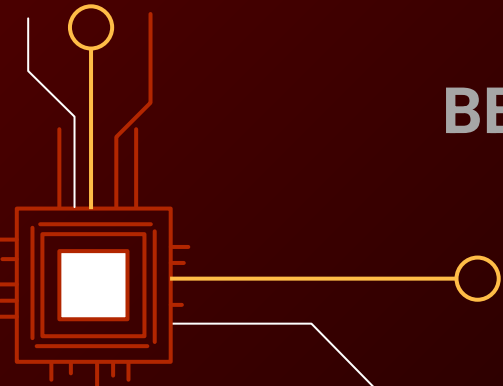




BLOOD BANK MANAGEMENT SYSTEM

BBMS Software Engineering Project



BLOOD BANK MANAGEMENT SYSTEM (BBMS)

- **Problem Statement :**
- Managing blood during critical moments is increasingly challenging.
- Finding blood donors can be inefficient and yield few results.
- Locating a ready donor or the nearest blood bank is often time-consuming.
- This situation causes anxiety for individuals caring for patients in urgent need of blood.

BLOOD BANK MANAGEMENT SYSTEM (BBMS)

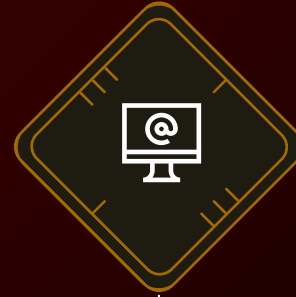
- **User Stories :**

- **System:** Secure authentication, comprehensive databases, and analytics reports.
- **Staff:** Manage donors, inventory, and generate reports.
- **Donors:** Schedule donations, track history, and receive notifications.
- **Patients:** Search inventory, request blood, and track request statuses .

