



**COMP-1682-M04-2023-24 Final Year Projects**

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# CHAPTER 1

## Introduction

JC donation Campaign System

Screen Casting=>

[https://kmdeducation-my.sharepoint.com/personal/mthaung1\\_kmd\\_edu\\_mm/\\_layouts/15/stream.aspx?id=%2Fpersonal%2Fmthaung1%5Fkmd%5Fedu%5Fmm%2FDocuments%2Fvideo1685761876%2Emp4&referrer=StreamWebApp%2EWeb&referrerScenario=AddressBarCopied%2Eview](https://kmdeducation-my.sharepoint.com/personal/mthaung1_kmd_edu_mm/_layouts/15/stream.aspx?id=%2Fpersonal%2Fmthaung1%5Fkmd%5Fedu%5Fmm%2FDocuments%2Fvideo1685761876%2Emp4&referrer=StreamWebApp%2EWeb&referrerScenario=AddressBarCopied%2Eview)

## Overview

The project is about the donation campaign system that can help people with donation digital systems. The organization, known as 'Joyful Contributions (JC),' was established by a group of youthful volunteers in 2002. At first, they used to collect donations and help people directly with the help of other young volunteers. They also set up a system where people could help each other directly. This organization aims to assist those living in deprived areas and facing various needs. Since our country is still developing, it is important for us to look out for each other with kindness. That is why the main goal of this organization is to encourage everyone to be caring and kind towards one another. All the kindness, this system and organization keep growing up since that day. Many of the donation campaigns are conducted by enthusiastic young volunteers. These campaigns typically target areas that require assistance. All places in need of support can reach out to us if they face financial or material difficulties.

## Current System

Currently, this organization is just running manually of all the process. And then the donation campaign is running in social media via Facebook, Instagram, and Twitter. So, there have not own media. When they do new campaign, they must post in all social by admin. When they record and calculate all the fundings by manually. The organization are managing and operating their processes without the use of automated or digital tools. Instead of relying on technology, they depend on human effort and physical methods to carry out tasks, manage donations, and run their organization's operations. So there have some errors when they are running their system by manually.

## **Current System Issues**

Unexpectedly, the situation of COVID-19, the donation process cannot be done effectively. In this situation, most of the donor want to do donation for the requirements places. But for this situation, we cannot do the campaign for the donors and the requirement places. After that, most of Myanmar's citizens are known as a donor which means they want to donate where need help. If people do not know the requirements places and people, they cannot do donate. Nowadays, most people are lying and enticed by using other requirements and incorrect information on social media. So, in this organization, people can donate trustfully for the requirements of places and people by creating the campaign. That is why the organization chose to build the digital donation campaign platform to continue the processes.

## **Expected system for this business**

This system comprises two sides: the admin site and the user site. On the admin site, administrators can upload donation campaign projects and effectively manage the funds received from each donation. When the users upload the donation campaign posting, that will allow to show in our system. But if admin check this posting was not matched with our rules and regulation, we will reject this posting.

In the user site, registered users can do as a donor and fundraiser. As a donor, they have the freedom to contribute to any donation campaign they wish. On the other hand, as fundraisers, they can post donation campaign when they require assistance in their respective initiatives or causes. These are the overview of this donation campaign system.

The crowdfunding website has cool features to make things easy for people. First, you can easily share your fundraising campaigns on social media to get more attention and donations. Then, if you want to find a specific campaign, there are smart search and filter options. You can look for campaigns based on categories, popularity, or urgency. Plus, you get to create your own profile with personal info, see your past donations, and check your fundraising history. And there is a dashboard where you can keep track of what you are doing, see how you are making a difference, and manage your campaigns all in one place. These features make the website simple and helpful for everyone.

## **Future Exception For the business**

This organization have not for the business but need to do improvement for the future. To make sure future donation system for businesses works well for a long time, the organization have some important plans. We will always use the latest technology to keep online payments safe. Since many people use their phones, we will make sure our system is easy to use on them. Keeping people's information private is super important, so we will follow strict privacy rules. We want to hear from donors and make our system better based on what they say. We will be open about where the donated money goes and share regular reports with donors. To get money, we will try diverse ways like partnerships and selling things. We will also handle money from different countries and follow all the rules. We will create a community feeling among donors and ask them to tell others about our cause. We will be ready for unexpected problems and make sure everything we do is legal. Working with other groups will help us do more, and we will use data to make smart choices. Most importantly, we will be flexible and change as the world changes to keep helping people. With these plans, our future donation system will keep doing good things for a long time.

## **Aim**

On this digital platform, the organization can create donation campaigns, donors can contribute with trust, and users can post their own campaigns when assistance is needed.

## **Objectives**

1. Investigate the existing system's weakness and features

Tasks will be:

- Investigate the existing system's weaknesses and features.
- Explore the donation's background and historical context.
- Assess the current operational methods in use.
- Identify the challenges and obstacles encountered by the current system.
- Define the scope of the proposed system.
- Develop the organization's future strategic plan.

From Objective 1 - Chapter (1) Introduction will be delivered.

## 2. Research and compare the similar system

Tasks will be:

- Research two similar systems.
- Learn and compare their usable features.
- Learn and compare their functional features.

From the objective 2- Chapter (2) Product Research will be delivered.

## 3. Research, compare and choose the suitable methodologies, development languages and databases for this system.

Tasks will be:

- Research and choose the methodologies to be used in the system.
- Research and choose the development language to be implemented.
- Research and choose the database management system to be used.

From Objective 3- chapter (3) Literature Review will be delivered

## 4. Research and evaluate the legal, social, ethical, and professional issues relevant to the system.

Tasks:

- Conduct research on legal, social, ethical, and professional issues related to the system.
- Evaluate the impact of these issues on the system's development and implementation.
- Document findings and recommendations.

## 5. Analyse the proposed system scope specially and evaluate the requirements.

Tasks will be

- Set the Use Case diagram and class diagram.
- Set the target users.
- Analyze the scope of the proposed system and capture the requirements.

- Determine the functional and non-functional requirements of the system.
- Prioritize the requirements according to the MoSCoW prioritization.
- Represent the requirements with diagrammatic representation.

From the Objective 5- Chapter (5) Requirement Specification will be delivered.

6. Establish time frames and plan the project accordingly.

Tasks:

- Create time boxes for each feature in the system.
- Set analysis, design, implementation, and testing plans within each time box.
- Deliver the overall project time box. ( Chapter 6)

7. Commence the development of a flexible and reliable website, then test and evaluate the complete system.

Tasks:

- Deliver the time box according to the plan.
- Review the functions and features of the whole project.
- Evaluate the result against the aims and objectives.
- Assess the final product against similar products.
- Evaluate the final product against the justification.
- Evaluate the result against the time-boxed plan.
- Produce a personal evaluation.
- Deliver the development according to time boxes.
- Deliver the development according to time boxes as outlined in Objective 7, Chapter 7.
- 

8. Review the entire project and envision the future of the newly implemented system.

Tasks:

- Conclude and review the entire system.
- Conduct a critical review of the system.



- Document the problems encountered before, during, and after the project, along with their solutions.
- Outline the future expectations of the implemented system.

Deliver the evaluation and critical review as outlined in Objective 8, Chapter 8.

## Project Plan with duration and deliverables

Objective	Methodology/ Techniques/ Methods	Deliverables	Duration
Objective 1	Framework-Agile Methodology- DSDM (Dynamic Systems Development Method)	Chapter -1: Project Introduction	5days
Objective 2	Framework-Agile Methodology- DSDM	Chapter -2: Project Research	5 days
Objective 3	Framework-Agile Methodology- DSDM	Chapter -3: Literature Review	5days
Objective 4	Framework-Agile Methodology- DSDM	Chapter -4: Legal, Social, Ethical and Professional issues	10 days
Objective 5	Framework-Agile Methodology- DSDM	Chapter-5: Requirement Specification	15days
Objective 6	Framework-Agile Methodology- DSDM	Chapter-6: Plan with Gantt Chart	5days
Objective 7	Framework-Agile Methodology- DSDM	Chapter-7: Development according with Project Plan (Gantt Chart)	100days
Objective 8	Framework-Agile Methodology- DSDM	Chapter-8: Evaluate the whole project and Critical Review	10days

## CHAPTER 2

### Similarities of donation websites

#### Product Research

In this product research section, it will be reviewed and researched with equivalent products as the proposed system. The research was reviewed according to Nielson's principles of heuristics. For this similar product that will review those product's functionality and usability. In this product research must review the target audiences, optimization, the rank, redirect link, social media of those product.

#### Similar Product Research

In this section will compare two similar product of donation system and will provide the differences (functionality and usability) of those products. Those products are “Just Giving” and “Kick Starter.”

#### Similar Product

##### Just Giving

The first research product is the JustGiving donation website. JustGiving is recognized as the world's most trusted platform for online giving, assisting individuals in raising funds for the charities and causes they are passionate about. Launched in 2000, JustGiving.com aimed to facilitate online donations for charities worldwide. Over the past 22 years, more than £6 billion has been raised through the platform, supporting compelling causes in every country around the globe.

Website => <https://www.justgiving.com/>

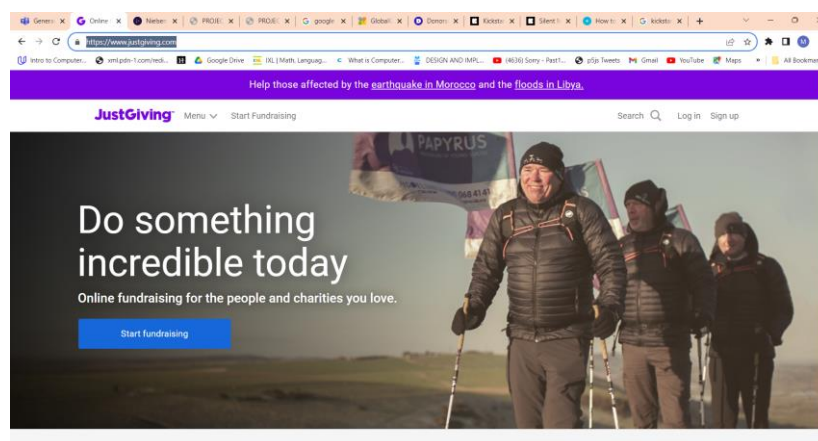


Fig (2.1) Just Giving donation website

## Kick Starter

The next product is Kick Starter donation and fundraising website. Kickstarter launched on April 28, 2009. Kickstarter campaigns turn ideas into reality. It's where creators share new visions for creative work with the communities that fund them. Their mission is to help bring creative projects to life for every environment.

Website => <https://www.kickstarter.com/?ref=nav>

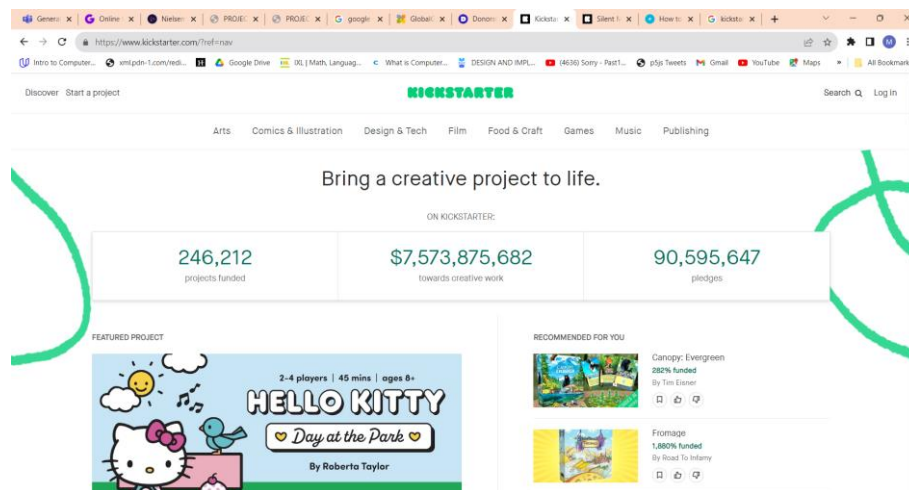


Fig (2.2) KickStarter Website

## 10 Usability Nilsen's Heuristics for UIs (User Interface)


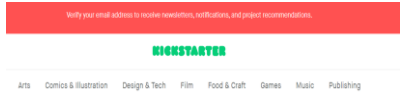


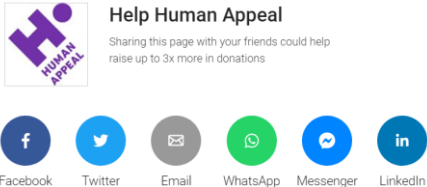
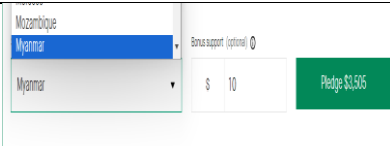
Nielsen's heuristics, introduced by Jakob Nielsen and Rolf Molich in 1990, provide ten guidelines for developing user interfaces. These heuristics serve as general principles rather than specific usability rules. They offer a set of general guidelines to create more accessible, user-friendly, and intuitive digital products. The heuristics include:


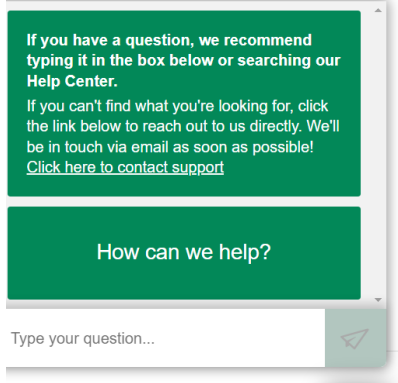
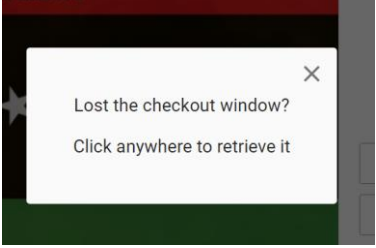
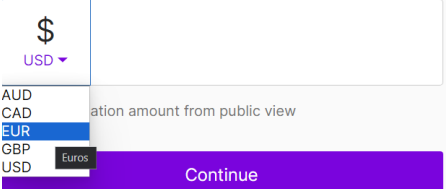
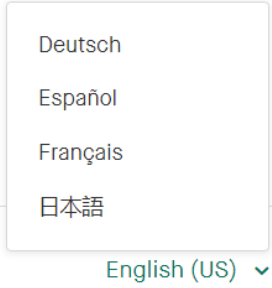
- Match between System and the Real World
- User Control and Freedom
- Consistency and Standards
- Error Prevention
- Recognition rather than Recall
- Flexibility and Efficiency of Use
- Aesthetic and Minimalist Design

- Help Users Recognize, Diagnose, and Recover from Errors
- Help and Documentation

## The differences in user interface of Research Donation Products

The user interface and useability will be compared by 10 Usability Nielsen's Heuristics. From this comparison can collect and consider which are the differences features and the most usability for this project.

	Just Giving	Kick Starter
Visibility of System Status:	 <p>User can see donate now pattern clearly and focusly . They will arrive to donate so they point out the patterns to users.</p>	 <p>If user didn't verify their email, they will show the alert red box upon the page to verify for security.</p>
Match between System and the Real World	 <p>Users show the real related funding project in the website.</p>	 <p>In this website show the real development project and need funding to continue the process.</p>
User Control and Freedom		

	User can share where the social media what they want.	User can control the currency and the amount of money what they want .
Consistency and Standards	<p>Find us on</p>  <p>Users can ask what they want to know clearly about that organization on those social media.</p>	 <p>For the consistency and standard, this site have the chat box for the user who they want to do anything about this website and organization.</p>
Error Prevention	 <p>There is alert for user if user click somewhere the user's check out data will be disappeared.</p>	
Recognition rather than Recall	 <p>User can choose the currency options what they want.</p>	 <p>User can view the website those upper languages what they prefer.</p>

Flexibility and Efficiency of Use

Menu Start Fundraising

Fundraising on JustGiving  
Crowdfunding  
Help for fundraisers and donors

JustGiving for Charities  
JustGiving for Event Partners  
JustGiving for Companies  
Developer Tools

For the flexibility and Efficiency of user, the website show the menu bar which can find the nav of this website.

Collections

Projects We Love

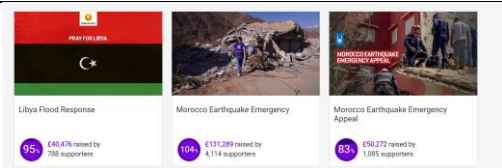
Trending  
Nearly Funded  
Just Launched  
Upcoming Projects  
Projects Near You  
Everything

Sections

Arts  
Comics & Illustration

User can find clearly about the project and section of this organization.

As ethic and Minimalist Design

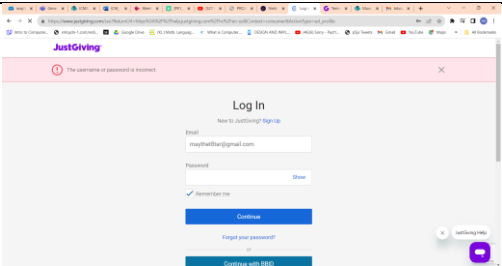


When user visit the website for donation and for something else, user will be visited this website again cause of the sample design and words.



This website is so youthful, simple and creative for users. That why user might be visited this website again.

Help Recognize, Diagnose, and Recover from Errors.



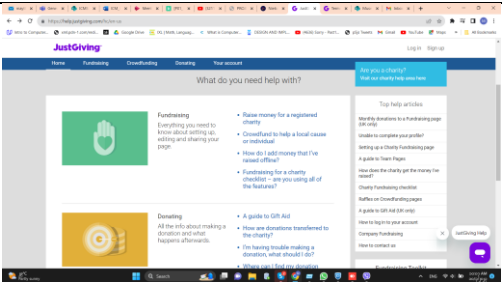
User put the wrong email and password, that will show the alert message. That's why user can easily know what's wrong.

More filters

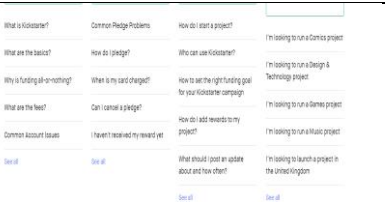
We can't find projects that match your search  
Check out a collection of popular and recommended options below

User put the wrong data and invalid data on the search box, that will show the alert message as in the picture.

Help Documentation



In this "Just Giving" donation website show the video and documents how to use step by step on this website's each function.



User can view step by step the documents of the function as in the picture.

## Functional Comparison of the websites.

Functional features of a website are the main basic functions that websites need to perform. In this case, all of them are donation websites and, therefore they must have the functional features of payment system, user management system and donation system. Here is a comparison of the functional features of similar systems. Based on this comparison, we will consider the most suitable basic functions for this project. Each website's features are rated according to their usefulness and functionality.

No	Functional criteria	Just Giving	Kickstarter
1	User Interface	The interface is simple and easily to understand for donation and fundraising process. (Rating :7)	The interface is simple but the process of doing donation and funding the project are a little complex. (Rating :5)
2	Sign Up	In this site, user can't sign up with google. The user needs to add all information to Sign up. After that user can do fundraising process and all history of their activity. (Rating:6)	In this site, user can sing up with Facebook and apple. After the account has been created, users can fill in their detail information like biography and more. (Rating:7)
3	Login in	User do login into their account by typing their email and password which gave during sign up.	User can log into their account via Facebook and apple sign in.



4	Languages	Only English language available	There have four languages available. English, Japanese, French and Dutch.
5	Management of user information	User can manage their information from dashboard. The user can only give information when they do fundraise process and other donation process.	User can management their information in profile. The user information is going to use when they start the project and do donation.
6	Search Features	Users can search all donation campaigns names and other activity from the search box. Then user also can search the categories of the donation.	Users can search all activity and program by their name from the search box. Then user can also search the program's categories of the funding.
7	Description	Each donation is explained briefly about the project with videos and photos.	Each project explained the detailed and how they work out and how much they need for those projects to complete successfully.
8	Donate features	Users have the freedom to make	The donation features in this site

		<p>donations of their choice on this campaign website. They can choose to contribute monthly and give as much as they are willing to. And choose the currency.</p>	<p>are so creative. There have two types, no award for pledge or you can get the award by donating depend on the amount.</p>
9	Fundraising features	<p>In this site, user can do fundraise charity for project and for own cases. When user do, have to choose the category which environment want to do charity and then fill all the requirements data. After that user will get the email address and the excel sheet of funding.</p>	<p>The fundraising system is not for charity. For the youth, that was for who want to do creative project for various environment then fill about of the project step by step and then can-do reward system for the donors.</p>
10	Payment method	<p>The donation checks out page of this site can choose the amount and one-off or monthly. And then can-do payment with google pay, pail pay and various</p>	<p>The check out system and payment are so simple just like normal system. The user can do payment with Visa, Mastercard, PayPal and JCB card.</p>

		credit card for the process.	After do donation, the donor can get the receipt email and can get the reward if they pledge with rewards.
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Rating: Neutral = 1 to 3, Good = 4 to 7, Excellent = 8 to 10

According to the above comparison, the JustGiving is rated 8 and Kickstarter is rated 9. Therefore, the some of the features of the JustGiving will be studied to be used in this website project.

