Green University of Bangladesh
Department of Computer Science and Engineering (CSE)
Faculty of Sciences and Engineering
Semester: (Spring, Year:2022), B.Sc. in CSE (Day/Eve)

LAB PROJECT PROPOSAL
Course Title: Integrated Design Project
Course Code: CSE 324 Section: EC

Student Details

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Project Proposal Status

Marks: …… **Signature: .....**
Comments: ..... **Date: .....**

1. TITLE OF THE PROJECT PROPOSAL

Donation Management System

2. PROBLEM DOMAIN & MOTIVATIONS

Nowadays, if anyone wants to donate food or some other things, they have to visit the organization personally. Otherwise, they needed to explore some websites to contribute food or some other item. Generally, tons of food waste or provided to food banks by the largest food suppliers and by the organized community. They have to discover some people who need food and some other items. This procedure takes a lot of time to contact the people or organization to know their needs. If they don't need any food or other things, then the donor has to communicate with different people or organizations. This is a big hassle for the donor.

The reason/motivation we chose this project because of the lack of a donation management system in Bangladesh. This system will reach out to those individuals who need donations or even those organizations that need help from other donors that are willing to help.

3. OBJECTIVES/AIMS

The Donation Management System works as a medium among the users who are searching for a channel to donate the excess food or extra items without wasting it. It gives the facility to the users for donating the extra food or some other items by notifying nearby people or organizations with the available item details.

The web application is specially designed in two ways to make it easier for its normal users.

If the donor looking for donating the food, they need to log in first then add the below information in the application:

- Choose a specific category.
- Name of the item, weight, and quantity.
- Location of the user.
- Contact address and other details were to take the donation.

The donor details are posted to the web application and users who need donations simply can make a request.

If the user is claiming the food, he must need to have an account.

Donation Modules:

- **Sign-up and log in:** The user has to sign up with the name, username, email, contact number, and address.
- **Donating the food and other items:** The user has to choose the category which he is donating and contact the address where the food is available and also fill other required fields.
- **Claiming the items**: If the user or organizations claims for the food, need to have an account.

Admin Module:

- **Log in:** The admin has to log in to manage the application.
- **Manage User:** Admin can see user details and control information.
- **Manage Donation:** Admin can update the donation post information.
- **Manage Category:** Admin can add/update/delete category.
- **Settings:** Admin can change settings.

4. LITERATURE REVIEW

Belekar S, Rajput R, Gharat K, Raut P. MOBILE APPLICATION FOR DONATION OF ITEMS. VIVA-Tech International Journal for Research and Innovation. 2021;1(4):1-6.

Corbo, Chiara, and Fabio Fraticelli. "The use of web-based technology as an emerging option for food waste reduction." *Envisioning a future without food waste and food poverty: Societal challenges*. Wageningen Academic Publishers, 2015. 1-2.

5. METHODOLOGY

In this project, we are going to use agile methodology to do this project. Because in the agile methodology we can break our project into small chunks which we call iteration. We will work on iteration, in iteration, we develop our system then we will test our system then we will release the version. After the initial release, we take feedback from users. Based on user feedback we made changes to our system.

Advantage of agile methodology:

- Frequent delivery: we can deliver our project earlier.
- Face to Face communication with the client: in this methodology, we take feedback from the client
- Changes: after taking the feedback we update our system.
- Time: in this methodology, we need less time.

The disadvantage of agile methodology:

- Less documentation: Agile won’t work on documentation, it focuses on implementation.

- Maintenance problem: agile doesn't have documentation so for that reason, it will face problem while updating the system.