COMPUTER SCIENCE PROPOSAL INFOGRAPHICS

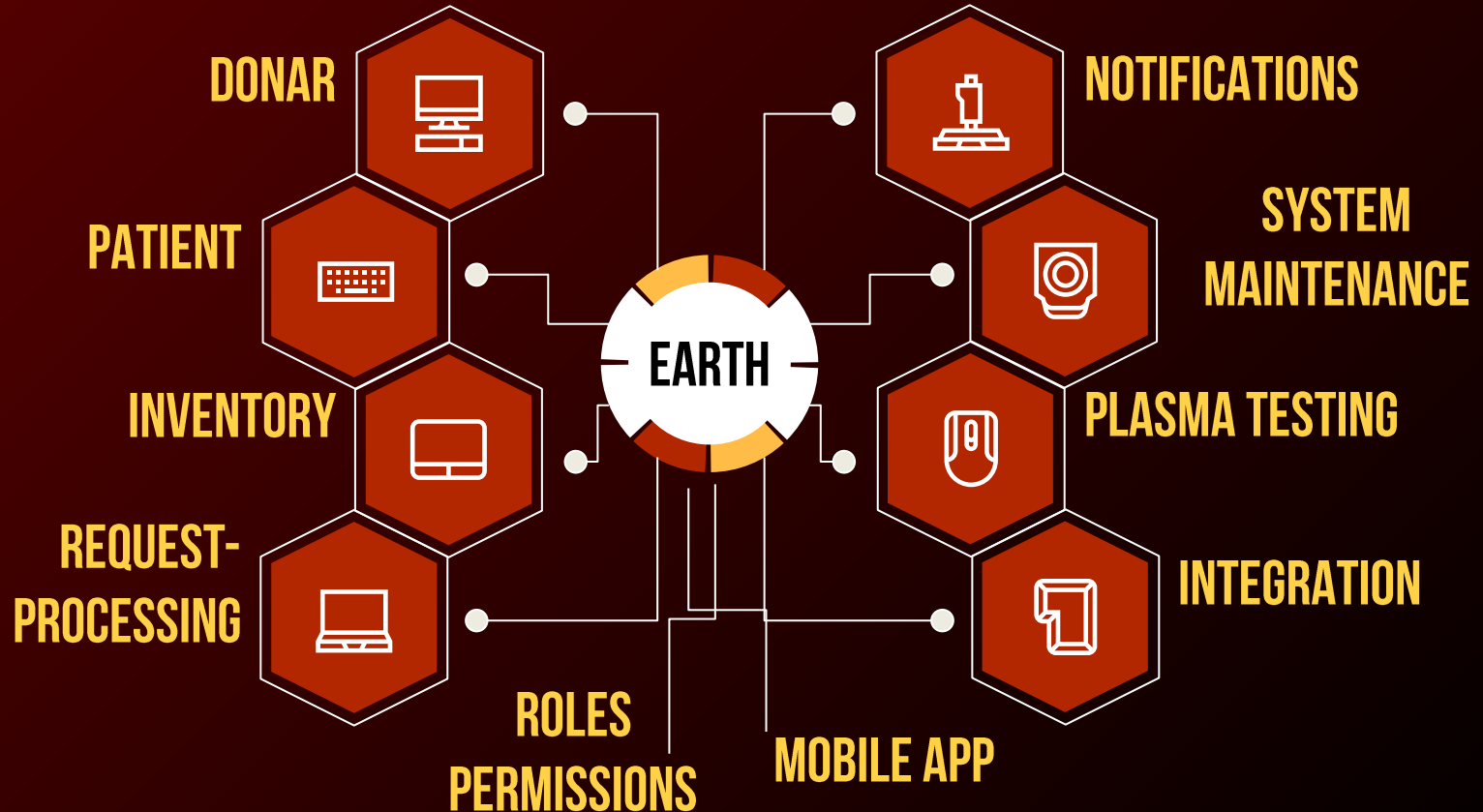


**FUNCTIONAL
REQUIREMENTS**



**NON-FUNCTIONAL
REQUIREMENT**

KEY FUNCTIONAL REQUIREMENTS



KEY FUNCTIONAL REQUIREMENTS

DONOR

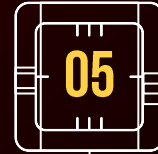
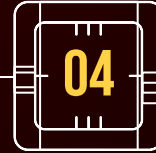
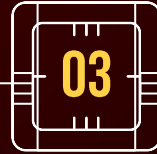
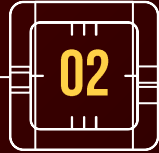
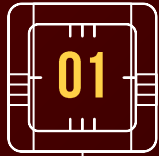
Track history,
schedule donations.

PATIENT

Filter searches and
manage requests.

INVENTORY:

Alerts for low stock
and expiring units.



REQUEST

Automated
prioritization with
overrides.

NOTIFICATIONS

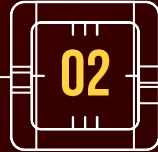
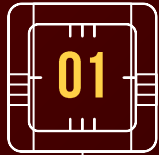
Updates for staff,
donors, and
patients.

KEY FUNCTIONAL REQUIREMENTS

SYSTEM

MAINTENANCE

Data backup and record archiving.

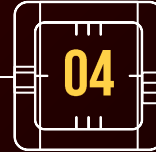
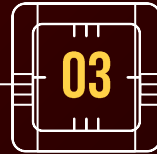


ROLES & PERMISSIONS

Role-restricted data access.

PLASMA TESTING

Link results to donations.

