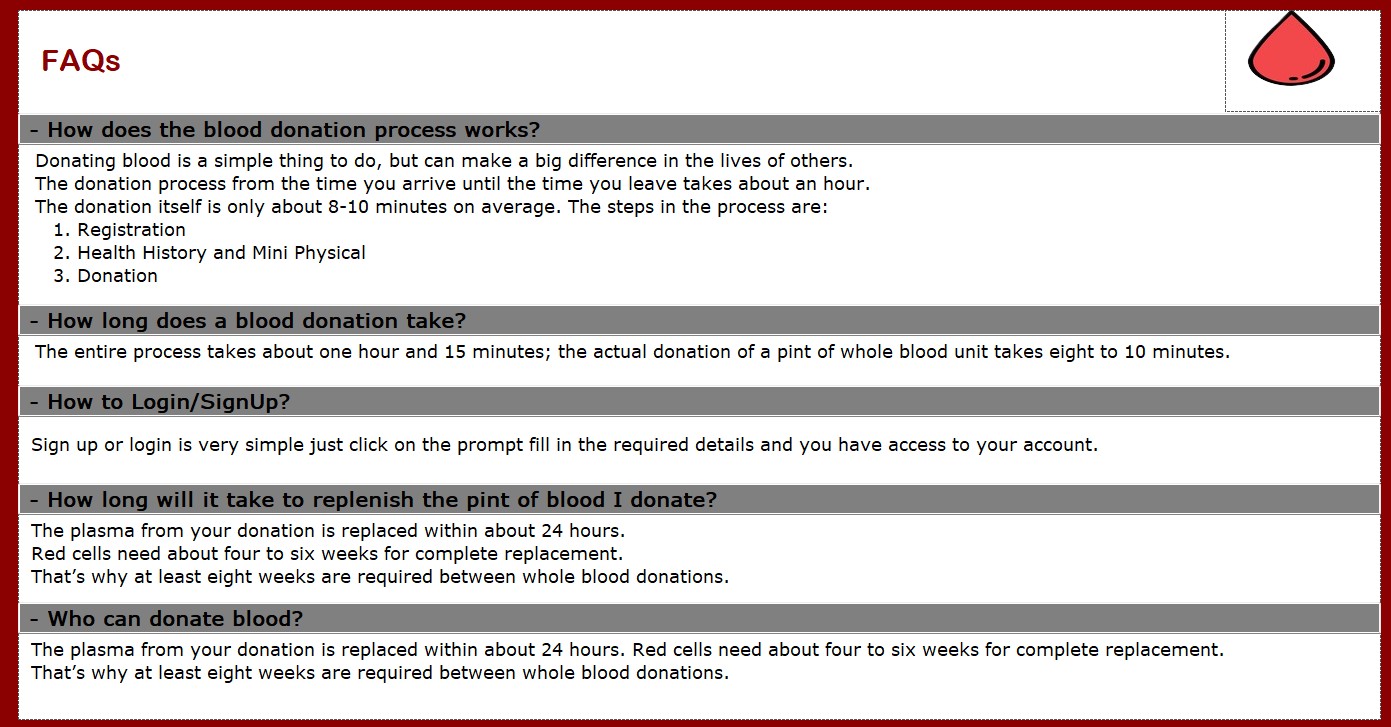
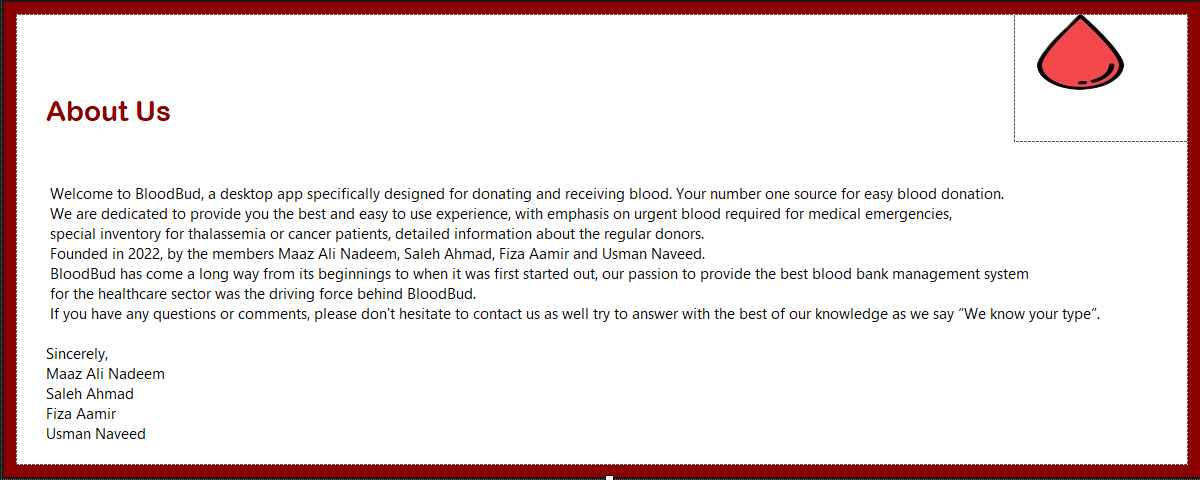


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#### Lab Report after donation (Accepted Donation)



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#### FAQs and About Us Pages

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