Website & Mobile Application For Badhan

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Overview

BADHAN is a voluntary blood donors' organization. It has branches in almost all of the undergraduate institutions like BUET. The BUET zone of Badhan keeps track of all the donors through the different residential hall committees . Each hall committee can access the data of

the donors associated with that hall only. They already have an website for maintenance of the whole system which has many problems. They are also looking for some new functionalities.

We would like to redesign the whole system keeping the currently working functionalities and adding the new expected ones.

Current Features

1. **Account creation for members :** The members of the committee can create an account in the system with their student ID and password.This account is used to trace the level of authority over the system.

2. **Admin privileges :** Higher authority users (admins) have the option to approve or disapprove the account creation request of the general members. Admins can also pass over the admin privileges to a general member .

3. **Log in and searching for specific blood group in the respective residential hall :** Users can log into the system and search for donors of a specific blood group, but only of those associated with the respective hall.

4. **Adding,removing and updating donor information :** Members can add, remove and update the information related to a donor (for example : contact information , date of donation , any medical issue that prohibiting blood donation, etc.) and the changes are tracked using a log.

Problems of the Current System

1. **No option to search for non-resident donors based on their home address :** If a conditions arises where blood is needed in a specific region of Dhaka (like Uttara) , the search option should incorporate the home address of the donors as that makes things more realistic and possible keeping the distance and traffic in consideration.

2. **Problem with the different formats of student ID** : In the process

   of populating the current database, student ID numbers have been inserted in

   different formats. This creates a problem in searching for a specific donor and

   checking of duplicate information.

3. **No way to handle duplicate donor addition and information updates :**

   Currently there is no way to track and handle duplication in the processes of

updating donor information. The new system needs to have this feature.

New Features to be Added

1. **A new member role named "Area representative" :** In case of emergency need of donor in a specific area of Dhaka , the area representative can help in reaching the donors of that specific area. The members need to be able to find the area representatives' information in the search process.
2. **Searching privileges to non-members :** Non-members need to be able to search for members of their residential hall to contact with.
3. **Option to view the states of currently unavailable donors :** A donor can be unavailable for causes like donation in near past , medical conditions ,etc. The members need a way to check for the current condition of a donor.
4. **Auto report generation :** The system should automatically generate report on the donation statistics over a given span of time on prompt .

Home

Home	Profile	Add Donor	Update Donor	FAQ	Help

Notification

Latest

Latest News

Search Donor

Blood Group ▼

Area ▼

Coming Up

Upcoming Events

Profile

Home	Profile	Add Donor	Update Donor	FAQ	Help

Notification

Image

Search Donor

Blood Group ▼

Area ▼

Name	Shahad Ishraq	Student ID	1305022
Hall	Kazi Nazrul Islam	Blood Group	O +
Email	abcd@email.com	Contact	0121235

Edit Profile

Provide Your Information

Name

Shahad Ishraq   ok

Student ID

1305022   ok

Email

seo@apple.com   To Moderate

Hall

Kazi Nazrul Islam ▼

Blood group

O+ ▼

Phone

01711123456

Create Account

Update Donor

Logged in as
Shahad Ishraq

Home	Profile	Add Donor	Update Donor	FAQ	Help

⚠ Notification

Add Donation Information

Blood Group ▼   Student ID ▼

Date of Donation   🗓

Add

Change Availability Status

Blood Group ▼   Student ID ▼

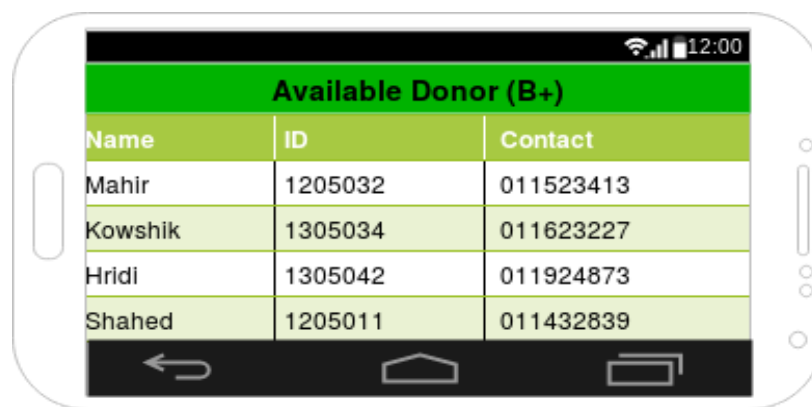◉ Available   ○ Unavailable

Change

Search Donor

Blood Group ▼

Area ▼

🔍

Features Wanted in the Mobile App

1. **Searching donor in offline mode :** A offline copy of the database of the respective hall to search for donors even when connectivity is not an option.
2. **Donor history :** The user (donor) should be able to see his history of donation to keep track of his availability.
3. All the features of the website.