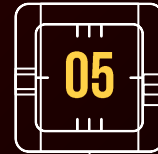


MOBILE APP

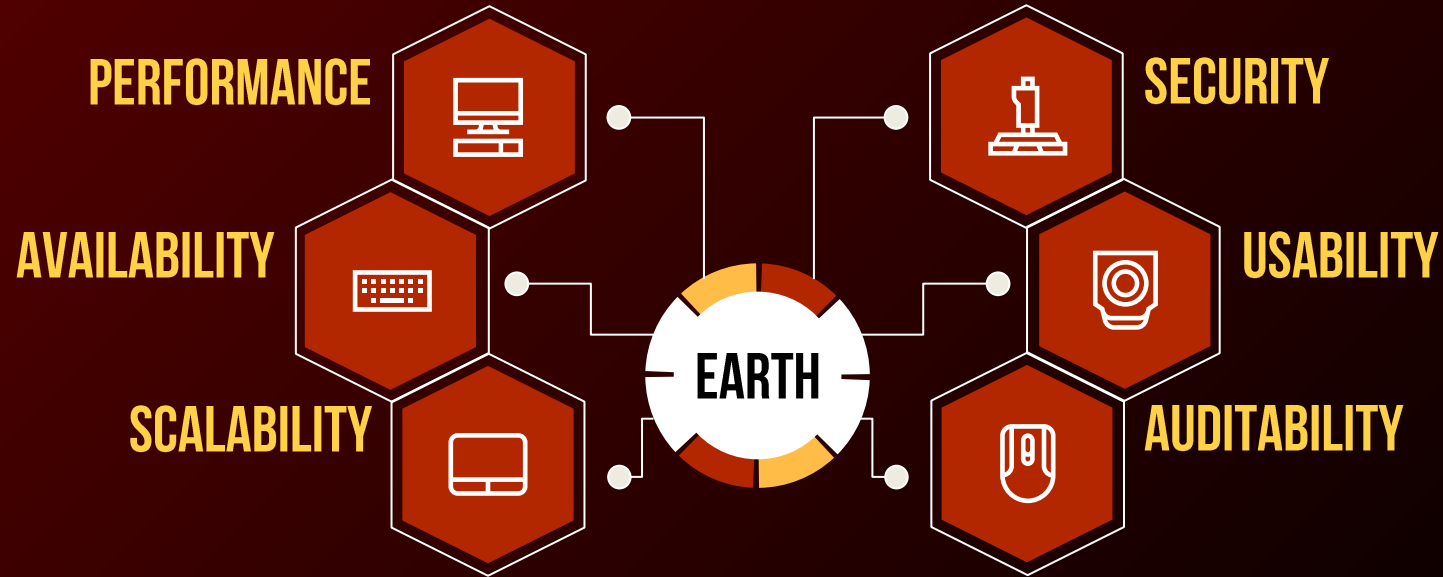
Core features with push notifications.

INTEGRATION:

Real-time partner blood bank syncing.



NON-FUNCTIONAL REQUIREMENTS



NON-FUNCTIONAL REQUIREMENTS

PERFORMANCE

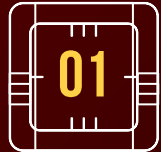
<1-second processing time for actions.

AVAILABILITY

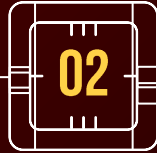
24/7 operation with 99.95% uptime.

SCALABILITY

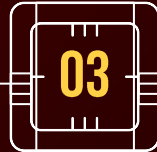
Supports peak demand.



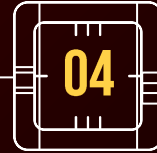
01



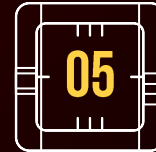
02



03



04



05



06

SECURITY

AES-256 encryption and session timeouts

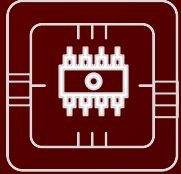
USABILITY

Accessible in <3 clicks, responsive design.

AUDITABILITY

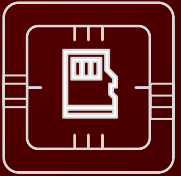
Detailed activity logs.