### Summary

Since COVID-19 Global Pandemic has affected the entire world tragically, peoples and the works have transformed most of their lifestyles to home-based systems. Due to the continuously coming waves of the infection and several lockdowns, People cannot do donation and charity activities outside their homes. So, most of the donation and charity organization started building the website or mobile application to assist people. According to The New York Times (April 2020), most of the website traffics are increased at least 15% more during the peak of pandemic.

To facilitate donations and charitable activities, the organization has made the decision to develop a dedicated website. This website will allow the organization to regularly update their information and activities, while also providing users with the ability to view and make donations. Additionally, if users encounter any challenges during these times, they can also utilize the platform to conduct fundraising for their specific needs. [OBJ]

## CHAPTER-3

### Literature Review

#### Project Management Methodology

A project management methodology is a set of principles, techniques, and tools used to execute, manage, and plan projects. It helps project managers lead team members, manage work, and facilitate collaboration. There are many types of project management methodologies, each with its own pros and cons. This project aims to provide details on the most effective project management method for this project among the following methodologies.

#### Waterfall Methodology

The "traditional" project management methodology is the waterfall. In traditional ways, projects are completed one stage at a time and in sequential order—like a waterfall that might flow down a collection of rocks. In this project, tasks are managed sequentially, and once a phase is completed, there is no iteration to revisit that phase. Each project phase consists of small, detailed tasks that require documentation. The project scope and requirements are defined early on, in collaboration with stakeholders, and remain fixed throughout the entire project with no changes.

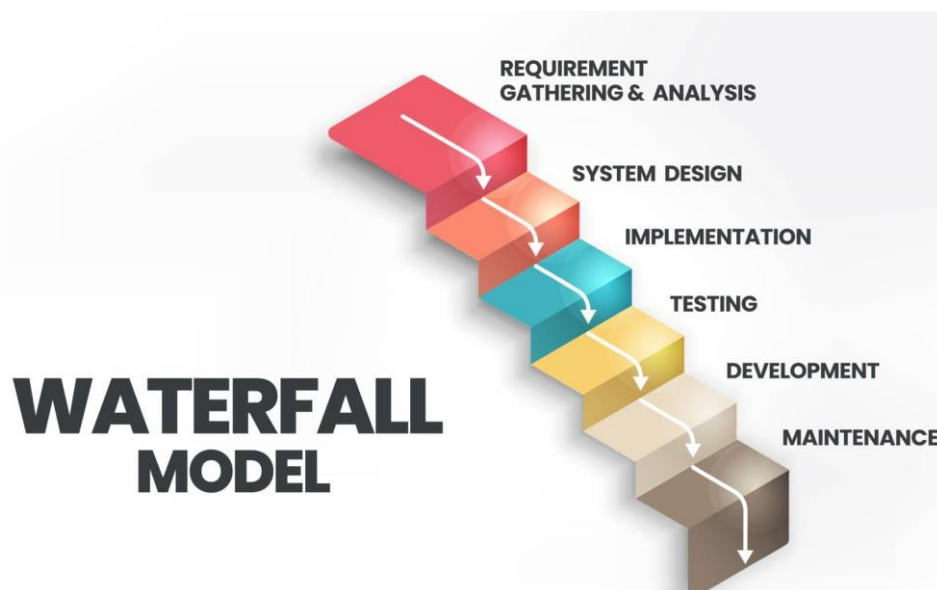


Fig (3.1) The Process of Waterfall Methodology

This picture shows the steps of the Waterfall Methodology

## **DSDM**

The agile project delivery framework known as the "dynamic systems development method" (DSDM) is mostly utilised for software development. The rapid application development process was used as the foundation for DSDM at the beginning. DSDM developed into a general project management and solution delivery methodology in 2007. DSDM is an incremental and iterative methodology that aligns with the values of Agile development, including ongoing user and customer involvement. It consists of three stages: the pre-project stage, the project stage, and the post-project stage. The project stage is then divided into various sections. Developers can go back to the earlier step or phase in DSDM and adjust as needed. Throughout the entire process, communication between users and developers is continuous.

DSDM (Dynamic Systems Development Method) is an Agile methodology that focuses on the full project lifecycle, including planning, development, and maintenance. Here are some reasons why DSDM is considered good for project development:

1. **User Involvement:** DSDM emphasizes active user involvement throughout the project, ensuring that the final product meets user requirements.
2. **Iterative and Incremental:** DSDM follows an iterative and incremental approach, allowing for the delivery of working software in short iterations. This enables prompt delivery of value and the ability to adapt to changing requirements.
3. **Focus on Business Need:** DSDM prioritizes the delivery of business value, ensuring that the project meets the needs of the business and delivers a return on investment.
4. **Collaborative Approach:** DSDM encourages collaboration among team members and stakeholders, fostering a sense of ownership and commitment to the project.
5. **Flexible and Adaptive:** DSDM is flexible and can be adapted to suit the specific needs of the project, making it suitable for a wide range of projects and industries.

6. **Emphasis on Quality:** DSDM emphasizes the importance of delivering high-quality software, with a focus on testing throughout the development process.

Overall, DSDM is good for project development because it promotes user involvement, delivers value early and often, focuses on business needs, encourages collaboration, and is flexible and adaptive.

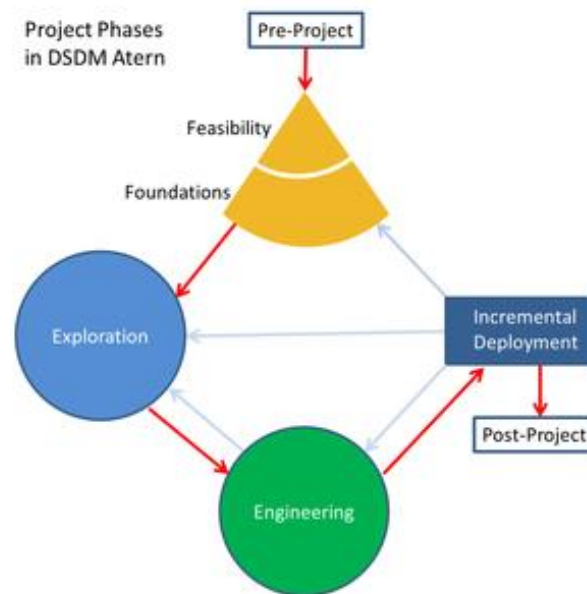


Figure 2: The Process of DSDM

This is the picture from the article of (Matthew Caine, 2021) showing the phases of DSDM.

## Scrum

Scrum, introduced to teams in 1993 by Jeff Sutherland, John Scumniotales, and Jeff McKenna of the Easel Corporation, is the most widely used Agile methodology, with over 66% of Agile adopters utilizing it. Scrum employs Agile principles through small teams, short development cycles, frequent communication, and designated roles to maintain project organization and progress. It is particularly effective for projects that require adaptability and thrive on change. Like Agile, Scrum is commonly applied in industries facing frequent change or uncertainties.

Scrum is an Agile framework designed for managing and organizing work on complex projects. It involves the following key elements:

Scrum is iterative and incremental, with a focus on delivering value early and often. It emphasizes collaboration, transparency, and continuous improvement, making it a popular choice for software development projects.

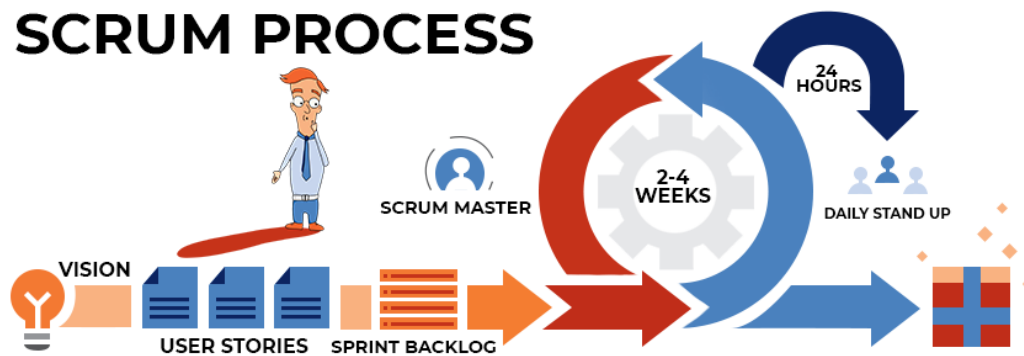


Fig (3.3) Scrum Process

### **Recommendation for the project Management Methodology**

Due to the project's extremely strict deadline and limited budget, it is advisable to use the time-boxing and MoSCoW technique of DSDM to ensure timely delivery. Time-boxing allocates activities within specific time constraints, facilitating easy progress assessment. DSDM's iteration and prototyping practices allow for feedback from the project supervisor, aiding project improvement. Unlike the Waterfall methodology, DSDM emphasizes continuous stakeholder communication, which can lead to a higher-quality product. Therefore, the most suitable methodology for this project is the Dynamic Systems Development Method (DSDM) over other methodologies.

### **Programming Languages**

The frontend and backend of the website must be created using appropriate programming languages. The frontend of a student website project will work best using the HTML/CSS/JavaScript trio. However, there are several programming languages that can be used to create a website's backend. Three of them, including Java, PHP, and Python, have been selected as potential languages for this project.

## PHP

PHP stands for Hypertext Preprocessor, and it is a server-side scripting language developed for web development. Being open-source, PHP is freely available for download and use. It is known for its simplicity, making it easy to learn and use. PHP files have a ".php" extension. In Myanmar's web development environment, PHP is the most popular language.

## Java

Java is a class-based, object-oriented programming language designed to minimize implementation dependencies. It follows the "write once, run anywhere" (WORA) principle, allowing compiled Java code to run on any platform supporting Java without requiring recompilation. First released in 1995, Java is extensively used for developing applications across desktop, web, and mobile platforms. Renowned for its simplicity, robustness, and security features, Java is a favored choice for enterprise-level applications.

## Python

Python is a popular general-purpose, high-level programming language created by Guido van Rossum in 1991 and further developed by the Python Software Foundation. It prioritizes code readability, and its syntax enables programmers to express concepts in fewer lines. Python facilitates rapid development and efficient system integration. There are two major Python versions: Python 2 and Python 3, which differ significantly from each other.

Aspect	Java	PHP	Python
<b>Syntax</b>	Statically typed, types must be declared explicitly	Dynamically typed, types do not need to be specified	Dynamically typed, types do not need to be specified
<b>Performance</b>	Compiled into bytecode, runs on JVM (high performance)	Interpreted, run directly without compilation (can be slower)	Interpreted, various implementations and optimizations



			(competitive performance)
<b>Web Development</b>	Can be used, required external libraries and frameworks	Widely used, build-in support for web development, extensive libraries, and frameworks	Growing popularity, frameworks like Django and Flash
<b>OOP</b>	Enforces strict OOP principles, objects encapsulated within classes	Initially limited support, now fully supports OOP	Supports OOP, allows for both procedural and OOP
<b>Community and Ecosystem</b>	Large, well-established community, extensive documentation, libraries, frameworks available	Vibrant community, especially for web development, multiple frameworks like Laravel and Symfony	Large and active community, board range of libraries and frameworks for various purposes
<b>Ease of Learning</b>	Steeper learning curve due to strict syntax and OOP principles	Easier for beginners due to simple syntax	Praised for readability and simplicity, considered one of the easiest to learn

### Recommendation Programming language

The decision to use PHP for the backend of this project was driven by several compelling reasons. First, PHP is known for its simplicity and ease of learning, making it an excellent choice for developing the website. The developer already had a familiarity with PHP, which facilitated a smoother development process.

Moreover, PHP boasts a robust community and abundant learning resources, making it an accessible and well-supported language. Its performance is noteworthy,

offering faster execution compared to some other programming languages. Additionally, PHP's efficiency in web development further cemented its suitability for this project. Hence, PHP emerged as the natural and well-rounded choice for powering the backend of our website.

## **Database Management System**

Database Management System (DBMS) is the software application that is used to manage, create, access, and maintain database. These management systems are important in managing or optimizing the storage and retrieval of donation detail, donor detail, funding detail and fundraising detail. These are various relational database management systems., but only three of them will be chosen as potentials for this project and be compared. These three systems include: MySQL, Microsoft SQL Server, and PostgreSQL.

### **MySQL**

MySQL is an open-source relational database management system released by MySQL AB in 1995. It is the most popular database, and its basics are familiar to most developers. While MySQL is open-source, those who require commercial support can purchase a license version from Oracle. Due to its widespread use over the years, resources and a supportive community for MySQL are readily available.

### **Microsoft SQL Server**

Microsoft SQL Server is a relational database management system developed by Microsoft. Unlike open-source software, SQL Server is not open source. However, SQL Server 2019 Express is a free version that can be used for developing small applications. It is one of the three leading database management systems in the market and supports analytics applications, transaction processing, and business intelligence.

### **PostgreSQL**

PostgreSQL is another open-source relational database management system, developed by Michael Stonebraker in the 1980s. Unlike MySQL, PostgreSQL is not affiliated with any corporation or private entity. It focuses on scalability and SQL compliance, and it is compatible with most major operating systems.

## **Recommendation database**

MySQL was selected as the database system for this website project for several reasons. Firstly, prior experience with MySQL facilitated smoother development. Being open source, it is cost-effective for student projects. Moreover, its widespread use in the web development community ensures easy access to solutions for any issues that may arise. MySQL provides robust backup and recovery options, ensuring data safety. It is also known for its scalability and speed, which are crucial for web applications. Lastly, MySQL integrates seamlessly with PHP, making it an excellent fit for web development. Therefore, MySQL emerged as the clear and practical choice for the project.

## **CHAPTER-4**

### **Legal, Social, Ethical and Professional issues**

The global COVID-19 pandemic has had tragic effects and has led to a rapid increase in internet usage. This surge has spurred growth in the online donation and fundraising sector. However, with this increased growth comes a heightened importance of addressing legal, social, ethical, and professional issues related to online donation and fundraising. Failing to address these issues could lead to serious problems.

#### **Legal Issues**

Legal issues mean that was produced the laws and principle for one's country. For the online donation and fundraising, that organization would be non-profit. The fundraising information would be right and not for their own profit. Afterwards, the organization must carefully keep the data. Must care about the security of this site to protect from hacker or some of virus. Cause this online donation to have the payment process.

Operating a donation website in Myanmar, or any country, involves several legal considerations. Here are some key points to consider:

**Registration and Compliance:** Ensure that your website is registered with the relevant authorities in Myanmar. This may include registering as a non-profit organization or charity, depending on the nature of your donations.

**Taxation:** Understand the tax implications of receiving donations in Myanmar. Consult with a tax advisor to ensure compliance with local tax laws.

**Data Protection:** Implement measures to protect the personal data of donors in accordance with Myanmar's data protection laws, if applicable.

**Fundraising Regulations:** Familiarize yourself with any regulations or guidelines related to fundraising activities in Myanmar. This may include restrictions on certain types of fundraising or requirements for disclosure.

**Financial Transparency:** Maintain accurate records of donations received and how funds are used. Be prepared to provide financial reports to donors and regulatory authorities as required.

**Intellectual Property:** Ensure that your website content does not infringe on any intellectual property rights, including trademarks, copyrights, or patents.

**Local Laws and Regulations:** Stay informed about any changes to laws and regulations that may affect your donation website in Myanmar.

It is important to seek legal advice from a qualified professional familiar with Myanmar's laws and regulations to ensure that your donation website complies with all applicable requirements.

## **Social Issues**

Social issues depend on how the internet will affect the interaction between the human and the system. Social issues have of issues concerning with the whole society like the health-related issues of the society, how well the system be maintained if some disturbances occur and the issues concerning with the customer information rights.

To project our user (donor and fundraiser) 's information, there will be a secured system and admins of the website will be paying close attention to the data privacy. Users should also research whether the website is secured or not before purchasing for donation and never choose the keep the password options can help reduce the information breach. Since this is the website concerning about donation campaign, the process and the detail information of this campaign will be expressed and shown to the donors to reduce the issues concerning about the campaign.

## **Ethical Issues**

Ethical issues revolve around determining the rightness or wrongness of behavior based on norms, culture, rules, regulations, and standards. Some actions may be considered unethical even if they are legal. According to Ben Davis (2021), key ethical issues in online donation include web tracking, copyright infringement, privacy

concerns, and internet fraud. These ethical dilemmas in online donation are similar to those in e-business.

For the online donation website, it is extremely important to maintain the donor and fundraiser information confidential. There can be some cases when a user asks the information about other users with good intention or one of the staff take the user information with a good reason, at those time it is important not to give away any of the users' information.

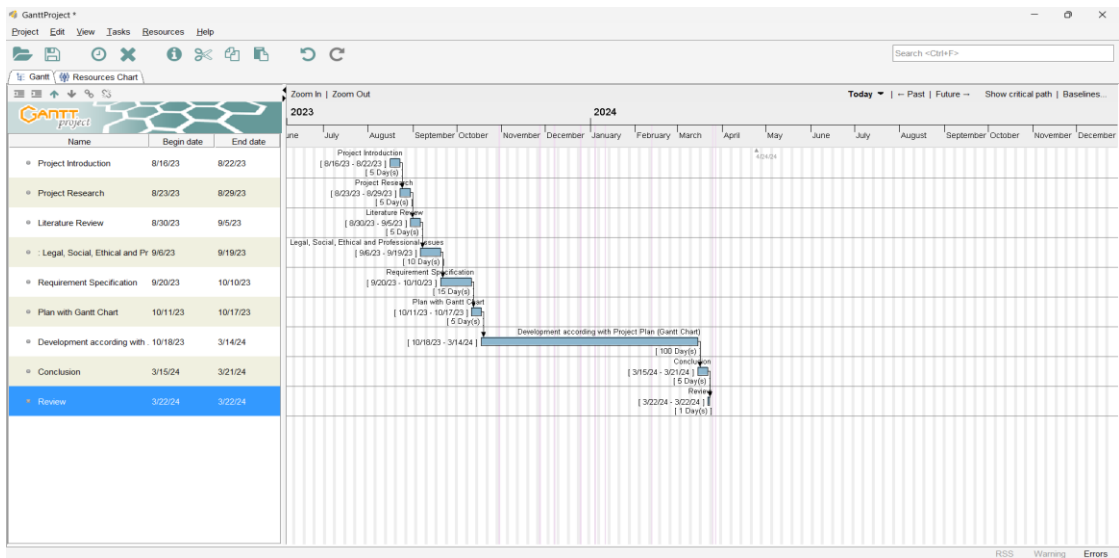
And where the organization provide the campaign, it is important to display the right and correct information where need some help from us.

For the developer, that would be ethical to give the same product (website) to another company once it has been sold. Also, software is produced for the intended company only is always completely owned by that company.

## **Professional Issues**

Professional issues are mostly related to ethical issues and involve standards of conduct and professional methods. Developers are required to honour other businesses' trademarks and copyrights. As a profession, developers are prohibited from engaging in fraud or frauds, which means they cannot accept payment or charge clients for services that should be provided free.

# Planning with Gantt Chart



The Gantt chart is a popular visual tool for planning and organizing a project. It breaks down the entire project into smaller tasks and schedules them to fit within a set timeframe. The Gantt chart displayed above illustrates the project's timeline from August 2023 to April 2024. The planning and development process is organized into time-boxes, which include key tasks like system analysis, coding, and testing. Tasks can be prioritized based on the project timeline.