Name	ID	Contact
Mahir	1205032	011523413
Kowshik	1305034	011623227
Hridi	1305042	011924873
Shahed	1205011	011432839

Available Donor (B+)

Android Application Interface

Motivation

The problems of the current system is the main motivation of this project. The added functionalities will enhance the entire process and make the maintenance of all the data more efficient and easy to use. The mobile app will add ease of usage.

System Architecture
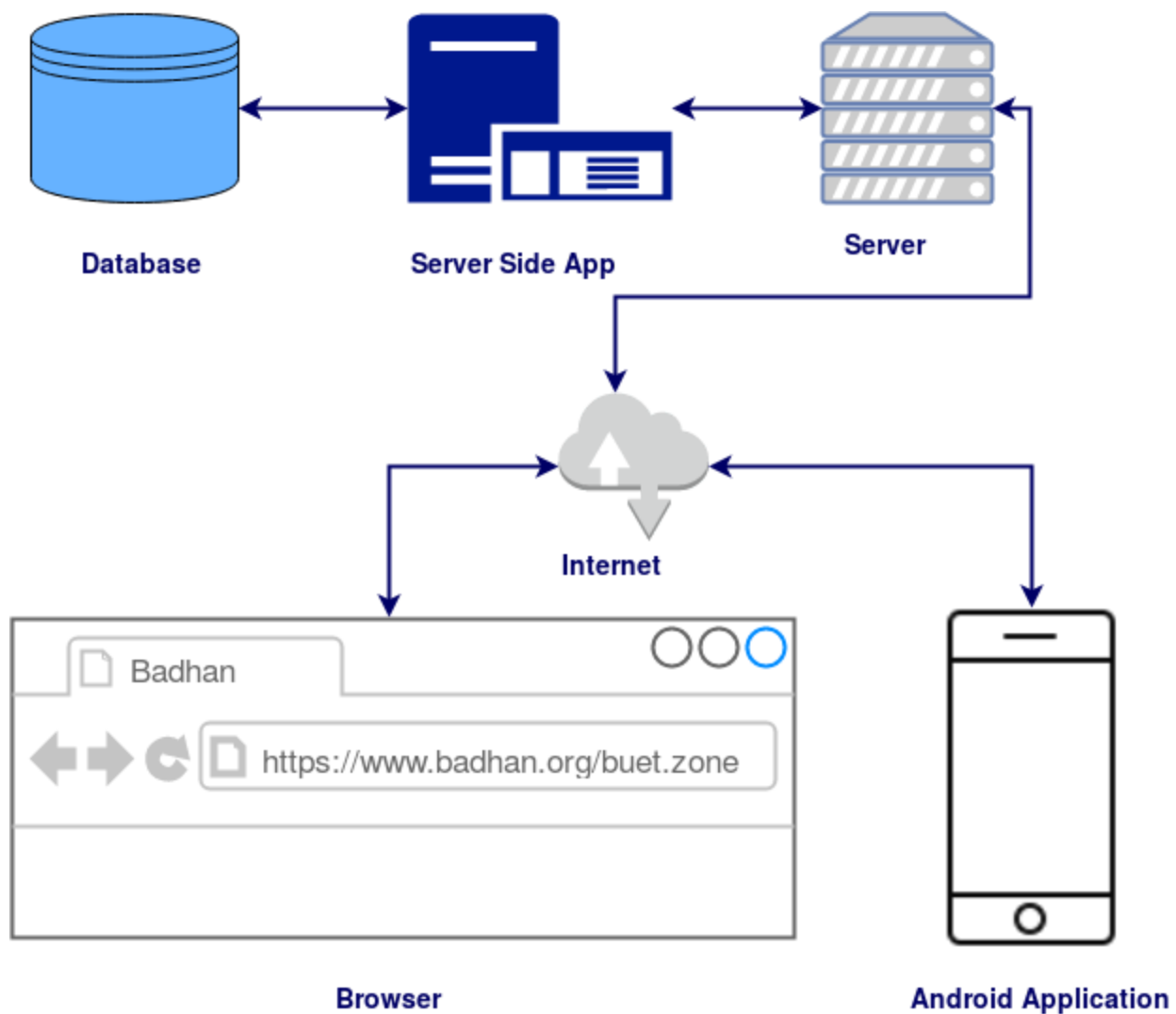
System Architecture

Tools & Technologies

An web based application with an android app will be developed using

- PHP
  For front and back end.

- Laravel
  PHP web framework.