USER INTERFACE REQUIREMENTS



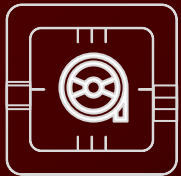
1

Intuitive Dashboards For All Users



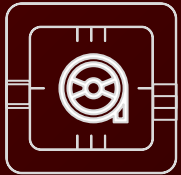
2

Real-time Status Update



3

Map-based Donation Center Locator



4

Visual Alerts For Urgent Tasks

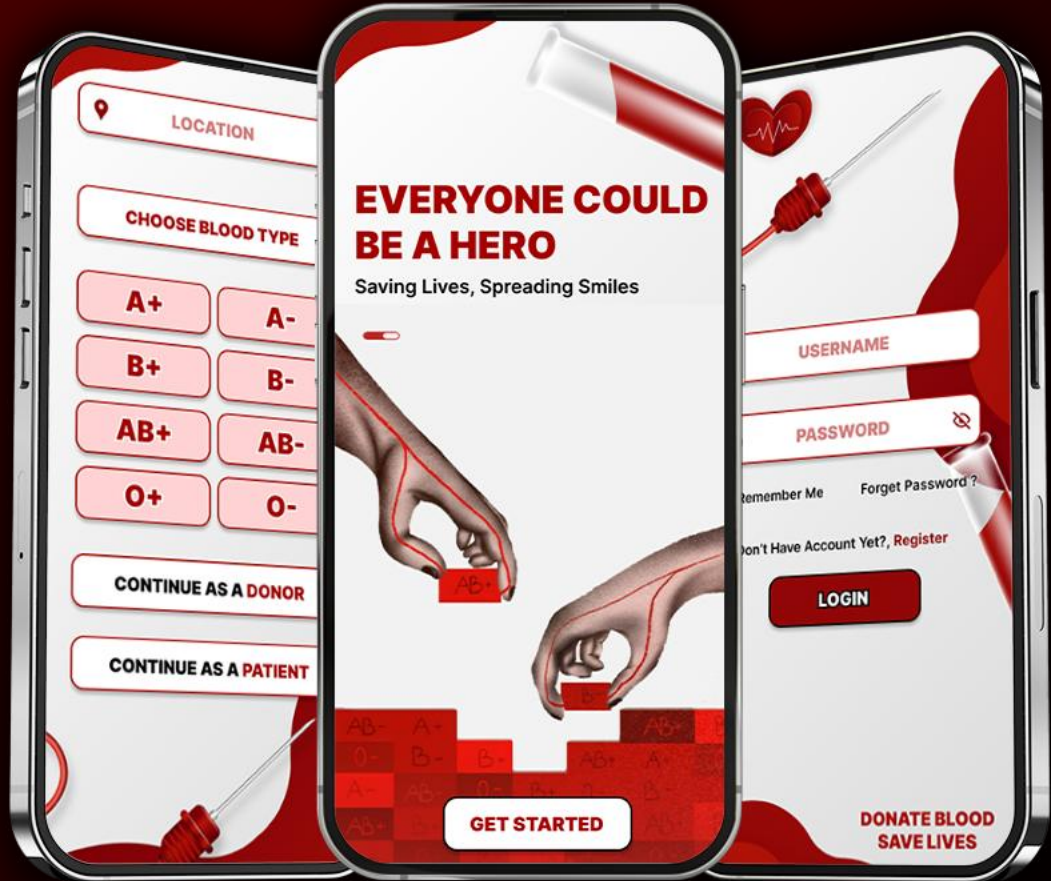
MOBILE APP UI



BLOOD BANK
BY HOSSAM ELBESH

PROTOTYPE LINK

TOOLS



EVERYONE COULD BE A HERO

Saving Lives, Spreading Smiles



GET STARTED



USERNAME



PASSWORD



☐ Remember Me

[Forget Password ?](#)

Don't Have Account Yet?, [Register](#)

LOGIN

**DONATE BLOOD
SAVE LIVES**



FULL NAME



DATE OF BIRTH



USERNAME



EMAIL



PASSWORD



CONFIRM PASSWORD



REGISTER



LOCATION

CHOOSE BLOOD TYPE

A+

A-

B+

B-

AB+

AB-

O+

O-

CONTINUE AS A DONOR

CONTINUE AS A PATIENT

