

“Manudam Paura”

School Volunteering System

Software Requirement Specification

Team Members

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1. Introduction

1.1. Purpose

The purpose of this document is to give a detailed description of the requirements for the “Manudam Paura”. This will express the purpose of the product. And also complete declaration for the development of the proposed system. This Document contains how the proposed system will work, what features available for the users, Scope of the project, and also about how the system will interact with external programs using relevant diagrams and interfaces.

Throughout this document, it provides a concise description of system requirements, architecture, and feasibility of proposed system. This will much helpful to the development of the system and to give some pre-introductions to the Client.

1.2. Domain Description

Sri Lanka is a third world country. So we don't have facilities like in other developed countries. There are so many rural areas even the children who live in there haven't touched a computer. Due to the economic state of the country, Sri Lankan government can't look after all those problems. To address this problem, we would like to encourage the volunteers who are around the country. When we consider generosity, Sri Lanka is in a good place in the world. That means there are so many people who like to help others. They like to share their knowledge and donate their money to the people who need their help. But in Sri Lanka it's hard to find information about the people who need that help the most. If there's a way to get to know about those people, it'll be a great opportunity to find them and help them. We hope to start this from school level and hope to extend to a wide range. So we can make a well educated community who'll be able to compete with the world.

1.3. Current System

In the current system there's no online system for volunteers to get to know about the people who need a economical or other help. And the children who need any economical or other help can't request for help from donors. Some volunteering organizations are doing some kind of charity programmes. Government and some other parties also do some project regarding this issue. But it's not possible to solve all the problems of the children in Sri Lanka. Through our system all parties can involve with these kind of charity work and other stuff .

1.4. Limitations Of the Current System

There's no way to volunteers and donors to join this kind of a system. Through our system we'll give the chance to get registered and see who are the people need their help. Volunteers and donors can see them on their timeline.

It's hard to the people who are with difficulties to tell their needs and get a help quickly. They have to wait in the queues in the government offices for so long.

When someone knows about a people or a group who need a help or donation ,he can't inform that to a volunteer or to a donor .So our system gives that chance to any person even for foreigners.

1.5. Product Scope

This Client-Server application will run on multiple PC's by the different client platforms. Mainly this project focusing on the school volunteering platform and this software will developed for either donating(by respond to the requested donations) or requesting the donations.This application will be developed to get informations about the schools that have special needs.

Donors can donate to requests from our system by anywhere in the world and also all the users will be interact with the system under verified platform . Only the admin panel will be responsible for that verifying duties.

1.6. Constraints and Limitations

- The person who request must be a principal or a vice principal of a school.So the admins have to verify before accepting a request.
- There should be a transparency in donations .
- We can't cover the areas who don't have an internet connections unless someone inform about those areas.

1.7. Objectives and Goals

- Give a platform to the donors who are willing to donate
- Give a platform to the volunteers to contribute to the community.
- Help the children who are with lack of IT knowledge and lab facilities.
- A platform which can be easily accessed by anyone and see the people who need their help.
- To identify talented students who are in rural areas and show their talents to the world.
- Get the attention of the foreigners who are willing to donate .
- Make the community a better place.
- To give a value to humanity.

2. FEASIBILITY STUDIES

2.1. Technical Feasibility

This client-server application will be developed by up to-date technologies .The front-end technologies are CSS , HTML and Javascript. For this project, the server side programming language is PHP .Because PHP will provide some main advantages such as cross platform facilities, easy feasibility to connect and interact with the MYSQL database. The back-end technologies for this project application will be based on mainly MVC architecture(that have main advantages like providing faster develop process, supporting for asynchronous techniques) and Codeigniter framework will be used to develop the application .

2.2. Risk Feasibility

Risk	Likelihood	Impact	Remark
Requirement change	Moderate	Moderate	Note 1
Failure to Manage end-user expectations	Low	High	
Data Lost	Low	High	Note 2
Lack of required Knowledge	Moderate	Moderate	
Lost of Developing Team member	Moderate	Moderate	
Electric Failures in the devices	Low	Moderate	

Note 1 : There may be low possibility to occur in change of the user requirements with the scope and objections.

Note 2 : Data lost in the system will be produce the non accurate outputs rather than user expected outputs from the system. Therefore we consider very highly security manner for unauthorized accesses.

