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HabJariah@Changlun: An Online Donation Platform

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Abstract : The COVID-19 attack in early 2020 shocked the world and led to an announcement by World Health Organization (WHO) as a global pandemic. As a result, numerous sectors, including the economy, business, and tourism, are negatively impacted. Thousands of people had financial hardships, and the White Flags movement gained popularity since many people needed assistance but did not know where to turn. In conjunction to that, HabJariah@Changlun is proposed as a web-based system that will be a central platform for collecting and distributing donations for Changlun residents who are in needs. Additionally, it serves as a platform for sellers to advertise and sell their goods. The primary goal of this system is to provide an efficient, systematic, and trustworthy approach of donating, receiving donation and selling products. The Rapid Application Development (RAD) methodology was used to implement this project, which consists of four phases, starting with requirements planning, continued with user design, construction, and ended with cutover. This project will be beneficial for the Changlun residents, especially the donor, the people in need, and the seller in Changlun. The donor now will have a trustworthy platform to donate their money. Furthermore, the people in need will receive the benefits as they have a platform to seek for help. On the other hand, the sellers can have a platform to sell their products. Most importantly, the less fortunate people can be helped.

Keywords: HabJariah@Changlun, online donation platform, COVID-19

1. Introduction

HabJariah@Changlun is a web-based system that acts as a one-stop center for people to express their kindness and help those in need within their community which is Changlun. Changlun is a small town situated near Universiti Utara Malaysia (UUM). The UUM students and staffs are big part of the community in Changlun since it is the nearest town to the university where they can find shopping center and restaurants. However, due to Movement Control Order (MCO), majority of the university

students were studying from home. Thus, Changlun has lost thousands of people who contributed to the community, particularly in the economic sector. This situation affects the local business as they were losing potential customers and having trouble to maintain their business. Besides, many people lost their job suddenly and did not know where to seek for help. Consequently, it is a great place to start this project, which will serve as a central platform for collecting and distributing donations for Changlun locals in need.

There are three main functions of this system: donation, shop, and request for help. For the donation function, the system admin will validate any campaigns, charities, organizations, as well as people in need who are seeking for help before they can be listed on the website. This process is crucial because nowadays, many fake campaigns or organizations claim that they need support even though the organizations do not even exist. Each of the requests need to include their target and specify what they need the most. Hence, whenever the target has been reached, the system admin will disable the ad. Next, the donor can choose the campaigns, organizations, and people that they would like to help. The donor can choose to help either through the donation system or meet the person in need directly. There are several ways to donate: online donation, offline donation, credit/debit card, and e-wallet. Other than that, this system will help the local business owners to expand their market towards increasing their income in cost-effective ways by advertising their products through the system. The donors can also buy from the sellers and donate to those in needs through this website. In this way, two parties can be helped; the people in need can get help while the seller can sell the product.

With the existence of HabJariah@Changlun, a systematic, efficient, and trustworthy system for donation can be provided. By using this system, the donors can have the ability to find the people in need and make donation without the need to worry about being scammed. More importantly, the people in need can use this system as a platform to seek for help in terms of financial or essential products. Furthermore, the seller or the shop owner can market their product through this system to boost their sales. Currently, even though the MCO has been lifted by the government, the people in need are still available here and there. Thus, HabJariah@Changlun will still be beneficial to the community.