## CHAPTER -5

### Target user

Type of User	Age	Computer skill / IT literacy	Language skill (especially English skill)
Website visitor	16-65	Good / average	Good /average
Donor and Fundraiser	16-70	Good	Good
Admin	18-50	Excellent	Very Good

### Functional Requirements of JC donation Campaign System

#### 1.Website admin processes (Timebox – 1)

##### 1.1 Website

Register (admin will be register since the start)

Login

Logout

##### 1.2 Manage admin account

-Add the admin account

-update the admin information

-view the admin account

##### 1.3 Manage user account

-view the user information

##### 1.4 Manage News posting

- Add the new postings

- Edit and update the existing new postings

- View the detail of new postings

- list all postings



- Delete the new Postings

### **1.5 Manage Campaign postings**

- Add the campaign postings
- Edit and delete the existing campaign posting
- View the detail of campaign postings
- list all campaign postings
- Delete the campaign postings

### **1.6 Manage Donation Transaction**

- View the list of donation transaction
- View the list of transaction of each campaign
- View the list of transaction of each user

## **2.User Process**

### **2.1Website**

- Home Page and other subpages that allowed to users
  - view the news postings
  - view the campaign postings
  - view each detail of the postings
  - views the posting by filtering

### **2.2 Register**

- email already existed
- pads must be strong
- must fill all requirements

### **2.3Login**

- email and username (must be registered)
- password

### **2.4Manage own user information**

- view the information

-edit and update the information

-delete the user account

## 2.5 Manage donation checkout

-select the donation postings

-select the payment method

- write down the amount that user want to donate

## MOSCOW Prioritization

Prioritization	Functions	Justification
Must	website (register/sign-up & login/sign-in)	To access and handle a website, the admin will have to login using his/her username and password pair that was used when the admin account was created. Except the admins, no one has the right to manage a website.  As well as for donors and fundraisers, it is necessary to register (sign-up) first and then login (sign-in) to perform actions on a website.
Must	Manage News postings	This is the main responsibility of an admin, and this process like adding news postings, update and show those postings on the website and delete the postings.
Must	Manage Campaign postings	This is the main responsibility of an admin, and this process includes functions like adding new

		postings, editing/updating existing items, displaying postings on the website, deleting postings, etc.
Must	Manage Donation Transaction	The transaction process is a must-complete step in the online donation system. The donor will have to fill out certain information, choose a preferred payment method, and confirm the donation.
Should	Manage user information	The registration process should manage cause of the user information security.
Should	Manage for each campaign's donation	Each campaign donation
Should	Export for report for each campaign's donation	
Should	Manage the popular campaigns and news	
Could	Comments section for each campaign and news on the website	Campaigns and news's comment section, it would be good for the users, and they can fill up the other requirements information.
Could	Share the campaign and news to other platforms.	Campaigns and news share to other platforms, to inform to other, the organization would be popular and be known.

## Non-Functional Requirements

### Introduction

Non-functional requirement here are general requirement that will be needed for each functional requirement.

## **Performance Requirement**

Campaign donation system should be able to access by multiple users at same time without any performance issues. Database should not have problem performing and handling large amount transactions data and query.

## **Usability**

All Function added in campaign donation system should be able to understand easily and learn easily by donor and the system user of varying technical skill level and age. System should have clear alert and system status message to inform users.

## **Design Requirements**

UI (User Interface) design need to be easy to use for admin, donor, and fundraisers of campaign donation system with varying age. Design needs to be consistent and front-end design need to be eye catching to attract more potential donor to donation website.

## **Security**

JC campaign donation organization will store personal data of donor and users etc. So, system need to be secure to prevent hacking and other take advantage of system security vulnerability easily. Should get Hypertext transfer Protocol Secure (HTTPS) for primary encrypting when data are sent between JC campaign donation organization and its donors/ users. Also, developer should use php data object to prevent attacker using SQL injection attack etc.

## **Maintainability**

Both campaign donation system backend and fronted should be easy to maintain when needed. This project is written using pure php and have detail documentation for maintainability.

## **Reliability**

JC donation campaign system should be able to handle most of the error input by using without showing technical error message of browser to user. Can be prevent by checking condition for most of the error and add alert and warning message to inform user when they make error.

## CHAPTER-6

### Time Box 1 For Admin Panel (campaign, news, user (admin) authorization)

<b>Time box Name</b>		Donation Campaign System Manage Website Admin Process Time-box	
<b>Start Date</b>		1 Jan 2024	
<b>End Date</b>		21 February 2024	
<b>Task</b>	<b>Duration</b>	<b>Start Date</b>	<b>End Date</b>
Functional Requirement	10 days	January 1, 2024	January 10, 2024
Use Case Diagram	5day	January 11, 2024	January 16, 2024
Screen Design (High Level & Low-Level Prototype)	5 days	January 17, 2024	January 22, 2024
Iteration for Screen Design	5 days	January 23, 2024	January 28, 2024
Class Diagram	5 days	January 28, 2024	February 2,2024
Coding Implementation	10day	February 3,2024	February 13,2024
Functional Testing	2 days	February 14,2024	February 16,2024
Usability Testing	1 day	February 17,2024	February 17,2024
Iteration for Usability Testing	1 day	February 18,2024	February 18,2024
Time Box Summary	1 day	February 19,2024	February 19 ,2024
<b>Key Deliverables (Output)</b>			
<b><u>Design</u></b>			
<ul style="list-style-type: none"><li>• Use Case Diagram for Website Admin Process</li><li>• Class diagram for donation campaign system</li></ul>			
<b><u>Coding</u></b>			
<ul style="list-style-type: none"><li>• Manage Campaign News (CRUD)</li><li>• Manage Campaign Item (CRUD)</li><li>• Manage Ticket Items (CRUD)</li><li>• Manage Volunteer Campaign (CRUD)</li><li>• Mange users' information</li></ul>			
<b><u>Testing</u></b>			
<ul style="list-style-type: none"><li>• Unit Test Document</li><li>• Integrated Test Document</li></ul>			

<ul style="list-style-type: none"> <li>• Usability Test Document</li> <li>• Test Cases &amp; Test Scripts for Time-box 1</li> </ul>
---

**Time box 2 User Panels’ functional requirements (campaign, news, donation process)**

<b>Time box Name</b>		Manage Donor (users) Process Time-box	
<b>Start Date</b>		20 February 2024	
<b>End Date</b>		6 April 2024	
<b>Task</b>	<b>Duration</b>	<b>Start Date</b>	<b>End Date</b>
Functional Requirement	3 days	February 20,2024	February 23,2024
Use Case Diagram	1 day	February 24,2024	February 24,2024
Screen Design (High Level & Low-Level Prototype)	10day	February 25,2024	March 1 ,2024
Iteration for Screen Design	2 days	March 2,2024	March 4 ,2024
Class Diagram	3 days	March 5 ,2024	March 8 ,2024
Coding Implementation	15 ay	March 9 ,2024	March 25 ,2024
Functional Testing	3 days	March 26 ,2024	March 29, 2024
Usability Testing	3 days	March 30, 2024	April 2, 2024
Iteration for Usability Testing	2 days	April 3, 2024	April 5, 2024
Time Box Summary	1 day	April 6, 2024	April 6, 2024
<b>Key Deliverables (Output)</b>			
<b><u>Design</u></b>			
<ul style="list-style-type: none"> <li>• Use Case Diagram for Customer Process</li> <li>• Class Diagram</li> </ul>			
<b><u>Coding</u></b>			
<ul style="list-style-type: none"> <li>• Process donation transactions for the organization.</li> <li>• Process donation transactions for specific campaigns.</li> <li>• Purchase tickets for fundraising events.</li> <li>• Register as a volunteer for volunteer campaigns.</li> <li>• Manage user profiles</li> </ul>			

**Testing**

- Unit Test Document
- Usability Test Document
- Test Cases & Test Scripts for Time-box 2

**Time box 3 Magane donation Transaction process**

<b>Time box Name</b>		Manage donation transaction process	
<b>Start Date</b>		April 7, 2024	
<b>End Date</b>		April 19,2024	
<b>Task</b>	<b>Duration</b>	<b>Start Date</b>	<b>End Date</b>
Functional Requirement	1 days	April 7,2024	April 7,2024
Iteration for Screen Design	1 days	April 8,2024	April 8, 2024
Coding Implementation	7days	April 9,2024	April 16 ,2024
Functional Testing	1 days	April 17,2024	April 17,2024
Usability Testing	1 days	April 18, 2024	April 18, 2024
Time Box Summary	1 day	April 19, 2024	April 19, 2024
<b>Key Deliverables (Output)</b>			
<b><u>Coding</u></b>			
<ul style="list-style-type: none"><li>• Manage donation transactions and generate reports for the admin.</li><li>• Handle ticket transactions.</li><li>• Manage registration for volunteers.</li></ul>			
<b><u>Testing</u></b>			
<ul style="list-style-type: none"><li>• Unit Test Document</li><li>• Usability Test Document</li><li>• Test Cases &amp; Test Scripts for Time-box 2</li></ul>			





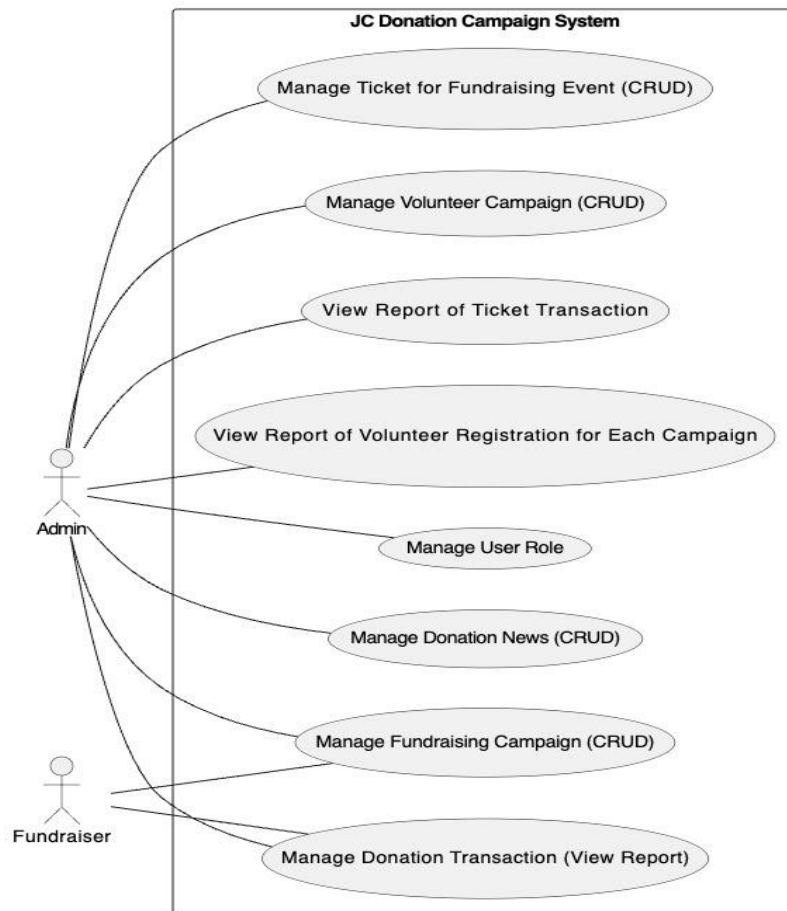
## CHAPTER 7

### Development of Time Box 1 For Admin Panel

#### Functional Requirements

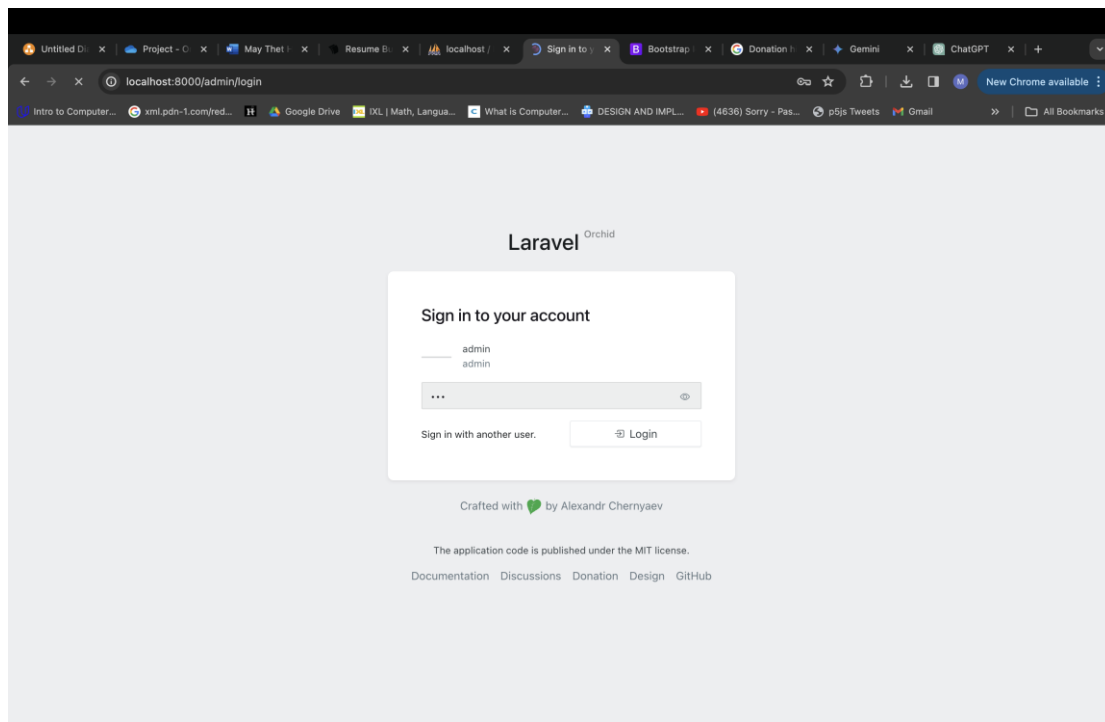
- News management
- Campaign management
- Ticket management
- Volunteer campaign management
- User and roles management

#### Use Case Diagram

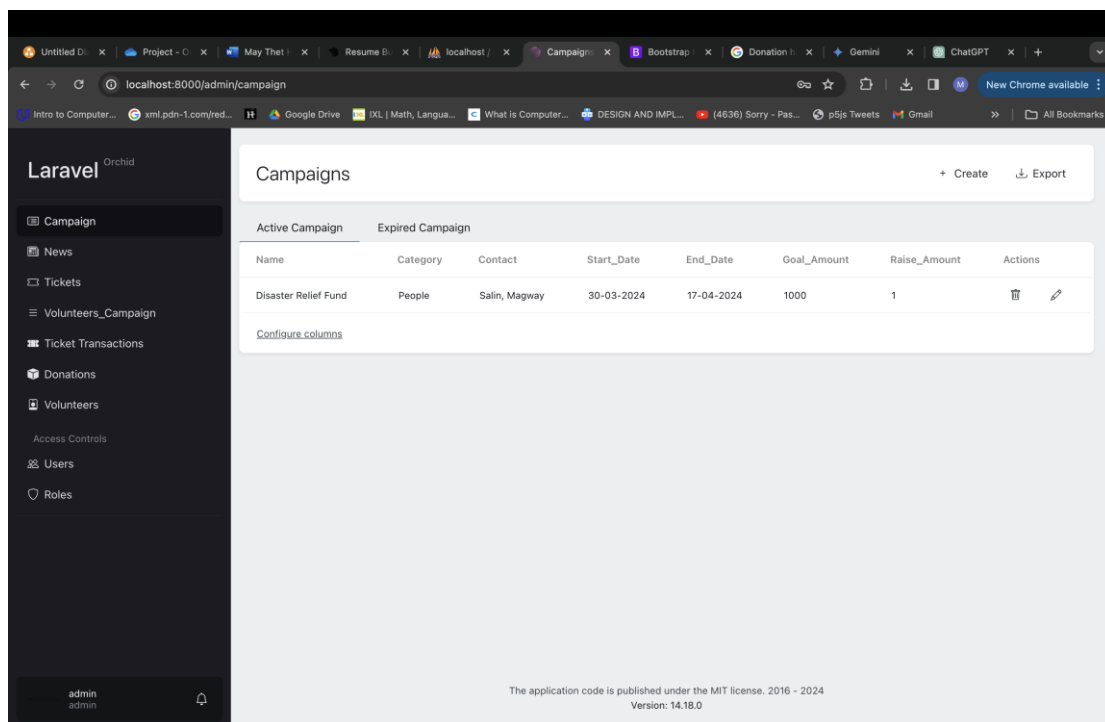


#### Screen Design

#### The Admin Prototype of JC Donation System



## Login Page



## Campaign List Page

Untitled D... x Project - O... x May Thet... x Resume B... x localhost / x Create Ca... x Bootstrap... x Donation... x Gemini... x ChatGPT... x +

localhost:8000/admin/campaign/create

Intro to Computer... x ml.pdn-1.com/red... x Google Drive x DL | Math, Langua... x What is Computer... x DESIGN AND IMPL... x (4636) Sorry - Pas... x p5js Tweets x Gmail x All Bookmarks

Laravel Orchard

- Campaign
- News
- Tickets
- Volunteers\_Campaign
- Ticket Transactions
- Donations
- Volunteers
- Access Controls
- Users
- Roles

admin admin

### Create Campaign

Name  
Enter Campaign Name

Category  
Enter Campaign Category

Contact  
Enter Campaign Contact

Description  
Enter Campaign Description

Media  
Upload image from your computer: [Browse](#)

Start Date  
Select Campaign Start Date

End Date  
Select Campaign End Date

Goal Amount  
Enter Campaign Goal Amount

Raise Amount

## Create Campaign

Untitled D... x Project - O... x May Thet... x Resume B... x localhost / x News - La... x Bootstrap... x Donation... x Gemini... x ChatGPT... x +

localhost:8000/admin/news




Intro to Computer... x ml.pdn-1.com/red... x Google Drive x DL | Math, Langua... x What is Computer... x DESIGN AND IMPL... x (4636) Sorry - Pas... x p5js Tweets x Gmail x All Bookmarks

Laravel Orchard

- Campaign
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- Roles

admin admin

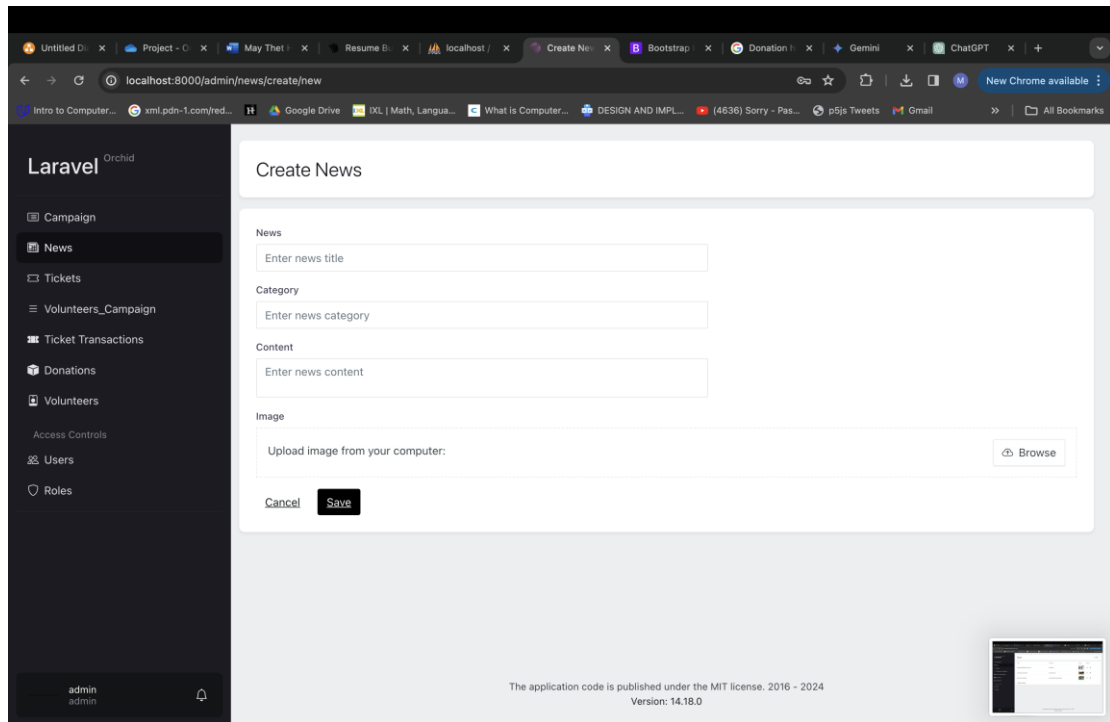
### News [+ Create](#)

Title	Category	Image	Actions
Education Empowerment Fund	Education		<a href="#">Edit</a> <a href="#">Delete</a>
Community Food Drive	Food Security		<a href="#">Edit</a> <a href="#">Delete</a>
Green Earth Initiative	Environmental Conservation		<a href="#">Edit</a> <a href="#">Delete</a>