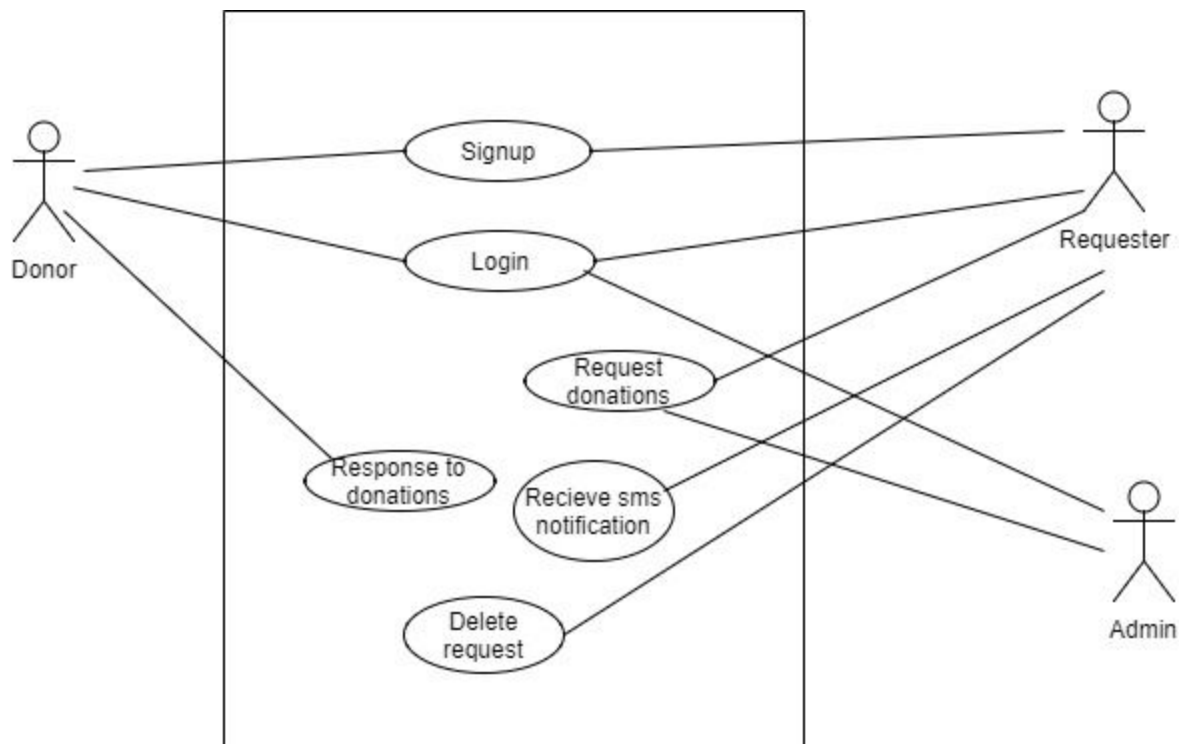
2.3. Legal and Ethical Feasibility

Ensuring that the project undertaken will meet all legal and ethical requirements as the project is carried out.

- The management accepted to get data from existing system to the newer one.
- The system used only for the purpose of managing the business. It cannot be used unethically under any circumstance.
- Financial and accounting standards are practiced.
- Correct Standards and Procedures will be followed in developing the System.

3. REQUIREMENTS

3.1. Use Cases & Use Case diagrams



3.2. Use Cases

Usecase 1 : Manage the database of the web application

Actor : Admin

Pre condition : Admin logged in to the system as administrator

Scenario : Access the database and do the edit delete update

Usecase 2 : Creating donor and requester accounts

Actor : donor, Requester

Pre condition : They access the web application with an active internet connection

Scenario : Fill the signup form and register with the system

Usecase 3 : Login to the system using donor or requester accounts

Actor : donor, Requester

Pre condition : They access the web application with an active internet connection and they should sign up for the system

Scenario :log in to the system using email and password

Usecase 4 : Make a donation request

Actor : Requester

Precondition : Login system as a requester

Scenario :Mention the details of the requesting donation and publish in the web application

Usecase 5 : Donate for a request

Actor : Donor

Precondition : Login system as a donor

Scenario : Go through the all the request and find one request and confirm to make a request

Usecase 6 : Make a donation request

Actor : admin

Precondition : Login system as a admin

Scenario :Mention the details of the requesting donation and publish in the web application

3.3. Functional Requirements

Login

All the 3 actors can login in to the web application. Each can enter in to the web application by providing their unique email and password combination.