- Apache
  Web server software.
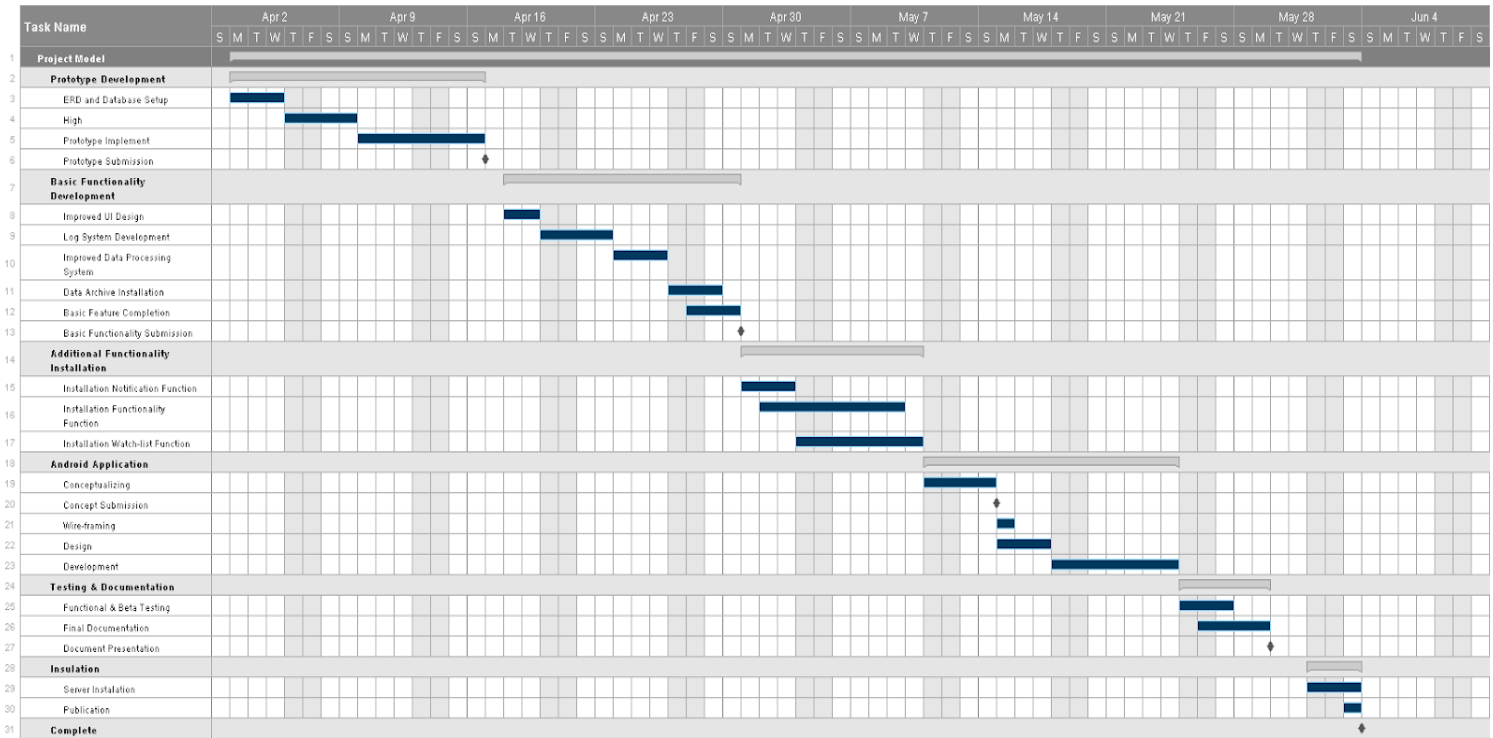
- MySQL
  For database development and management.

- Java, Android SDK
  For android application development.

- XML
  For parsing data structure.

Timetable

Task Name	Apr 2	Apr 9	Apr 16	Apr 23	Apr 30	May 7	May 14	May 21	May 28	Jun 4

1. Project Model
2. Prototype Development
3. ERD and Database Setup
4. High
5. Prototype Implement
6. Prototype Submission
7. Basic Functionality Development
8. Improved UI Design
9. Log System Development
10. Improved Data Processing System
11. Data Archive Installation
12. Basic Feature Completion
13. Basic Functionality Submission
14. Additional Functionality Installation
15. Installation Notification Function
16. Installation Functionality Function
17. Installation Watch-list Function
18. Android Application
19. Conceptualizing
20. Concept Submission
21. Wire-framing
22. Design
23. Development
24. Testing & Documentation
25. Functional & Beta Testing
26. Final Documentation
27. Document Presentation
28. Insulation
29. Server Installation
30. Publication
31. Complete

https://goo.gl/PKudF9

Key Stakeholders

Project Supervisor	Dr. Sadia Sharmin
Developer	Shahad Ishraq
Developer	Md. Jakaria
Client	Badhan BUET Zone