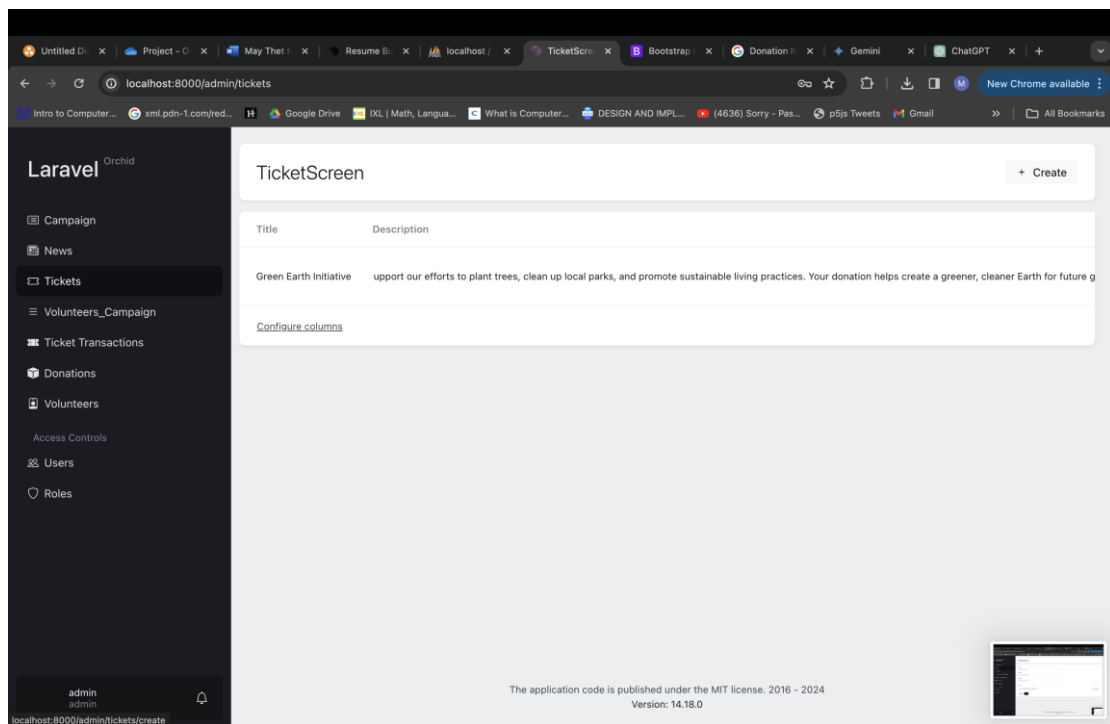
[Configure columns](#)

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Version: 14.18.0

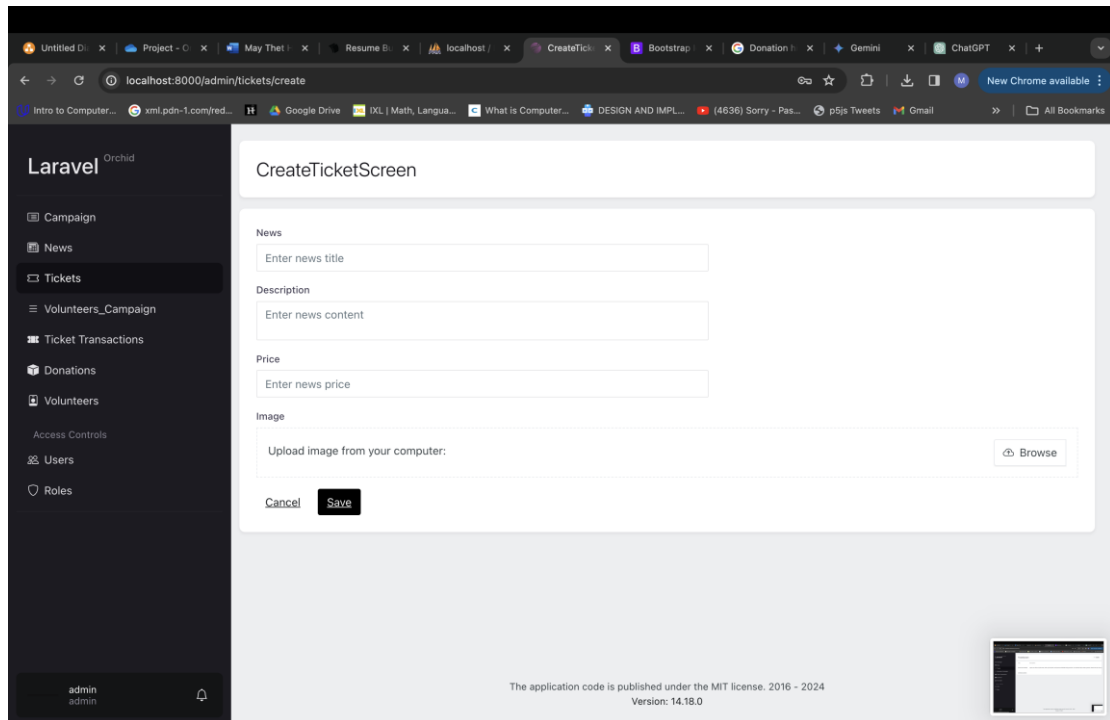
## News lists Page



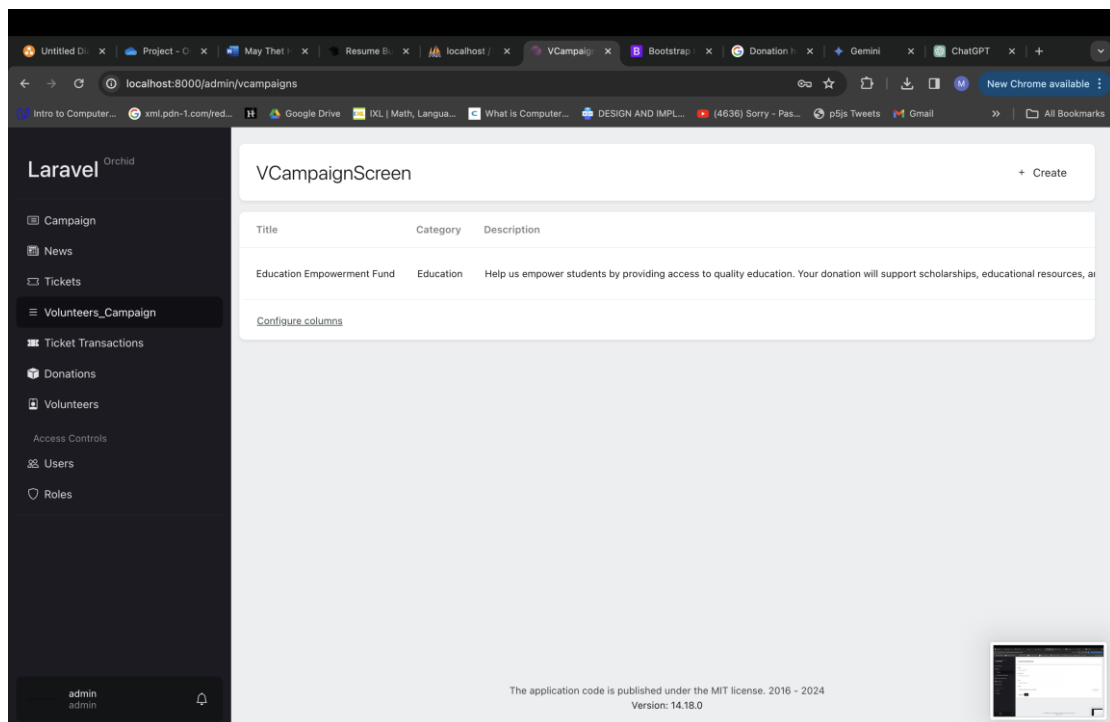
## Create News Page



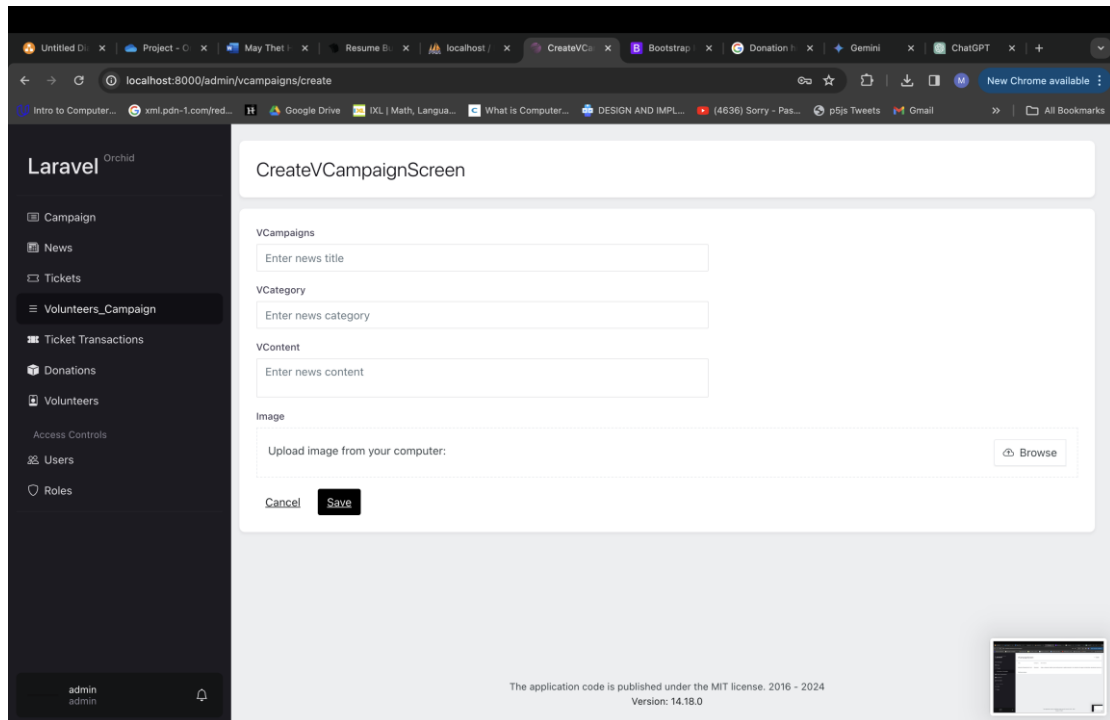
## Ticket List Page



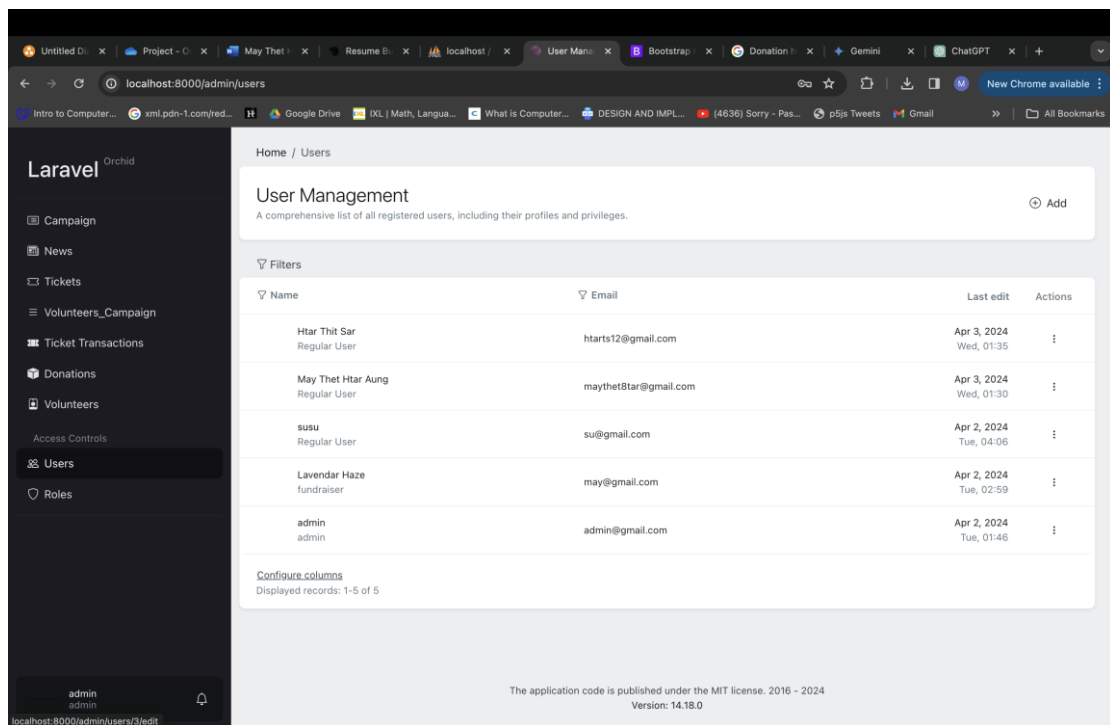
## Create Ticket Page



## Volunteer Campaign List



## Create Volunteer Campaign



## User Lists

localhost:8000/admin/users/create

### Create User

User profile and privileges, including their associated role.

[Save](#)

**Profile Information**  
Update your account's profile information and email address.

Name \*  
Name

Email \*  
Email

**Password**  
Ensure your account is using a long, random password to stay secure.

Password  
Enter the password to be set

**Roles**  
A Role defines a set of tasks a user assigned the role is allowed to perform.

Name role  
Specify which groups this account should belong to

**Permissions**  
Allow the user to perform some actions that are not provided for by his roles

System  
☐ Attachment ☐ Roles ☐ Users

Main  
☐ Main

Create User Page

localhost:8000/admin/roles

### Role Management

A comprehensive list of all roles, including their permissions and associated users.

[Add](#)

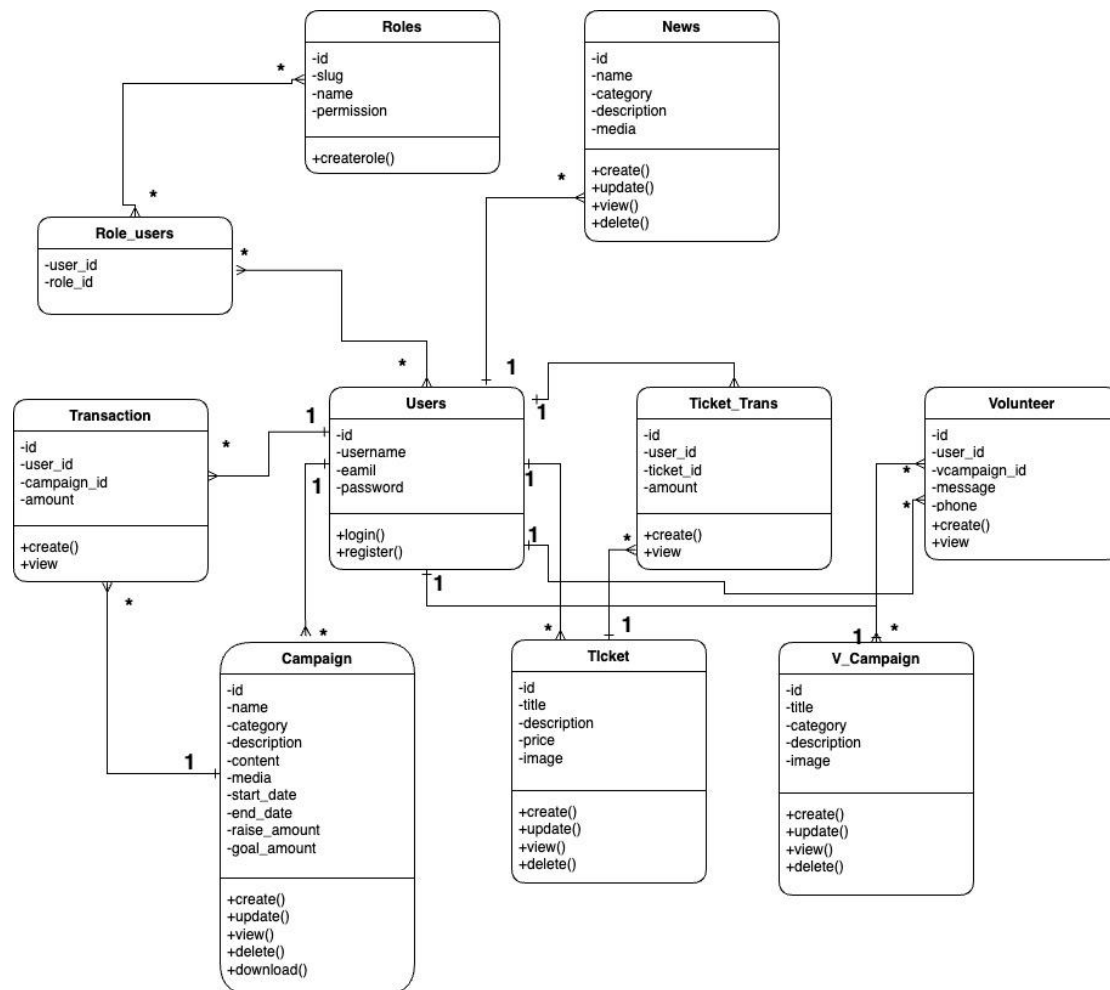
Name	Slug	Last edit
fundraiser	Fundraiser	Apr 2, 2024 Tue, 02:58
admin	Admin	Apr 2, 2024 Tue, 01:45

[Configure columns](#)  
Displayed records: 1-2 of 2

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Version: 14.18.0

Role Page

## Class Diagram



## Testing Plan

No	Date	Test Cases	Test Flow	Expected outcomes
	02/04/24	-login for admin	-fill the email and password	Arrive to the admin dashboard
	02/04/24	-Create the user's roles	-insert the user role -click Save button	Alerts create successfully Arrive to the user role page with added data
	02/04/24	-Update the user roles	-Click the user role -update the info -click the Save button	-Alert data successfully updated -Arrive to the roles page
	02/04/24	-Create the users (fundraiser)	-insert the user info -click Save button	Alerts create successfully Arrive to the user's page with added data



	02/04/24	-Update the users	-click the user -update the info -click the Save button	-Alert data successfully updated -Arrive to the user's page
	02/04/24	-Create the campaign	-click the create button -insert all requirements data -Click the Save button	Alerts create successfully Arrive to the campaign page with added data
	02/04/24	-update the campaign	-Click the campaign -update the info -Click Save button	-Alert data successfully updated -Arrive to the campaign page
	02/04/24	-delete the campaign	-Click the Delete button	Delete the selected data
	02/04/24	-Create the news	-click the create button -insert all requirements data -Click the Save button	Alerts create successfully Arrive to the News page with added data
	02/04/24	-update the news	-Click the new -update the info -Click Save button	-Alert data successfully updated -Arrive to the new page
	02/04/24	-delete the news	-Click the Delete button	Delete the selected data
	02/04/24	-create the ticket for event	-click the create button -insert all requirements data	-Alerts create successfully -Arrive to the Ticket page with added data

			-Click the Save button	
	02/04/24	-update the ticket	Click the update -update the info -Click Save button	-Alert data successfully updated -Arrive to the ticket page
	02/04/24	-delete the ticket	Click the Delete button	Delete the selected data
	02/04/24	-create the volunteer campaign	-click the create button -insert all requirements data -Click the Save button	-Alerts create successfully -Arrive to the volunteer campaign page with added data
	02/04/24	-update the volunteer campaign	Click the update -update the info -Click Save button	-Alert data successfully updated -Arrive to the volunteer campaign page
	02/04/24	-delete the volunteer campaign	Click the Delete button	Delete the selected data

### Testing Log

No	Date	Test Cases	Test Flow	Expected outcomes	Actual outcomes	Result
	02/04/24	-login for admin	-fill the email and password	Arrive to the admin dashboard	correct	Pass

	02/04/24	-Create the user's roles	-insert the user role -click Save button	Alerts create successfully Arrive to the user role page with added data	Need to add alert message	Fail
	02/04/24	-Update the user roles	-Click the user role -update the info -click the Save button	-Alert data successfully updated -Arrive to the roles page	Need to add alert message	Fail
	02/04/24	-Create the users (fundraiser)	-insert the user info -click Save button	Alerts create successfully Arrive to the user's page with added data	Need to add alert message	Fail
	02/04/24	-Update the users	-click the user -update the info -click the Save button	-Alert data successfully updated -Arrive to the user's page	Need to add alert message	Fail
	02/04/24	-Create the campaign	-click the create button -insert all requirements data -Click the Save button	Alerts create successfully Arrive to the campaign page with added data	Need to add alert message	Fail

	02/04/24	-update the campaign	-Click the campaign -update the info -Click Save button	-Alert data successfully updated -Arrive to the campaign page	Need to add alert message	Fail
	02/04/24	-delete the campaign	-Click the Delete button	Delete the selected data	correct	Pass
	02/04/24	-Create the news	-click the create button -insert all requirements data -Click the Save button	Alerts create successfully Arrive to the News page with added data	Need to add alert message	Fail
	02/04/24	-update the news	-Click the new -update the info -Click Save button	-Alert data successfully updated -Arrive to the new page	Need to add alert message	Fail
	02/04/24	-delete the news	-Click the Delete button	Delete the selected data	correct	Pass
	02/04/24	-create the ticket for event	-click the create button -insert all requirements data	-Alerts create successfully -Arrive to the Ticket page	Need to add alert message	Fail