6. FEASIBILITY STUDY

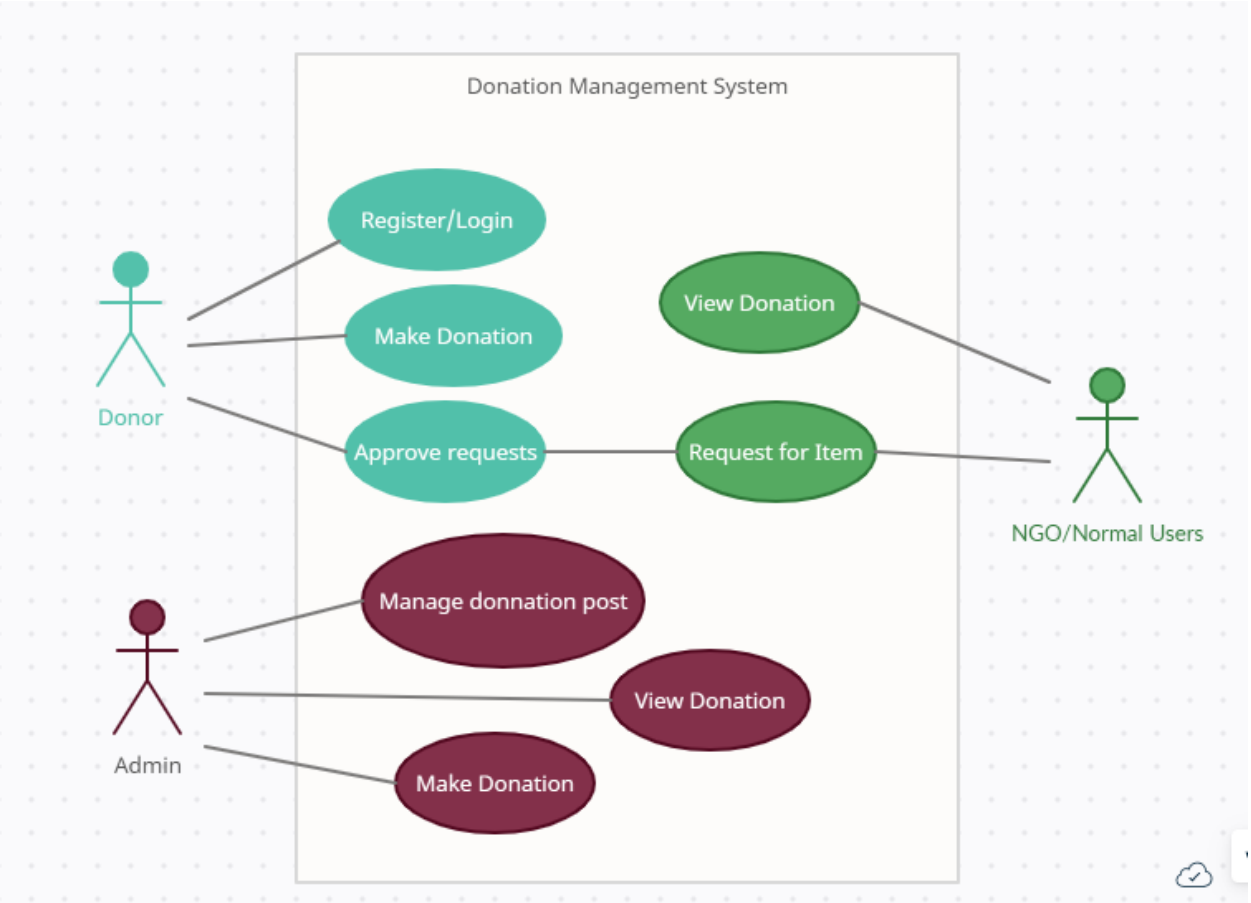

Figure: use case diagram

The development of the feasibility study of this system is as follows:

6.1. Technical feasibility study: This feasibility analysis mainly analyzes the mechanical condition can be completed smoothly development work, the hardware and software can meet the need.

6.2 Economic feasibility: This system can be useful for the NGO or other people who want to help the poor people. This system cannot being economic benefits, but it can bring efficiency of donation management system.

6.3 Operational feasibility: This system can be accepted by the users, user can able to operate the final product. This system is designed to be user friendly this any user can operate this system.

7. MAIN PHASES

- Project proposal and planning.
- Requirement specification of a project.
- SDLC selection for a specific project.
- Developing a data flow diagram (DFD) model of a project.
- Develop a UML use case diagram for the given project.
- Develop UML sequence and communication diagram for the given project.
- Develop a UML class diagram for the given project.
- Software testing.

SL	Task	Required Week	Responsible person	Phase
1	Requirement Specification and Data Collection	1	Yasin Arafat	Research and Planning
2	Requirement Finalization	1	Sharmin Khatun	Analysis
3	Design and Modeling	2	Most Akhi Khatun	Design
4	System Modeling and Finalization	1	Mohammad Shah Alam	Design
5	System Development (Coding)	2	Mohammad Shah Alam	Implementation
6	Testing and Feedback	1	Sharmin Khatun	Testing
7	Beta Version Delivery for Feedback	1	Yeasin Arafat	Testing
8	Take feedback and requirement Change	1	Mohammad Shah Alam	Testing
9	Delivery preparation	1	Most Akhi Khatun	Deployment

8. GANNT CHART OF PROJECT DEVELOPMENT TIMING.

Weeks	1	2	3	4	5	6	7	8	9	10	11
Project Activities											
Requirement Specification and Data Collection											
Requirement Finalization											
Design and Modeling											
System Modeling and Finalization											
System Development (Coding)											
Testing and Feedback											
Beta Version Delivery for Feedback											
Take feedback and requirement Change											
Delivery											

9. BUDGE9T DETAILS OF A DONATION MANAGEMENT SYSTEM

SL	Criteria	Cost Specification	Cost
1	Salary Cost	Team leader	60,000/-
		System designer	40,000/-
		Software engineer	50,000/-
		Developer	40,000/-
		Tester	40,000/-
2	Website cost	Domain	1000/-
		Hosting	2000/-
		Website maintenance	8,000/-
3	Office cost	Team meeting	20,000/-
		Project meeting	25,000/-
	Total Cost		286,000/-

10. TOOLS & TECHNOLOGIES

Web programming:

- HTML
- CSS
- Bootstrap
- JavaScript

Programming Language/Framework:

- PHP/Laravel

Database:

- MySQL

Version Control:

- Git
- GitHub

Code Editor/IDE:

- VS Code
- PhpStrom

11. CONCLUSION

This project will be able to solve donation issues by first enabling individuals to donate online instead of calling, which is beneficial for both Donors and organizations. Items can be donated easily. Minimizing wastage is the main goal of the donation management system project.

The web application is specially designed in two ways, one interface for donating the food and the other for the person or organization that is claiming the food.

12. CONTRIBUTION:

1. Mohammad Shah Alam - (Project Idea & Backend Development)
2. Most Akhi Khatun - (Frontend Development)
3. Sharmin Khatun - (Recourse Collect)
4. Yasin Arafat - (Testing and Solve bugs)

13. REFERENCE

https://nevonprojects.com/waste-food-management-donation-app/

https://www.trootech.com/donor-management-system/

https://nevonprojects.com/online-charity-management-system/