Signup

Donor and the requester can sign up for the system except for the admin. They can create their own account and can interact with the system

Make a donation

Donors will be able to make donations through their accounts. To make a donation a donor must have a web account. Otherwise he will not be able to make a donation. For this purposes he can choose a donor request from the web application.

Request a donation

To make a request one should create a requester account. Otherwise he will not be able to make a request from the web application. And also admin can make a request from this web application. This request may be come to the admin as a printed requests. Requester can be either school principal or a responsible in-charge teacher/student(It should be get approval by the admin).

Response to a request

To response to a request donator should need to sign in to our system and response .When donator response to the request automatically requestor received a sms .

Send SMS notifications to the requester

If there is a donor for the specific request sms will be sent for the requester to notify him that his request accepted by a donor.

3.3 Non-Functional Requirements

Availability

This web application is available for anyone who has an active internet connection. They can be access anytime anywhere. This will be convenient for the users.

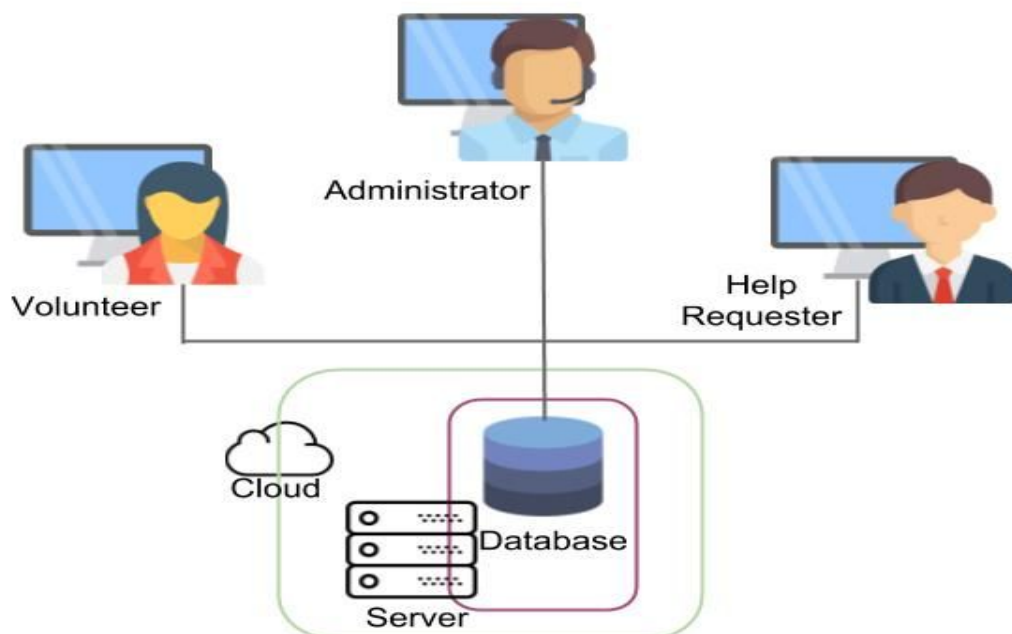
Maintainability

This web application is easily maintainable as this is not a standalone system. Developer can easily maintain the system.