			-Click the Save button	with added data		
	02/04/24	-update the ticket	Click the update -update the info -Click Save button	-Alert data successfully updated -Arrive to the ticket page	Need to add alert message	Fial
	02/04/24	-delete the ticket	Click the Delete button	Delete the selected data	correct	Pass
	02/04/24	-create the volunteer campaign	-click the create button -insert all requirements data -Click the Save button	-Alerts create successfully -Arrive to the volunteer campaign page with added data	Need to add alert message	Fail
	02/04/24	-update the volunteer campaign	Click the update -update the info -Click Save button	-Alert data successfully updated -Arrive to the volunteer campaign page	Need to add alert message	Fail
	02/04/24	-delete the volunteer campaign	Click the Delete button	Delete the selected data	correct	Pass

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### **Time Box Summary**

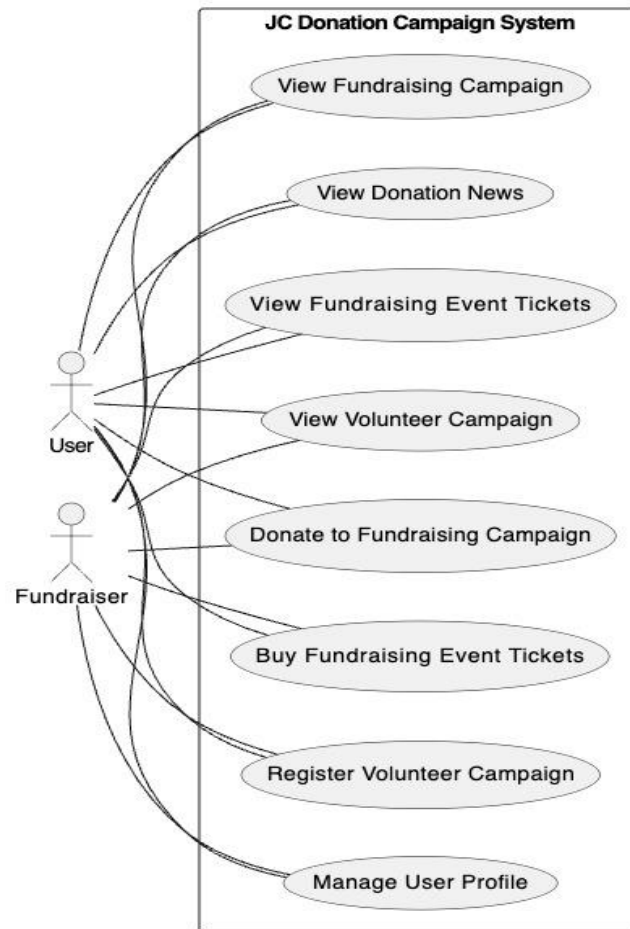
In the process of developing news management, campaign management, ticket management, volunteer campaign management, and user and roles management using the Orchid Laravel framework, I faced various challenges. My unfamiliarity with the framework led to a longer learning curve than expected, as I navigated its complexities. Additionally, I encountered conflicts related to specific business requirements, requiring careful resolution. Despite these hurdles, I am committed to overcoming them and delivering a comprehensive solution that aligns with our project's objectives. <sup>[OBJ]</sup>

### **Development of Time Box 2 For Donor and Fundraiser (user) Panel**

#### **Functional Requirements**

- News management on User site
- Campaign management on User site
- Donations' Transaction Management (CRUD)
- User and roles management

#### **Use Case Diagram**



## Screen Design

localhost:8000/register

**JC DONATION**

Name  
Htar Thit Sar

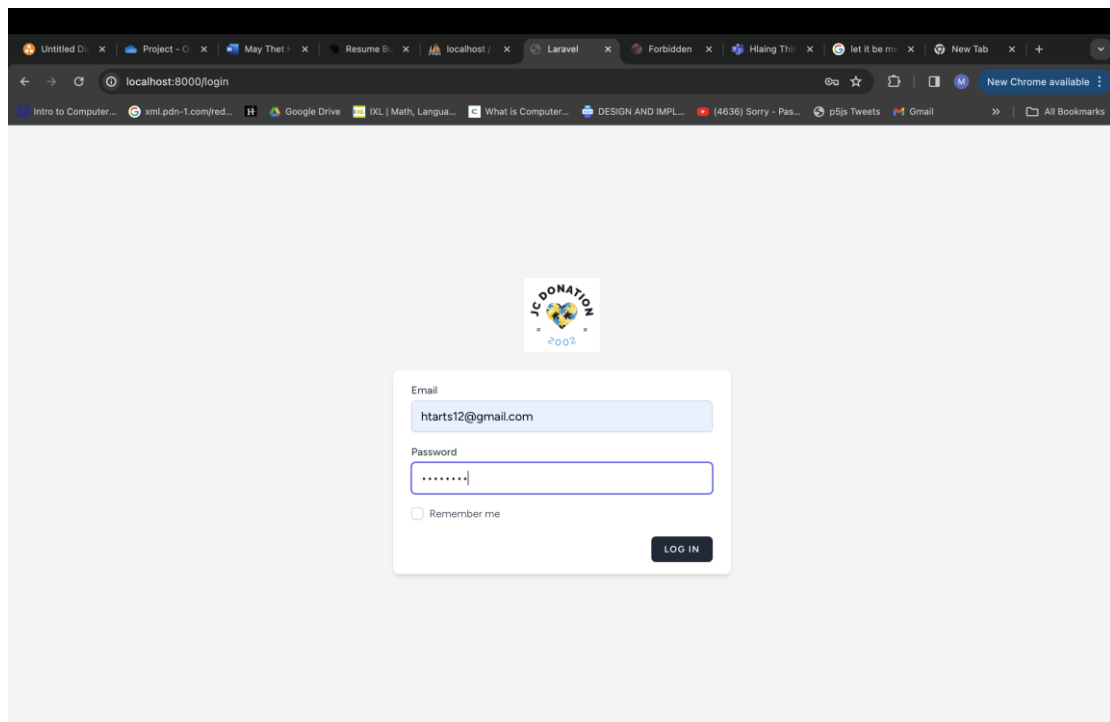
Email  
htarts12@gmail.com

Password  
.....

Confirm Password  
.....

[Already registered?](#) **REGISTER**

## Register



Register

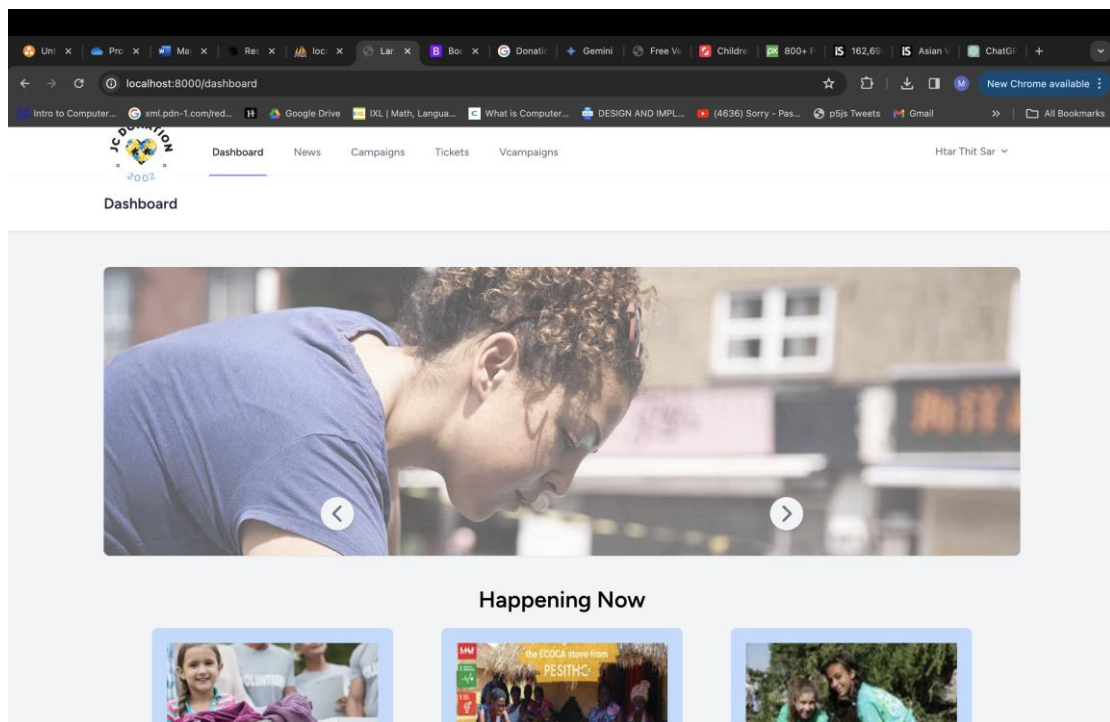
Email: htarts12@gmail.com

Password: \*\*\*\*\*

☐ Remember me

LOG IN

## Login



Dashboard

News Campaigns Tickets Vcampaigns

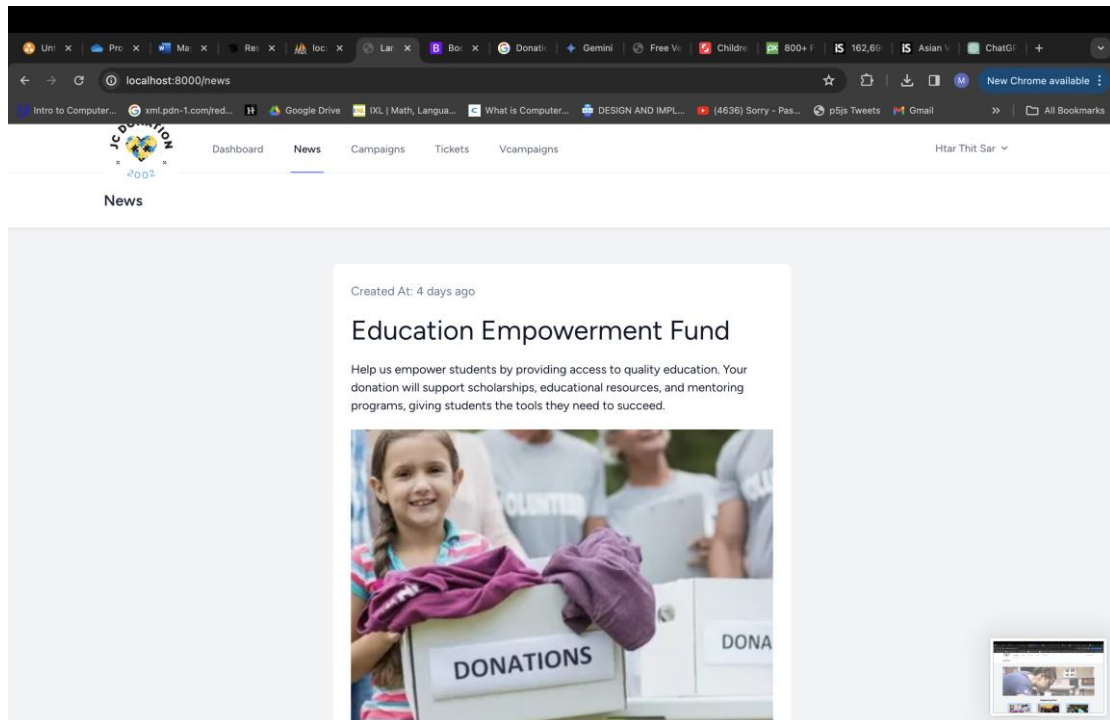
Hitar Thit Sar

Happening Now

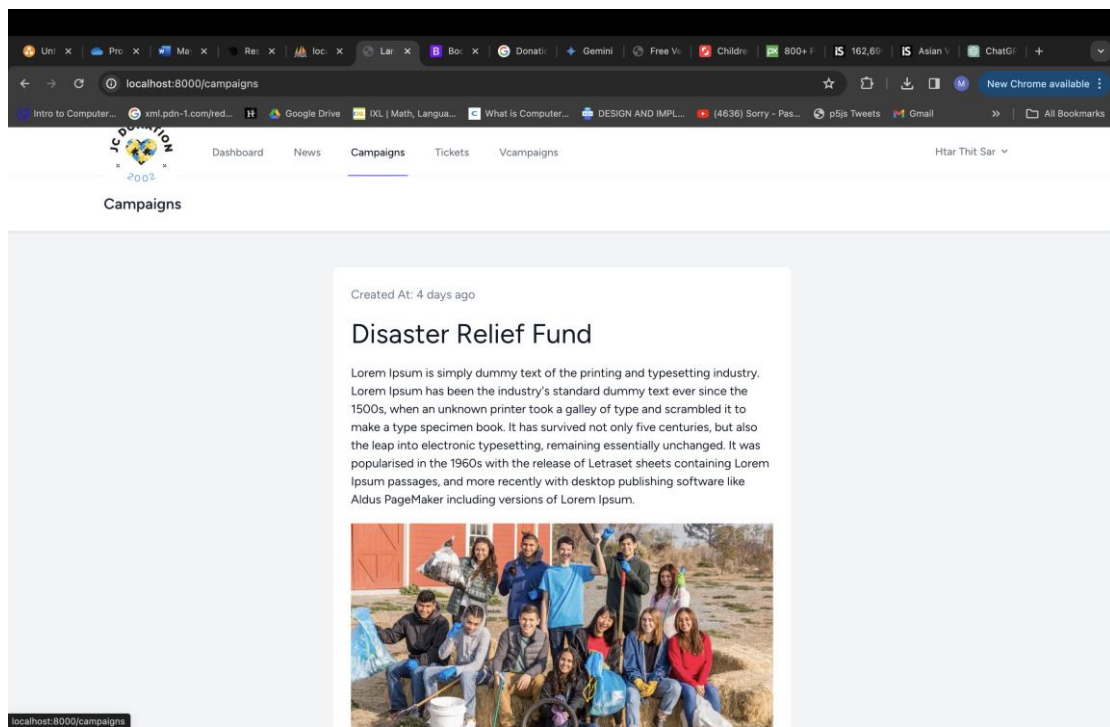
the ECOGA stove from PESITH

## Dashboard Page

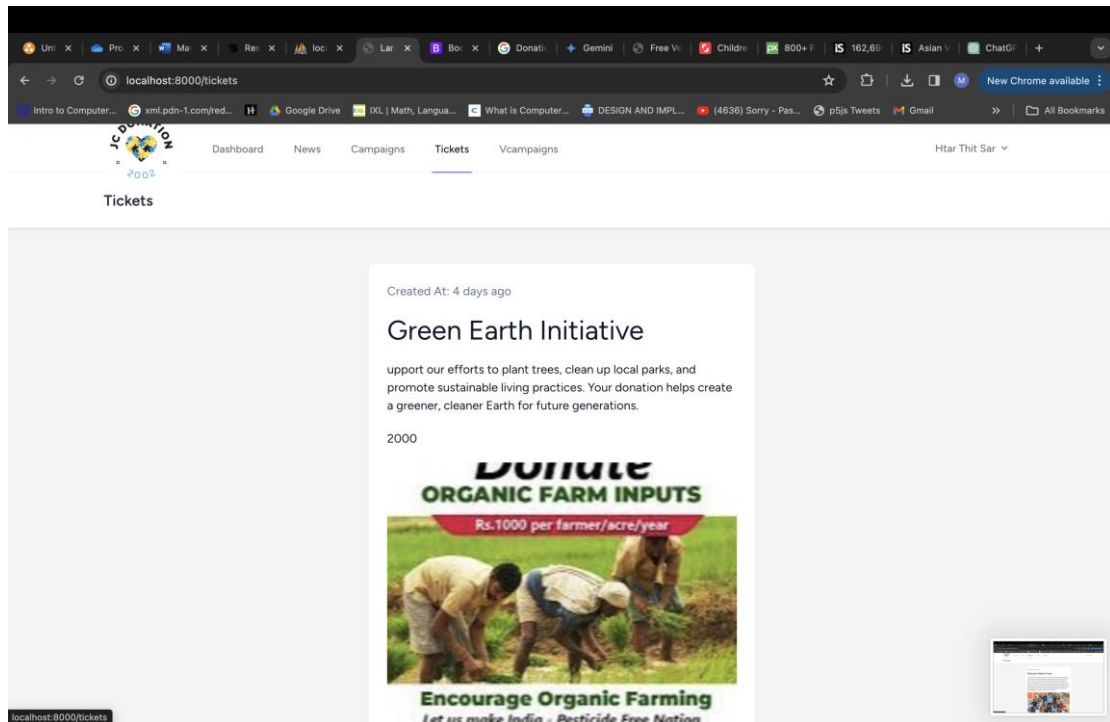




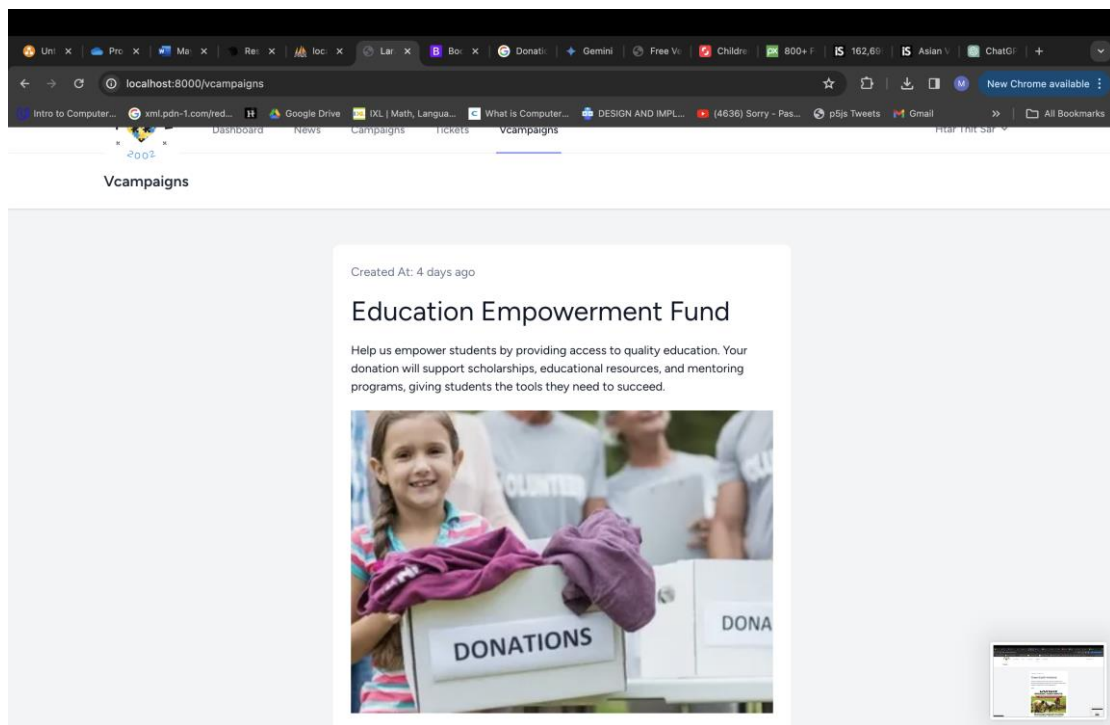
News Page



Campaign Page



Ticket Page



Volunteer Campaign

Profile

**Profile Information**  
Update your account's profile information and email address.

Name  
Htar Thit Sar

Email  
htarts12@gmail.com

SAVE

**Update Password**  
Ensure your account is using a long, random password to stay secure.

Current Password

New Password

Profile Page

Donate Here

**Support Us Today For Disaster Relief Fund**

Htar Thit Sar

Disaster Relief Fund

PayPal

100

Submit

Campaign From

The screenshot shows a web browser with multiple tabs open. The active tab is 'localhost:8000/ticket/4'. The page has a navigation bar with links: Dashboard, News, Campaigns, Tickets, and Vcampaigns. A user profile 'Htar Thit Sar' is visible in the top right. The main content area is titled 'Ticket Here' and features a form titled 'Support Us Today For Green Earth Initiative'. The form contains the following fields: a text input for 'Htar Thit Sar', a text input for 'Green Earth Initiative', a dropdown menu for 'PayPal', and a text input for '\$2000'. A blue 'Submit' button is at the bottom of the form.

Support Us Today For Green Earth Initiative

Htar Thit Sar

Green Earth Initiative

PayPal

\$2000

Submit

## Ticket From

The screenshot shows a web browser with multiple tabs open. The active tab is 'localhost:8000/vcampaign/2'. The page has a navigation bar with links: Dashboard, News, Campaigns, Tickets, and Vcampaigns. A user profile 'Htar Thit Sar' is visible in the top right. The main content area is titled 'Register now to become a Volunteer' and features a form titled 'Volunteer Registration'. The form contains the following fields: a text input for 'Name' (Htar Thit Sar), a text input for 'Email' (htarts12@gmail.com), a text input for 'Phone' (098685584), and a text area for 'Why you want to be a Volunteer?' containing the text: 'I applied as a volunteer for this campaign because I believe in its cause and want to contribute my time and skills to make a positive impact in the community.' A blue 'Submit' button is at the bottom of the form.

Volunteer Registration

Name

Htar Thit Sar

Email

htarts12@gmail.com

Phone

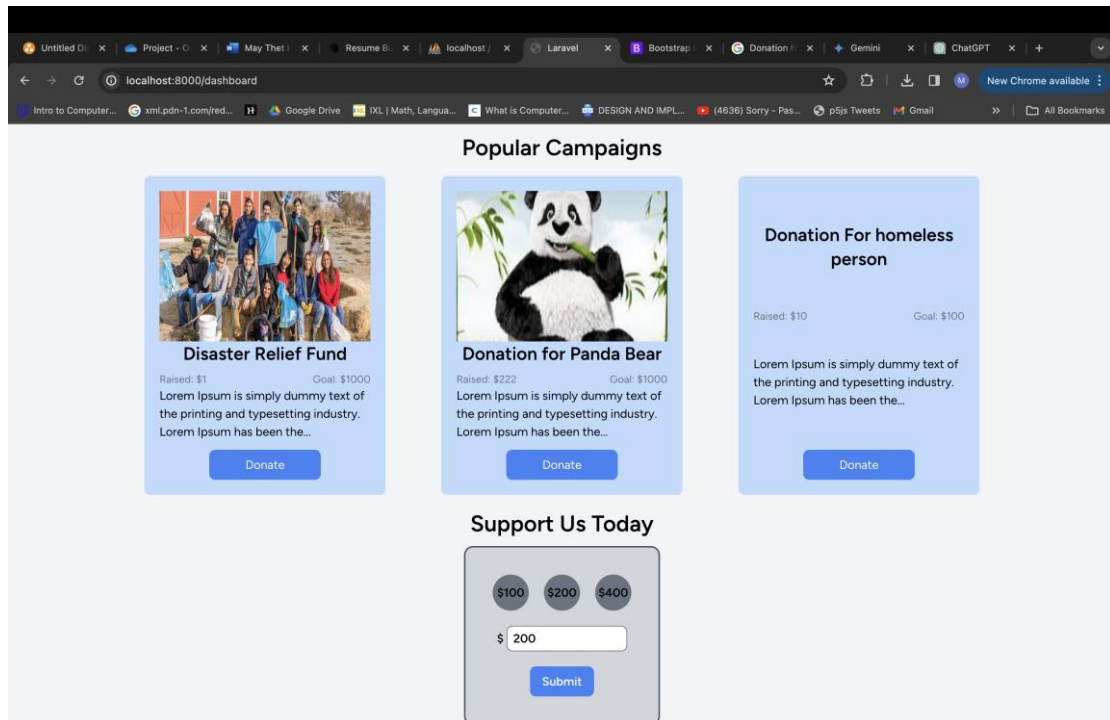
098685584

Why you want to be a Volunteer?

I applied as a volunteer for this campaign because I believe in its cause and want to contribute my time and skills to make a positive impact in the community.

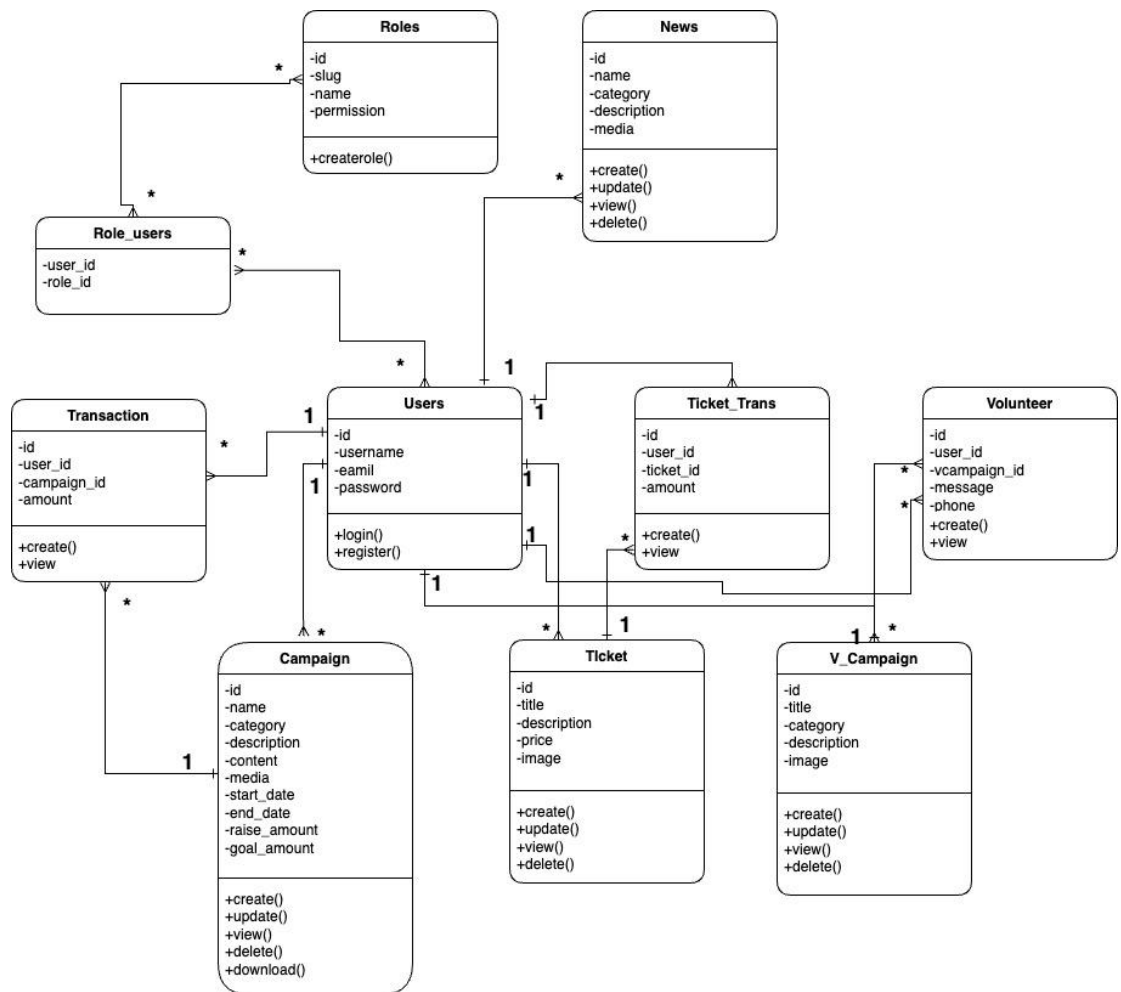
Submit

## Volunteer Registration Form



Organization Donate Form

## Class Diagram



## Testing Plan for Time Box 2

No	Date	Test Cases	Test Flow	Expected outcomes
	02/04/24	Register as a user	-insert all requirement data -click register button	Arrive to login page
	02/04/24	Login as a user	-insert all requirement data -click the login button	Arrive to the dashboard page
	02/04/24	View the dashboard	Click the Home nav	-Arrive to the dashboard page
	02/04/24	Donate the organization	-choose the amount or write down the amount on the form -click the donate	-Alert to the successfully donate

	02/04/24	View the News	-click the News nav button	-Arrive to the News page
	02/04/24	View the Campaigns	-Click the Campaign nav button	-Arrive to the Campaign page
	02/04/24	Donate the campaign	Click the donate button -fill the amount that want to donate and choose the payment method	-Alerts donate successfully -Arrive to the campaign page
	02/04/24	View the tickets	Click the ticket nav button	-Arrive toe the ticket page
	02/04/24	Buy the Ticket	Click the Buy button -choose the payment method -click submit button	-Alert Successfully bought it -Arrive to the ticket page
	02/04/24	View the volunteer campaign	-Click the VCampaigns nav button	-Arrive to the Vcampaign page
	02/04/24	Register as a volunteer	Click the Register button -fill the data for the volunteer -click the submit button	-Alert Register successfully -Arrive to the vCampaign page
	02/04/24	View the user profile	-Click the user profile	-Arrive to the user profile page
	02/04/24	Update the user profile	-update the data -click the save button	-Alert update successfully -Arrive to the profile page

## Testing Log for Timebox 2

No	Date	Test Cases	Test Flow	Expected outcomes	Actual outcomes	Result
	02/04/24	Register as a user	-insert all requirement data -click register button	Arrive to login page	correct	Pass
	02/04/24	Login as a user	-insert all requirement data -click the login button	Arrive to the dashboard page	correct	Pass
	02/04/24	View the dashboard	Click the Home nav	-Arrive to the dashboard page	correct	Pass
	02/04/24	Donate the organization	-choose the amount or write down the amount on the form -click the donate	-Alert to the successfully donate	correct	Pass
	02/04/24	View the News	-click the News nav button	-Arrive to the News page	correct	Pass
	02/04/24	View the Campaigns	-Click the Campaign nav button	-Arrive to the Campaign page	correct	Pass
	02/04/24	Donate the campaign	Click the donate button	-Alerts donate successfully	correct	Pass



			-fill the amount that want to donate and choose the payment method	-Arrive to the campaign page		
	02/04/24	View the tickets	Click the ticket nav button	-Arrive to the ticket page	correct	Pass
	02/04/24	Buy the Ticket	Click the Buy button -choose the payment method -click submit button	-Alert Successfully bought it -Arrive to the ticket page	correct	Pass
	02/04/24	View the volunteer campaign	-Click the VCampaigns nav button	-Arrive to the Vcampaign page	correct	Pass
	02/04/24	Register as a volunteer	Click the Register button -fill the data for the volunteer -click the submit button	-Alert Register successfully -Arrive to the campaign page	correct	Pass
	02/04/24	View the user profile	-Click the user profile	-Arrive to the user profile page	correct	Pass

	02/04/24	Update the user profile	-update the data -click the save button	-Alert update successfully -Arrive to the profile page	correct	Pass
--	----------	-------------------------	--	---	---------	------

### **Time Box Summary**

After implementing news management, campaign management, donations' transaction management, and user and roles management on the user site using the Laravel Blade framework, I have successfully delivered a comprehensive solution that enhances the functionality of our project. Despite facing initial challenges due to my unfamiliarity with the framework, I managed to overcome them through perseverance and dedication. The implementation of these processes has significantly improved the user experience and overall efficiency of our system. I look forward to further enhancing and expanding these features to meet the evolving needs of our project

## **Development of Time Box 3 For Manage donation Transaction process**

### **Functional Requirements**

- Manage donation transactions and generate reports for the admin.
- Handle ticket transactions.
- Manage registration for volunteers.

### **Screen Design**

LaravelOrchid

Campaign

News

Tickets

Volunteers\_Campaign

Ticket Transactions

Donations

Volunteers

Access Controls

Users

Roles

adminadmin

TicketTransScreen

User_Name	Ticket_Name	Amount	Created_At
admin		2000	2024-04-02T16:13:21.000000Z

Configure columns

The application code is published under the MIT license. 2016 - 2024  
Version: 14.18.0

## Campaign Donation Report

LaravelOrchid

Campaign

News

Tickets

Volunteers\_Campaign

Ticket Transactions

Donations

Volunteers

Access Controls

Users

Roles

adminadmin

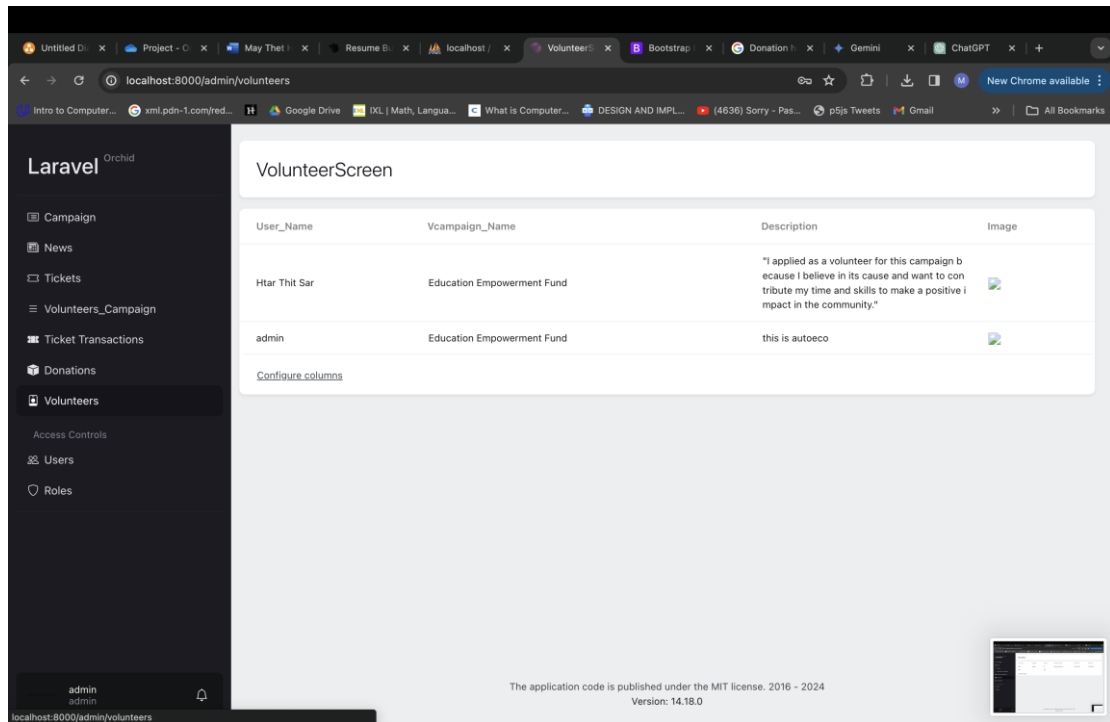
Donation

User_Name	Category	Amount	Campaign_Name	Start_Date	End_Date
admin	People	12	Disaster Relief Fund	30-03-2024	17-04-2024
admin		200			

Configure columns

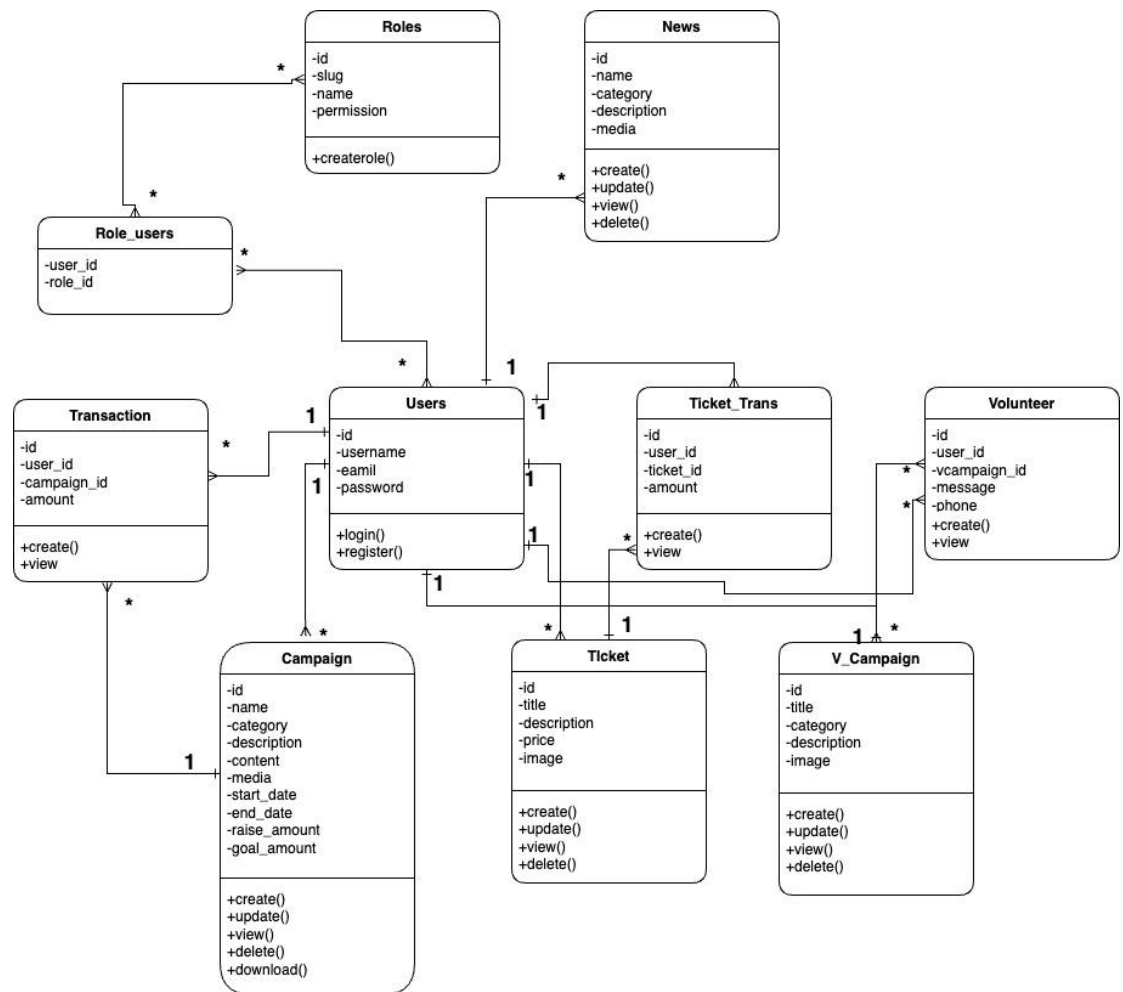
The application code is published under the MIT license. 2016 - 2024  
Version: 14.18.0

## Ticket Transaction Report



## Volunteer Registration Report

## Class Diagram



### Testing Plan for Time Box 3

No	Date	Test Cases	Test Flow	Expected outcomes
	04/04/24	View the donation transactions	Click the donation nav	Arrive to the donation trans page
	04/04/24	View the ticket transaction	Click the ticket transaction	Arrive to the ticket transaction page
	04/04/24	View the registration volunteers	Click the volunteer	Arrive to the volunteer page

### Testing Log for Time Box 3

No	Date	Test Cases	Test Flow	Expected outcomes	Actual outcomes	Result

	04/04/24	View the donation transactions	Click the donation nav	Arrive to the donation trans page	correct	Pass
	04/04/24	View the ticket transaction	Click the ticket transaction	Arrive to the ticket transaction page	correct	Pass
	04/04/24	View the registration volunteers	Click the volunteer	Arrive to the volunteer page	correct	Pass

### **Time Box Summary**

During the implementation phase, managing donation transactions, handling ticket transactions, and managing registration for volunteers proved to be a seamless process without any major obstacles. I effectively managed donation transactions and generated detailed reports for the admin, providing valuable insights into our fundraising efforts. Additionally, I efficiently handled ticket transactions, ensuring timely resolution of user inquiries and issues. Moreover, managing registration for volunteers was executed smoothly, enabling us to onboard volunteers seamlessly for our campaigns. Overall, this implementation has significantly improved our operational efficiency and user experience, setting a solid foundation for future enhancements.

## **CHAPTER 8**

### **Objective 1,2,3,4: Feasibility Study**

This objective is about studying the feasibility of this project including business processes, issues of the current system etc. Also research similar system for better understanding of how other donation systems are implemented both functionally and non-functionally. Also, study and find out potential legal, ethical, social, and professional issue that can happen during development of this project. Lastly research for technical feasibility for which methodology, which languages and which database is suitable for development. All of this is fulfilled with project report consist of business process and issues, similar system research and compare of two donation system for both functional and non-functional. Also include report for LESPI and include literature review of language, methodology and database for choosing which one is suitable. Lastly, project plan is produced after all things mentioned above so this objective is fulfilled.

### **Objective 5,6: Analysis**

Analysis for this project is perform and documented in chapter 3 similar system comparison and chapter 5 foundation chapter. Foundation chapter include report for target user analysis, functional requirements and non-functional requirement specification for this project and Moscow prioritization. Also, risks are defined, analyse, and produce risk management plan. After analysis timebox plan is created. So, analysis objective is fulfilled.

### **Objective 7: Timebox development**

Timebox development included analysis, design, implementation, and testing. This project has 3 timeboxes and al include Timebox plan. also include Moscow for timebox functional requirement for further analyses and prototype to get feedback. After that screen design, is carry out and timebox is implemented using PHP, MySQL. all the require deliverable for implementation such as ERD, class diagram, use case diagram are include in report. After implementation is complete, testing for functional and non-functional (usability test) is performed and documented using test plan and test script. After iteration is performed if needed, summary for timebox is documented before

starting next timebox. So, this objective is also fulfilled with all the required deliverables are included in report and all the functional and non-functional requirements are met.

### **Objective 8: Review the whole project and future amendment**

The product demonstrates a strong foundation in usability and stability, making it a reliable choice for real-life applications. Users appreciate its intuitive design and consistent performance, which contribute to a positive user experience. However, there is an opportunity to further enhance the product's technical skills improvement aspects. This could include providing more advanced features or resources that help users develop their skills while using the product.