Reliability

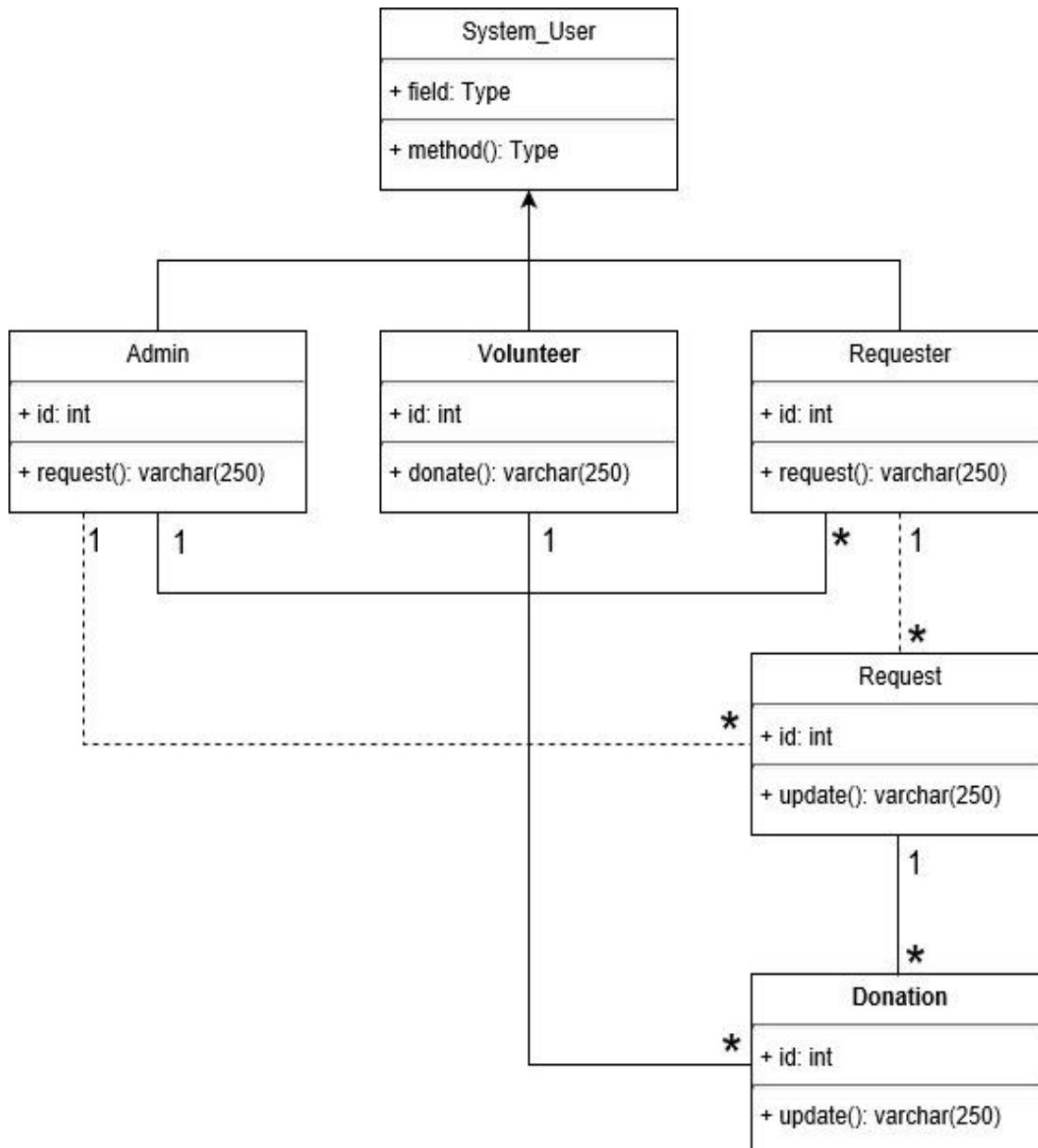
This web application has high level of reliability as there is a very few chance for down the system.