Additionally, the development requirements for the product are robust, indicating a need for continuous improvement to meet evolving user needs and industry standards. Despite the challenges posed by these strong requirements, there is a clear commitment from the development team to enhance the product. This commitment is reflected in my efforts to address issues promptly and incorporate user feedback into future updates.

While the product generally meets expectations, there are instances where expected requirements do not align perfectly with actual outcomes. This misalignment may stem from various factors, such as evolving user preferences or technical constraints. Addressing these discrepancies requires a careful review of the development process to identify areas for improvement and ensure that future updates better align with user expectations.

In conclusion, the product offers a solid foundation in usability and stability, with opportunities for improvement in technical skills enhancement and aligning expected requirements with actual outcomes. By addressing these areas, the development team can further enhance the product's value and user satisfaction.

### **References**

- Aela, E. (2022). *10 Usability Heuristics for UI Design*. [online] aelaschool.com. Available at: <https://aelaschool.com/en/interactiondesign/10-usability-heuristics-ui-design/>.
- Westland, J. (2021). *Project Management Methodology - An Overview*. [online] ProjectManager.com.



Available at: <https://www.projectmanager.com/blog/project-management-methodology>.

JustGiving (2017). *Join JustGiving and show you care*. [online] JustGiving.

Available at: <https://www.justgiving.com/>.

Kickstarter (2019). Kickstarter. [online] Kickstarter.

Available at: <https://www.kickstarter.com/>.

Coursera (2022). *Types of Project Management: Methodologies, Industries, and More*.

[online] Coursera.

Available at: <https://www.coursera.org/articles/types-of-project-management>.

Academic Dictionaries and Encyclopedias. (n.d.). *Dynamic systems development method*. [online]

Available at: <https://en-academic.com/dic.nsf/enwiki/11603364> [Accessed 19 Mar. 2024].

PM-Partners (2021). *What is Scrum? / The Agile Journey with PM-Partners*. [online]

PM Partners.

Available at: <https://www.pm-partners.com.au/the-agile-journey-a-scrum-overview/>.

Coursera (2022). *Types of Project Management: Methodologies, Industries, and More*.

[online] Coursera.

Available at: <https://www.coursera.org/articles/types-of-project-management>.

S, B. (2022). *What Is Scrum Methodology? & Scrum Project Management*. [online]

Nimble.

Available at: <https://www.nimblework.com/agile/scrum-methodology/>.



# **APPENDIX A – PROJECT PROPOSAL**

## **Introduction**

### **Overview**

The project is about the donation campaign system that can help people with donation digital systems. The organization, known as 'Joyful Contributions (JC),' was established by a group of youthful volunteers in 2002. At first, they used to collect donations and help people directly with the help of other young volunteers. They also set up a system where people could help each other directly. This organization aims to assist those living in deprived areas and facing various needs. Since our country is still developing, it is important for us to look out for each other with kindness. That is why the main goal of this organization is to encourage everyone to be caring and kind towards one another. All the kindness, this system and organization keep growing up since that day. Many of the donation campaigns are conducted by enthusiastic young volunteers. These campaigns typically target areas that require assistance. All places in need of support can reach out to us if they face financial or material difficulties.

### **Current System**

Currently, this organization is just running manually of all the process. And then the donation campaign is running in social media via Facebook, Instagram, and Twitter. So, there have not own media. When they do new campaign, they must post in all social by admin. When they record and calculate all the fundings by manually. The organization are managing and operating their processes without the use of automated or digital tools. Instead of relying on technology, they depend on human effort and physical methods to carry out tasks, manage donations, and run their organization's operations. So there have some errors when they are running their system by manually.

### **Current System Issues**

Unexpectedly, the situation of COVID-19, the donation process cannot be done effectively. In this situation, most of the donor want to do donation for the requirements places. But for this situation, we cannot do the campaign for the donors and the requirement places. After that, most of Myanmar's citizens are known as a donor which means they want to donate where need help. If people do not know the requirements places and people, they cannot do donate. Nowadays, most people are lying and enticed by using other requirements and incorrect information on social media. So, in this

organization, people can donate trustfully for the requirements of places and people by creating the campaign. That is why the organization chose to build the digital donation campaign platform to continue the processes.

### **Expected system for this business**

This system comprises two sides: the admin site and the user site. On the admin site, administrators can upload donation campaign projects and effectively manage the funds received from each donation. When the users upload the donation campaign posting, that will allow to show in our system. But if admin check this posting was not matched with our rules and regulation, we will reject this posting.

In the user site, registered users can do as a donor and fundraiser. As a donor, they have the freedom to contribute to any donation campaign they wish. On the other hand, as fundraisers, they could post donation campaign when they require assistance in their respective initiatives or causes. These are the overview of this donation campaign system.

The crowdfunding website has cool features to make things easy for people. First, you can easily share your fundraising campaigns on social media to get more attention and donations. Then, if you want to find a specific campaign, there are smart search and filter options. You can look for campaigns based on categories, popularity, or urgency. Plus, you get to create your own profile with personal info, see your past donations, and check your fundraising history. And there is a dashboard where you can keep track of what you are doing, see how you are making a difference, and manage your campaigns all in one place. These features make the website simple and helpful for everyone.

### **Future Exception For the business**

This organization have not for the business but need to do improvement for the future. To make sure future donation system for businesses works well for a long time, the organization have some important plans. We will always use the latest technology to keep online payments safe. Since many people use their phones, we will make sure our system is easy to use on them. Keeping people's information private is super important, so we will follow strict privacy rules. We want to hear from donors and make our system better based on what they say. We will be open about where the donated money goes and share regular reports with donors. To get money, we will try separate ways like partnerships and selling things. We will also handle money from different countries and follow all the rules. We will create a community feeling among donors and ask them to tell others about our cause. We will be ready for unexpected problems

and make sure everything we do is legal. Working with other groups will help us do more, and we will use data to make smart choices. Most importantly, we will be flexible and change as the world changes to keep helping people. With these plans, our future donation system will keep doing good things for a long time.

### **Aim**

On this digital platform, the organization can create donation campaigns, donors can contribute with trust, and users can post their own campaigns when assistance is needed.

### **Objectives**

1. Investigate the existing system's weakness and features

Tasks will be:

- Investigate the existing system's weaknesses and features.
- Explore the donation's background and historical context.
- Assess the current operational methods in use.
- Identify the challenges and obstacles encountered by the current system.
- Define the scope of the proposed system.
- Develop the organization's future strategic plan.

From Objective 1 - Chapter (1) Introduction will be delivered.

2. Research and compare the similar system

Tasks will be:

- Research two similar systems.
- Learn and compare their usable features.
- Learn and compare their functional features.

From the objective 2- Chapter (2) Product Research will be delivered.

3. Research, compare and choose the suitable methodologies, development languages and databases for this system.

Tasks will be:

- Research and choose the methodologies to be used in the system.
- Research and choose the development language to be implemented.

- Research and choose the database management system to be used.

From Objective 3- chapter (3) Literature Review will be delivered

4. Research and evaluate the legal, social, ethical, and professional issues relevant to the system.

Tasks:

- Conduct research on legal, social, ethical, and professional issues related to the system.
- Evaluate the impact of these issues on the system's development and implementation.
- Document findings and recommendations.

5. Analyse the proposed system scope specially and evaluate the requirements.

Tasks will be

- Set the Use Case diagram and class diagram.
- Set the target users.
- Analyze the scope of the proposed system and capture the requirements.
- Determine the functional and non-functional requirements of the system.
- Prioritize the requirements according to the MoSCoW prioritization.
- Represent the requirements with diagrammatic representation.

From the Objective 5- Chapter (5) Requirement Specification will be delivered.

6. Establish time frames and plan the project accordingly.

Tasks:

- Create time boxes for each feature in the system.
- Set analysis, design, implementation, and testing plans within each time box.
- Deliver the overall project time box. ( Chapter 6)

7. Commence the development of a flexible and reliable website, then test and evaluate the complete system.

Tasks:

- Deliver the time box according to the plan.
- Review the functions and features of the whole project.
- Evaluate the result against the aims and objectives.
- Assess the final product against similar products.
- Evaluate the final product against the justification.
- Evaluate the result against the time-boxed plan.
- Produce a personal evaluation.
- Deliver the development according to time boxes.
- Deliver the development according to time boxes as outlined in Objective 7, Chapter 7.
- 

8. Review the entire project and envision the future of the newly implemented system.

Tasks:

- Conclude and review the entire system.
- Conduct a critical review of the system.
- Document the problems encountered before, during, and after the project, along with their solutions.
- Outline the future expectations of the implemented system.

Deliver the evaluation and critical review as outlined in Objective 8, Chapter 8.

#### Project Plan with duration and deliverables

Objective	Methodology/ Techniques/ Methods	Deliverables	Duration
Objective 1	Framework-Agile Methodology- DSDM	Chapter -1: Project Introduction	5days
Objective 2	Framework-Agile Methodology- DSDM	Chapter -2: Project Research	5 days
Objective 3	Framework-Agile Methodology- DSDM	Chapter -3: Literature Review	5days

Objective 4	Framework-Agile Methodology- DSDM	Chapter -4: Legal, Social, Ethical and Professional issues	10 days
Objective 5	Framework-Agile Methodology- DSDM	Chapter-5: Requirement Specification	15days
Objective 6	Framework-Agile Methodology- DSDM	Chapter-6: Plan with Gantt Chart	5days
Objective 7	Framework-Agile Methodology- DSDM	Chapter-7: Development according with Project Plan (Gantt Chart)	100days
Objective 8	Framework-Agile Methodology- DSDM	Chapter-8: Evaluate the whole project	10days

## **Similarities of donation websites**

### **Product Research**

In this product research section, it will be reviewed and researched with comparable products as the proposed system. The research was reviewed according to Nielson's principles of heuristics. For this similar product that will review those product's functionality and usability. In this product research must review the target audiences, optimization, the rank, redirect link, social media of those product.

### **Similar Product Research**

In this section will compare two similar product of donation system and will provide the differences (functionality and usability) of those products. Those products are "Just Giving" and "Kick Starter."

### **Similar Product**

#### **Just Giving**

The first research product is the JustGiving donation website. JustGiving is recognized as the world's most trusted platform for online giving, assisting individuals in raising funds for the charities and causes they are passionate about. Launched in 2000, JustGiving.com aimed to facilitate online donations for charities worldwide. Over the past 22 years, more than £6 billion has been raised through the platform, supporting compelling causes in every country around the globe.



Website => <https://www.justgiving.com/>

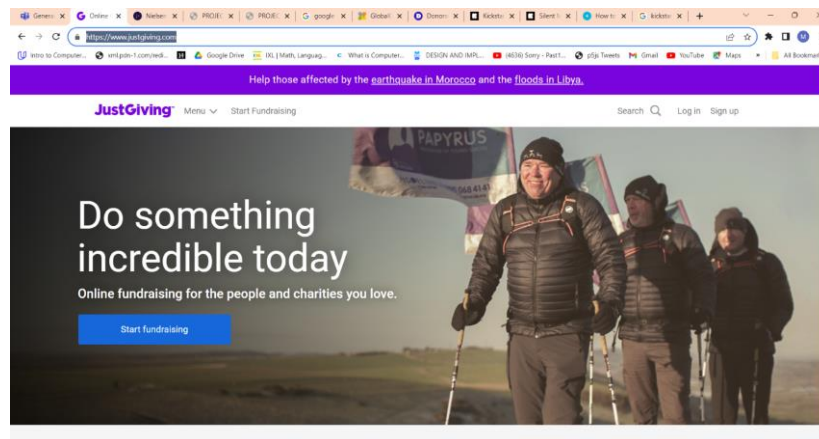


Fig (2.1) Just Giving donation website

## Kick Starter

The next product is Kick Starter donation and fundraising website. Kickstarter launched on April 28, 2009. Kickstarter campaigns turn ideas into reality. It is where creators share new visions for creative work with the communities that fund them. Their mission is to help bring creative projects to life for every environment.

Website => <https://www.kickstarter.com/?ref=nav>

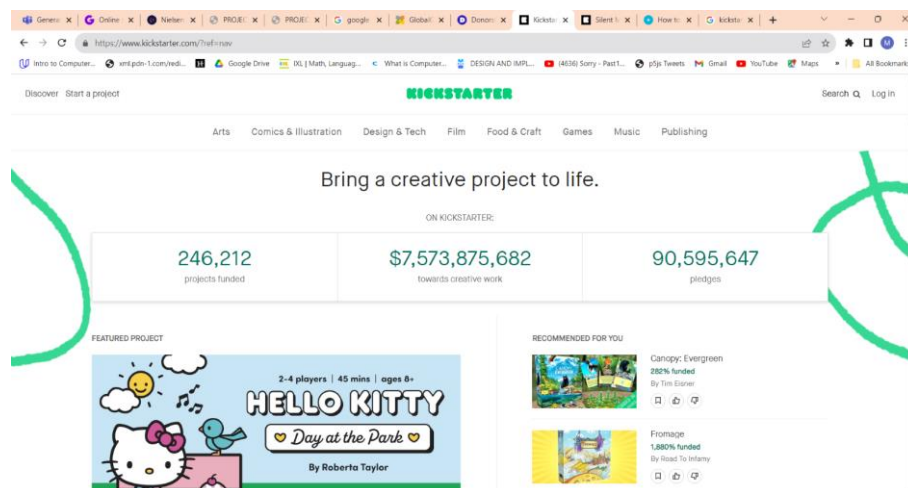


Fig (2.2) Kickstarter Website

## 10 Usability Nielsen's Heuristics for UIs

- Nielsen's heuristics, introduced by Jakob Nielsen and Rolf Molich in 1990, provide ten guidelines for developing user interfaces. These heuristics serve as general principles rather than specific usability rules. They offer a set of general



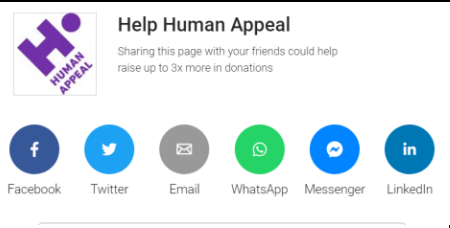
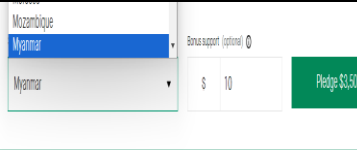

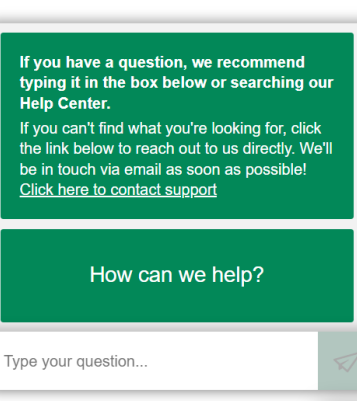
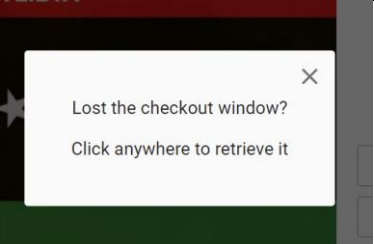
guidelines to create more accessible, user-friendly, and intuitive digital products. The heuristics include:

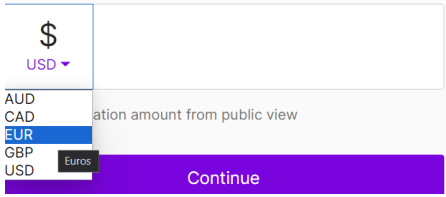
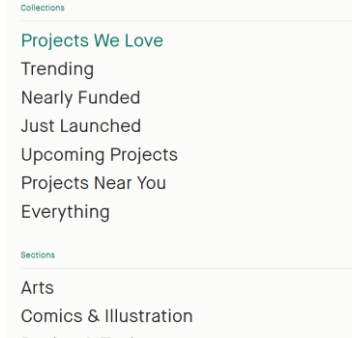

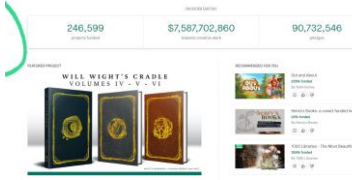
- Match between System and the Real World
- User Control and Freedom
- Consistency and Standards
- Error Prevention
- Recognition rather than Recall
- Flexibility and Efficiency of Use
- Aesthetic and Minimalist Design
- Help Users Recognize, Diagnose, and Recover from Errors
- Help and Documentation

**The differences in user interface of Research Donation Products**

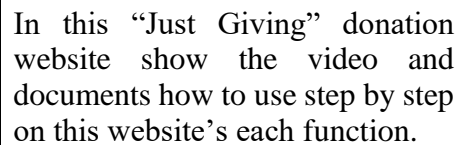
The user interface and useability will be compared by 10 Usability Nielsen's Heuristics. From this comparison can collect and consider which are the differences features and the most usability for this project.

	Just Giving	Kick Starter
Visibility of System Status:	<div><p><b>Action for Childr</b></p><p>Providing support ranging fi food vouchers and emerger funding for bills to debt and budgeting advice. Their resources are stretched sin the cost-of-living crisis.</p><p>Donate now</p></div> <p>User can see donate now pattern clearly and focus. They will arrive to donate so they point out the patterns to users.</p>	<div><p>Verify your email address to receive newsletters, notifications, and project recommendations.</p><p><b>KICKSTARTER</b></p><p>Arts Comics &amp; Illustration Design &amp; Tech Film Food &amp; Craft Games Music Publishing</p></div> <p>If user did not verify their email, they will show the alert red box upon the page to verify for security.</p>

<p>Match between System and the Real World</p>	 <p>Human Appeal Morocco Earthquake Emergency</p> <p>Users show the related funding project on the website.</p>	 <p>Automatic Watches Built in the USA - Cold Watch Company</p> <p>In this website show the real development project and need funding to continue the process.</p>
<p>User Control and Freedom</p>	 <p>Help Human Appeal</p> <p>Sharing this page with your friends could help raise up to 3x more in donations</p> <p>Facebook Twitter Email WhatsApp Messenger LinkedIn</p> <p>User can share where the social media what they want.</p>	 <p>User can control the currency and the amount of money what they want.</p>
<p>Consistency and Standards</p>	<p>Find us on</p>  <p>Users can ask what they want to know clearly about that organization on those social media.</p>	 <p>If you have a question, we recommend typing it in the box below or searching our Help Center.</p> <p>If you can't find what you're looking for, click the link below to reach out to us directly. We'll be in touch via email as soon as possible!</p> <p><a href="#">Click here to contact support</a></p> <p>How can we help?</p> <p>Type your question...</p> <p>English / UCV ...</p> <p>For the consistency and standard, this site has the chat box for the user who they want to do anything about this website and organization.</p>
<p>Error Prevention</p>	 <p>Lost the checkout window?</p> <p>Click anywhere to retrieve it</p> <p>There is alert for user if user click somewhere the user's check out data will be disappeared.</p>	

<p>Recognition rather than Recall</p>	 <p>User can choose the currency options what they want.</p>	 <p>User can view the website those upper languages what they prefer.</p>
<p>Flexibility and Efficiency of Use</p>	 <p>For the flexibility and Efficiency of user, the website shows the menu bar which can find the nav of this website.</p>	 <p>User can find clearly about the project and section of this organization.</p>
<p>As ethic and Minimalist Design</p>	 <p>When user visit the website for donation and for something else, user will be visited this website again cause of the sample design and words.</p>	 <p>This website is so youthful, simple, and creative for users. That why user might be visited this website again.</p>
<p>Help Users Recognize, Diagnose, and Recover from Errors.</p>	 <p>User put the incorrect email and password, that will show the alert message. That is why user can easily know what is wrong.</p>	 <p>User put the wrong data and invalid data on the search box, that will show the alert message as in the picture.</p>

and



function as in the picture.

### Functional Comparison of the websites.

Functional features of a website are the main basic functions that websites need to perform. In this case, all of them are donation websites and, therefore they must have the functional features of payment system, user management system and donation system. Following is the comparison of functional features of the similar systems and from this comparison, the most suitable basic functions for this project will be considered. Each website features are rated according to the usefulness of functionality features.

No	Functional criteria	Just Giving	Kickstarter
1	User Interface	The interface is simple and easily to understand for donation and fundraising process. (Rating :7)	The interface is simple but the process of doing donation and funding the project are a little complex. (Rating :5)
2	Sign Up	In this site, user cannot sign up with google. The user needs to add all information to Sign up. After that user	In this site, user can sing up with Facebook and apple. After the account has been created, users can

		can do fundraising process and all history of their activity. (Rating:6)	fill in their detail information like biography and more. (Rating:7)
3	Login in	Users do login into their account by typing their email and password which gave during sign up.	User can log into their account via Facebook and apple sign in.
4	Languages	Only English language available	There have four languages available. English, Japanese, French and Dutch.
5	Management of user information	User can manage their information from dashboard. The user can only give information when they do fundraise process and other donation process.	User can management their information in profile. The user information is going to use when they start the project and do donation.
6	Search Features	Users can search all donation campaigns names and other activity from the search box. Then user also can search the categories of the donation.	Users can search all activity and program by their name from the search box. Then user can also search the program's categories of the funding.

7	Description	Each donation is explained briefly about the project with videos and photos.	Each project explained the detailed and how they work out and how much they need for those projects to complete successfully.
8	Donate features	Users have the freedom to make donations of their choice on this campaign website. They can choose to contribute monthly and give as much as they are willing to. And choose the currency.	The donation features in this site are so creative. There have two types, no award for pledge or you can get the award by donating depend on the amount.
9	Fundraising features	In this site, user can do fundraise charity for project and for own cases. When user do, must choose the category which environment want to do charity and then fill all the requirements data. After that user will get the email address and the	The fundraising system is not for charity. For the youth, that was for who want to do creative project for various environment then fill about of the project step by step and then can-do reward system for the donors.

		excel sheet of funding.	
10	Payment method	The donation checks out page of this site can choose the amount and one-off or monthly. And then can-do payment with google pay, pail pay and various credit card for the process.	The check out system and payment are so simple just like normal system. The user can do payment with Visa, Mastercard, PayPal and JCB card. After do donation, the donor can get the receipt email and can get the reward if they pledge with rewards.

Rating: Neutral = 1 to 3, Good = 4 to 7, Excellent = 8 to 10

According to the above comparison, the JustGiving is rated 8 and Kickstarter is rated 9. Therefore, the some of the features of the JustGiving will be studied to be used in this website project.

### Summary

Since COVID-19 Global Pandemic has affected the entire world tragically, peoples and the works have transformed most of their lifestyles to home-based systems. Due to the continuously coming waves of the infection and several lockdowns, People cannot do donation and charity activities outside their homes. So, most of the donation and charity organization started building the website or mobile application to assist people. According to The New York Times (April 2020), most of the website traffics are increased at least 15% more during the peak of pandemic.

To facilitate donations and charitable activities, the organization has made the decision to develop a dedicated website. This website will allow the organization to



regularly update their information and activities, while also providing users with the ability to view and make donations. Additionally, if users encounter any challenges during these times, they can also utilize the platform to conduct fundraising for their specific needs. [OBJ]

## **Literature Review**

### **Project Management Methodology**

A project Management methodology is a group of principles, techniques and tools that are used to execute, manage, and plan the projects. That was helped project manager how to lead the team members and manage work while facilitating team collaboration. In this project management methodology have many unusual types. They all have pros and cons in somewhere. Want to provide the detail and which are the effective project management method for this project by each of the following project methodology.

### **Waterfall Methodology**

The "traditional" project management methodology is the waterfall. In traditional ways, projects are completed one stage at a time and in sequential order—like a waterfall that might flow down a collection of rocks. Since the tasks in the project are managed in the sequential approach and once a phase is completed in the project, there will be no iteration to go back to that phase again. Each phase of the project contains small, detailed tasks to be completed with a documentation. All the project scope and requirements are defined early in the project together with the stakeholders and they are fixed with no changes for the entire project.

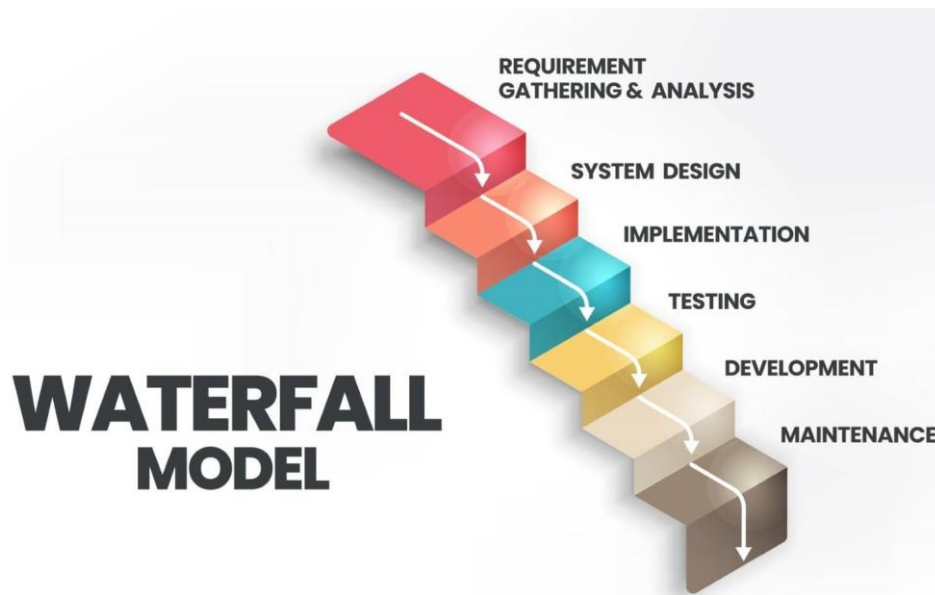


Fig (3.1) The Process of Waterfall Methodology

This picture shows the steps of the Waterfall Methodology

## **DSDM**

The agile project delivery framework known as the "dynamic systems development method" (DSDM) is mostly utilised for software development. The rapid application development process was used as the foundation for DSDM at the beginning. DSDM developed into a general project management and solution delivery methodology in 2007. DSDM is an incremental and iterative methodology that aligns with the values of Agile development, including ongoing user and customer involvement. It consists of three stages: the pre-project stage, the project stage, and the post-project stage. The project stage is then divided into various sections. Developers can go back to the earlier step or phase in DSDM and adjust as needed. Throughout the entire process, communication between users and developers is continuous.

DSDM (Dynamic Systems Development Method) is an Agile methodology that focuses on the full project lifecycle, including planning, development, and maintenance. Here are some reasons why DSDM is considered good for project development:

1. **User Involvement:** DSDM emphasizes active user involvement throughout the project, ensuring that the final product meets user requirements.

2. Iterative and Incremental: DSDM follows an iterative and incremental approach, allowing for the delivery of working software in short iterations. This enables prompt delivery of value and the ability to adapt to changing requirements.

3. Focus on Business Need: DSDM prioritizes the delivery of business value, ensuring that the project meets the needs of the business and delivers a return on investment.

4. Collaborative Approach: DSDM encourages collaboration among team members and stakeholders, fostering a sense of ownership and commitment to the project.

5. Flexible and Adaptive: DSDM is flexible and can be adapted to suit the specific needs of the project, making it suitable for a wide range of projects and industries.

6. Emphasis on Quality: DSDM emphasizes the importance of delivering high-quality software, with a focus on testing throughout the development process.

Overall, DSDM is good for project development because it promotes user involvement, delivers value early and often, focuses on business needs, encourages collaboration, and is flexible and adaptive.

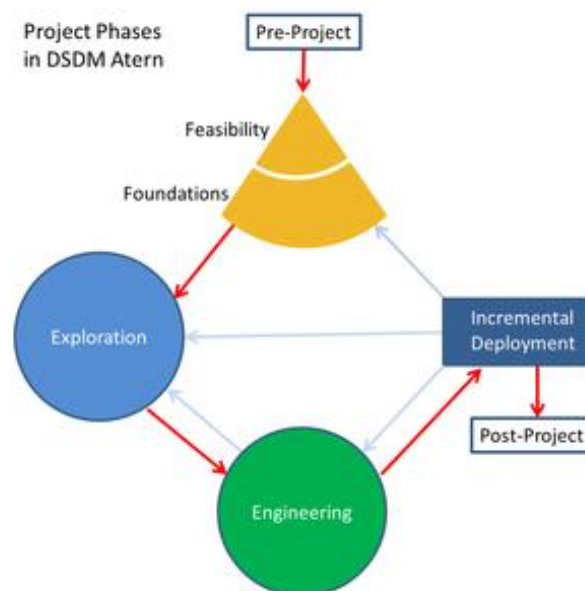


Figure 2: The Process of DSDM

This is the picture from the article of (Matthew Caine, 2021) showing the phases of DSDM.

## Scrum

Scrum, introduced to teams in 1993 by Jeff Sutherland, John Scumniotales, and Jeff McKenna of the Easel Corporation, is the most widely used Agile methodology, with over 66% of Agile adopters utilizing it. Scrum employs Agile principles through small teams, short development cycles, frequent communication, and designated roles to maintain project organization and progress. It is particularly effective for projects that require adaptability and thrive on change. Like Agile, Scrum is commonly applied in industries facing frequent change or uncertainties.

Scrum is an Agile framework designed for managing and organizing work on complex projects. It involves the following key elements:

Scrum is iterative and incremental, with a focus on delivering value early and often. It emphasizes collaboration, transparency, and continuous improvement, making it a popular choice for software development projects.

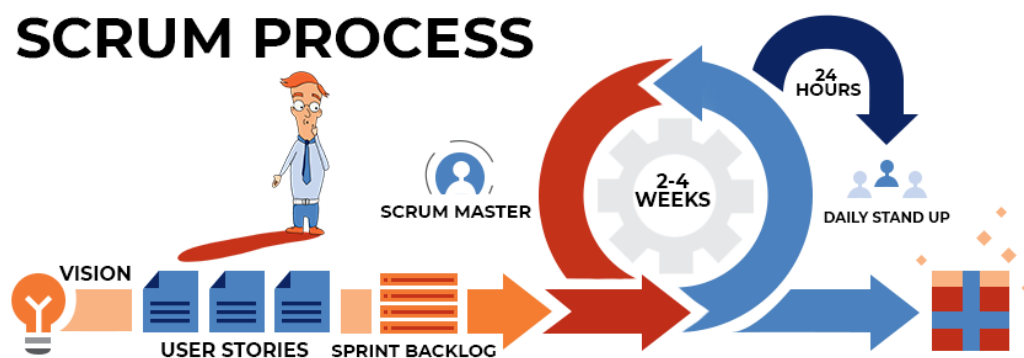


Fig (3.3) Scrum Process

### Recommendation for the project Management Methodology

That project has an extremely strict deadline and limited budget, it is suitable to use time boxing and Moscow technique of DSDM to be able to deliver on time. With time-boxing technique, the activities are allocated within a certain time constraint to be completed which can help access the progress of the project easily. Dure to the iteration and prototyping practices of DSDM, the feedback from the project supervisor can help improve the project. According to the DSDM principles which is different from the

Waterfall methodology, stakeholders are communicating continuously which can finally result in a high product. Therefore, the methodology which is the most suitable for this project will be the Dynamics System Development Method (DSDM) than other methodologies.

### **Programming Languages**

The frontend and backend of the website must be created using appropriate programming languages. The frontend of a student website project will work best using the HTML/CSS/JavaScript trio. However, there are several programming languages that can be used to create a website's backend. Three of them, including Java, PHP, and Python, have been selected as potential languages for this project.

### **PHP**

PHP stands for Hypertext Preprocessor, and it is a server-side scripting language developed for web development. Being open-source, PHP is freely available for download and use. It is known for its simplicity, making it easy to learn and use. PHP files have a ".php" extension. In Myanmar's web development environment, PHP is the most popular language.

### **Java**

Java is a class-based, object-oriented programming language designed to minimize implementation dependencies. It follows the "write once, run anywhere" (WORA) principle, allowing compiled Java code to run on any platform supporting Java without requiring recompilation. First released in 1995, Java is extensively used for developing applications across desktop, web, and mobile platforms. Renowned for its simplicity, robustness, and security features, Java is a favored choice for enterprise-level applications.

### **Python**

Python is a popular general-purpose, high-level programming language created by Guido van Rossum in 1991 and further developed by the Python Software Foundation. It prioritizes code readability, and its syntax enables programmers to express concepts in fewer lines. Python facilitates rapid development and efficient system integration. There are two major Python versions: Python 2 and Python 3, which differ significantly from each other.

Aspect	Java	PHP	Python
<b>Syntax</b>	Statically typed, types must be declared explicitly	Dynamically typed, types do not need to be specified	Dynamically typed, types do not need to be specified
<b>Performance</b>	Compiled into bytecode, runs on JVM (high performance)	Interpreted, run directly without compilation (can be slower)	Interpreted, various implementations and optimizations (competitive performance)
<b>Web Development</b>	Can be used, required external libraries and frameworks	Widely used, build-in support for web development, extensive libraries, and frameworks	Growing popularity, frameworks like Django and Flask
<b>OOP</b>	Enforces strict OOP principles, objects encapsulated within classes	Initially limited support, now fully supports OOP	Supports OOP, allows for both procedural and OOP
<b>Community and Ecosystem</b>	Large, well-established community, extensive documentation, libraries, frameworks available	Vibrant community, especially for web development, multiple frameworks like Laravel and Symfony	Large and active community, board range of libraries and frameworks for various purposes
<b>Ease of Learning</b>	Steeper learning curve due to strict syntax and OOP principles	Easier for beginners due to simple syntax	Praised for readability and simplicity, considered one of the easiest to learn

## **Recommendation Programming language**

The decision to use PHP for the backend of this project was driven by several compelling reasons. First, PHP is known for its simplicity and ease of learning, making it an excellent choice for developing the website. The developer already had a familiarity with PHP, which facilitated a smoother development process.

Moreover, PHP boasts a robust community and abundant learning resources, making it an accessible and well-supported language. Its performance is noteworthy, offering faster execution compared to some other programming languages. Additionally, PHP's efficiency in web development further cemented its suitability for this project. Hence, PHP emerged as the natural and well-rounded choice for powering the backend of our website.

## **Database Management System**

Database Management System (DBMS) is the software application that is used to manage, create, access, and maintain database. These management systems are important in managing or optimizing the storage and retrieval of donation detail, donor detail, funding detail and fundraising detail. These are various relational database management systems., but only three of them will be chosen as potentials for this project and be compared. These three systems include: MySQL, Microsoft SQL Server, and PostgreSQL.

### **MySQL**

MySQL is an open-sourced relational database management system which is released by MySQL AB in 1995. It is the most popular database and the basic of MySQL is familiar with most of the developers. Though it is an open-source software, the ones who want to go commercial can also purchase a license version from the Oracle. Since MySQL has been widely used for a certain period, the resources and community can be found easily.

### **Microsoft SQL Server**

Microsoft SQL Server is a relational database management system which is developed by Microsoft. It is not an open-sourced software, but SQL Server 2019 Express is the free version and can be used for developing small applications. It is one of the three market leading database management system and supports analytics applications, transaction processing and business intelligence.

## **PostgreSQL**

PostgreSQL is also an open-sourced relational database management system which is developed by Michael Stonebraker around 1980s. It does not belong to any cooperation or other private entity. It emphasized on the scalability and compliance of the SQL, and it can be run on most of the major operating systems

## **Recommendation database**

MySQL was chosen as the database system for this website project for several reasons. First, there was prior experience with MySQL, which made development smoother. It is an open-source option, making it cost-effective for student projects. Additionally, it is widely used in the web development community, ensuring easy access to solutions when issues arise. MySQL offers robust backup and recovery options, assuring data safety. It is also known for its scalability and speed, crucial for web applications. Lastly, it is an excellent fit when using PHP for web development. So, MySQL was the clear and practical choice for the project.

## **Legal, Social, Ethical and Professional issues**

Due to the tragic effects of COVID 19 global pandemic and rapidly increasing use of internet, the growth in the online donation and fundraising sector has been emerged during these years. With the increased growth of online donation and fundraising- legal, social ethical and professional issues concerning in online donation and fundraising sectors have become more crucial to protect or unless serious problems may occur.

## **Legal Issues**

Legal issues mean that was produced the laws and principle for one's country. For the online donation and fundraising, that organization would be non-profit. The fundraising information would be right and not for their own profit. Afterwards, the organization must carefully keep the data. Must care about the security of this site to protect from hacker or some of virus. Cause this online donation to have the payment process.

Operating a donation website in Myanmar, or any country, involves several legal considerations. Here are some key points to consider:

**Registration and Compliance:** Ensure that your website is registered with the relevant authorities in Myanmar. This may include registering as a non-profit organization or charity, depending on the nature of your donations.



**Taxation:** Understand the tax implications of receiving donations in Myanmar. Consult with a tax advisor to ensure compliance with local tax laws.

**Data Protection:** Implement measures to protect the personal data of donors in accordance with Myanmar's data protection laws, if applicable.

**Fundraising Regulations:** Familiarize yourself with any regulations or guidelines related to fundraising activities in Myanmar. This may include restrictions on certain types of fundraising or requirements for disclosure.

**Financial Transparency:** Maintain accurate records of donations received and how funds are used. Be prepared to provide financial reports to donors and regulatory authorities as required.

**Intellectual Property:** Ensure that your website content does not infringe on any intellectual property rights, including trademarks, copyrights, or patents.

**Local Laws and Regulations:** Stay informed about any changes to laws and regulations that may affect your donation website in Myanmar.

It is important to seek legal advice from a qualified professional familiar with Myanmar's laws and regulations to ensure that your donation website complies with all applicable requirements.

## **Social Issues**

Social issues depend on how the internet will affect the interaction between the human and the system. Social issues have of issues concerning with the whole society like the health-related issues of the society, how well the system be maintained if some disturbances occur and the issues concerning with the customer information rights.

To protect our user (donor and fundraiser) 's information, there will be a secured system and admins of the website will be paying close attention to the data privacy. Users should also research whether the website is secured or not before purchasing for donation and never choose the keep the password options can help reduce the information breach. Since this is the website concerning about donation campaign, the process and the detail information of this campaign will be expressed and shown to the donors to reduce the issues concerning about the campaign.

## **Ethical Issues**

Ethical issues concern with deciding whether a behaviour is right or wrong depending on one's norms, culture, rules, regulations and standard. Some actions may be unethical even though it is a legal act. According to Ben Davis (2021), most of the

ethical issues in online donation consist of web tracking, copyright, privacy, and fraud on the internet. This online donation ethical issue is just like e-business issue.

For the online donation website, it is extremely important to maintain the donor and fundraiser information confidential. There can be some cases when a user asks the information about other users with good intention or one of the staff take the user information with a good reason, at those time it is important not to give away any of the users' information.

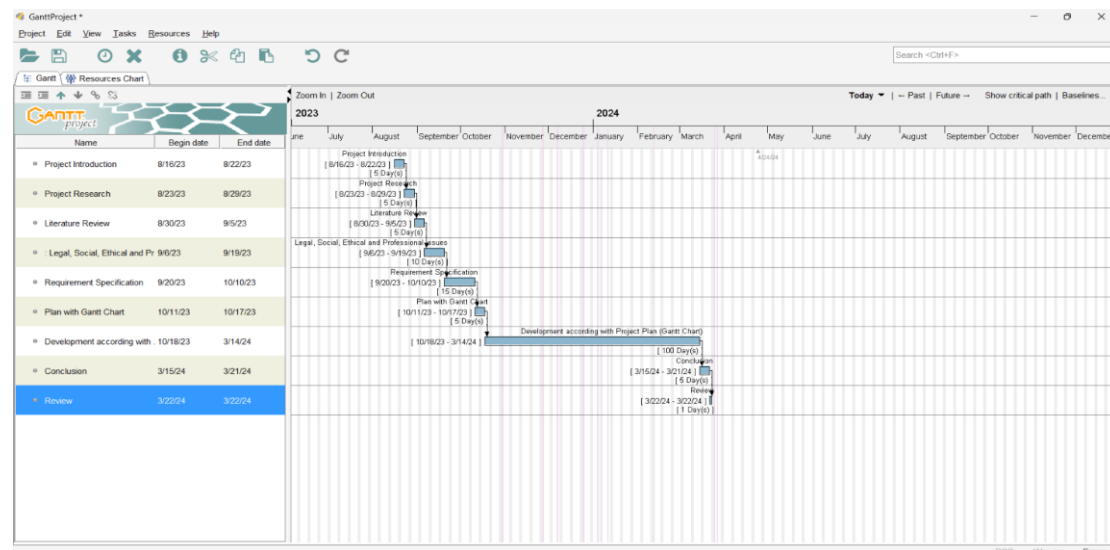
And where the organization provide the campaign, it is important to display the right and correct information where need some help from us.

For the developer, that would be ethical to give the same product (website) to another company once it has been sold. Also, software is produced for the intended company only is always completely owned by that company.

## Professional Issues

Professional issues are mostly related to ethical issues and involve standards of conduct and professional methods. Developers are required to honour other businesses' trademarks and copyrights. As a profession, developers are prohibited from engaging in fraud or frauds, which means they cannot accept payment or charge clients for services that should be provided free.

## Planning With Gantt Chart



The Gantt chart is a popular visual tool for planning and organizing a project. It breaks down the entire project into smaller tasks and schedules them to fit within a set period. The Gantt chart displayed above illustrates the project's timeline from August

2023 to April 2024. The planning and development process is organized into time-boxes, which include key tasks like system analysis, coding, and testing. Tasks can be prioritized based on the project timeline.