4. Proposed System Architecture



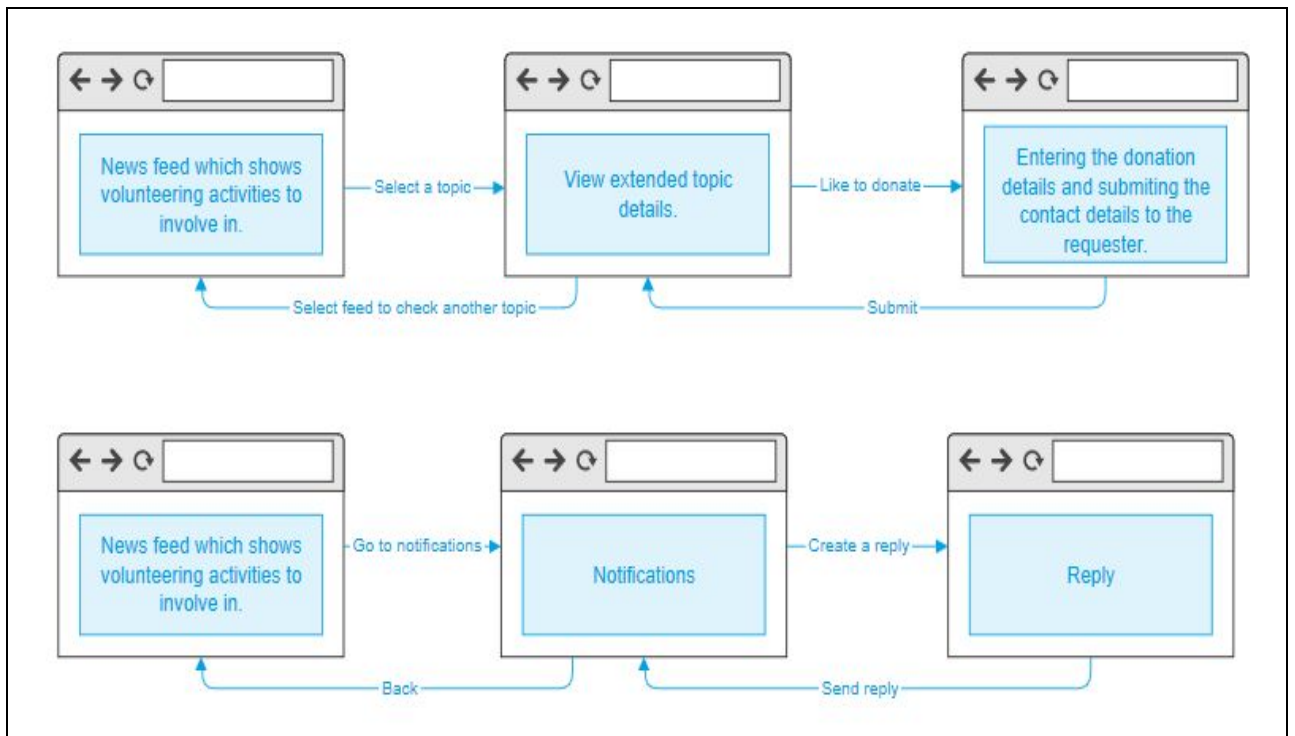
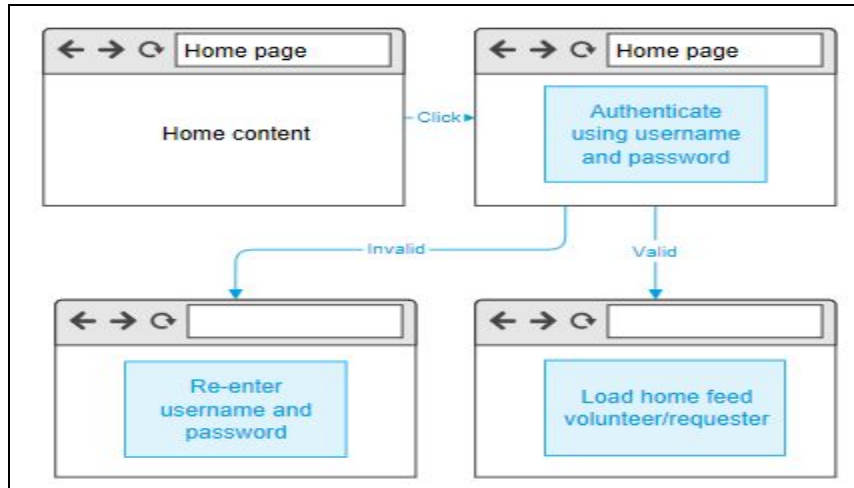
5. System's Design

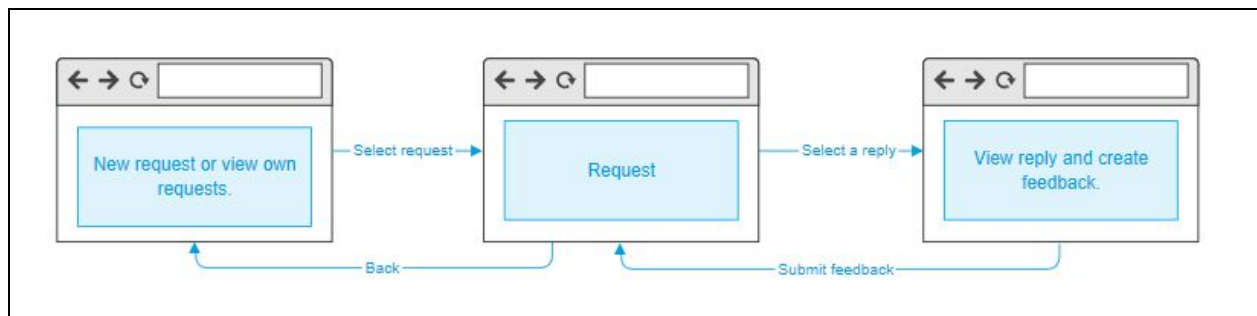
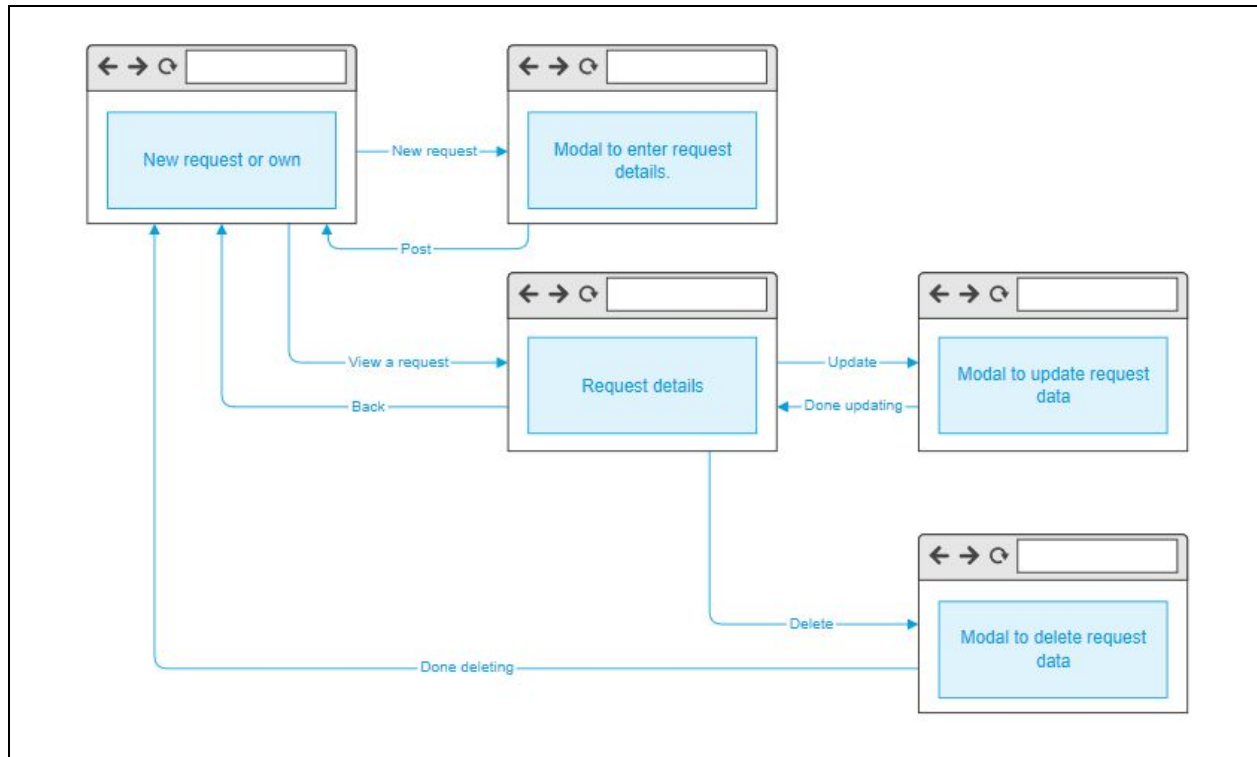
5.1. Class Diagram



6. Interfaces

6.1. Interface Flow Diagrams





7. Collected Data from some schools

7.1. Bodhiraja Vidyalaya , Katubedda, Moratuwa

- This school is recently facing some recognizable issues
 - Recognizable crackings in the main hall.
 - Interrupted the telephone connection due to overdue balance of telephone bills.
 - Insufficient power suppliers for computers in the computer lab.
 - Main doors at the main hall have swollen and broken, also facing some security issues due to that
 - Drinking water taps have already broken.
- All informations are conducting by school vice principal Mrs. S.G. Manel Kumari .

7.2. De Zoysa Maha Vidyalaya , Moratuwa

- This school is very old and popular school in the moratuwa area . But surprisingly they requested some essential needs
 - Insufficient essential music instruments for both school western and eastern brass bands
 - Water suppliers has broken and currently majority water suppliers have broken.
 - Essential sports equipments has expired and not in good standards.
 - Majority students came from the in need families.
- All informations are conducting by school principal Mr. H. Athauda.