2. Materials and Methods

The methodology that was used for this project is Rapid Application Development (RAD) [3], as portrayed in **Figure 1**. The advantage of employing RAD is that it facilitates effective progress monitoring and real-time communication on any changes by reducing planning time and prioritizing prototype iterations [4]. There were four phases in RAD: requirements planning, user design, construction, and cutover. The requirements were obtained by interviewing the potential user, reviewing and analysing the existing systems, as well as articles and journals about online donation systems. The low-fidelity prototype was created and designed to meet the requirements obtained. The prototype was created using PHP and SQL. Microsoft Visual Studio and phpMyAdmin were two of the tools used during the construction phase. Finally, an evaluation of the prototype's usability was carried out utilising a Google Form-created online survey. There were four (4) sections with a total of 19 questions in the questionnaire. Section A includes questions on respondents' demographic information while Section B consists of questions regarding the usefulness of HabJariah@Changlun. Section C enquires about the ease of use of HabJariah@Changlun while questions in aSection D are regarding the user-satisfaction of HabJariah@Changlun. The 5-point Likert scale, which spans from Strongly Agree to Strongly Disagree, is used for these questions [5]. The prototype was improved in response to comments received from the respondents.
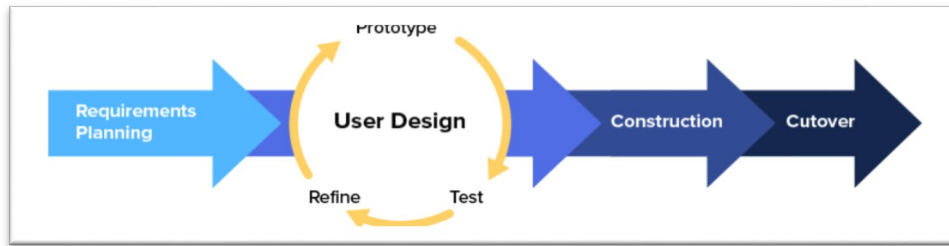
Figure 1: The RAD Methodology [3]

3. Results and Discussion

The four user types that HabJariah@Changlun is designed for are admin, donor, receiver, and seller. They need to use the browser on their desktop or mobile device to access HabJariah@Changlun. Before using the system, they must register and log in to the system. **Figure 2** depicts the selected admin interfaces. After logging in, the admin can choose whether to accept or reject the recipient's and seller's application. If the administrator chooses to approve the application, it will be published on the website; otherwise, the administrator must state the reason of rejection. The admin can also edit and read the information about their profile.
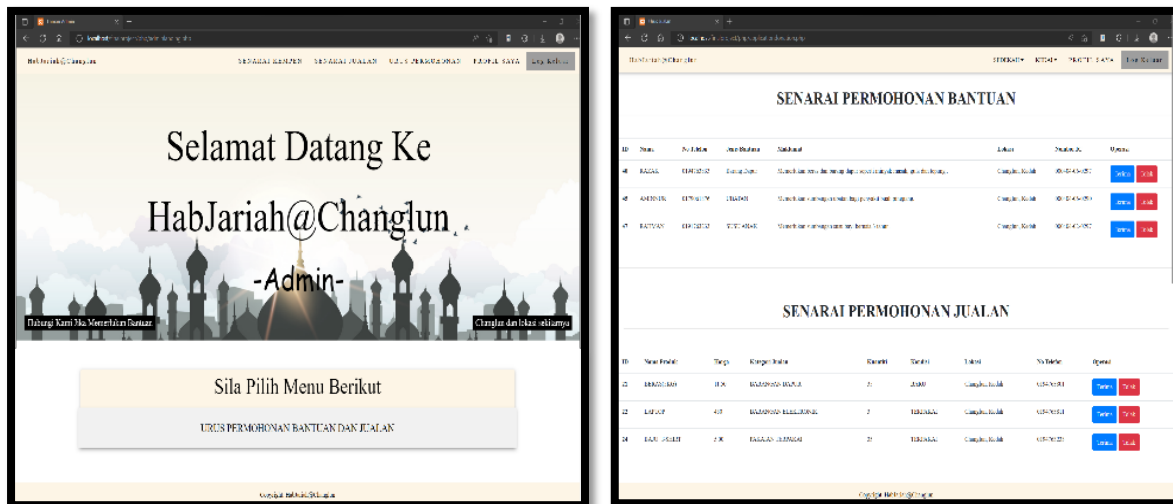

Figure 2: The interface of HabJariah@Changlun (Admin)

Among the functions that can be performed by the recipient after login are to apply for donation and manage profile. The recipient can apply for donation by filling up the form with the required information and wait for the approval from the system admin before their application can be listed on the website. They can also manage their profile by viewing and updating their information. For the donors, they can make donation and manage their profile once they login to the HabJariah@Changlun. The donors can choose any campaign that they would like to make a donation by clicking on the preferred campaign. Then, the system will display further information on the selected campaign. They can decide the amount of donation before proceeding with the donation. On the other hand, the sellers can apply for sales, manage sales and manage profile once they login to the HabJariah@Changlun. The sales can be applied by filling up the form with the required information and wait for the approval from the system admin before their application can be listed on the website. Then, they can view, update, and delete their sales once there are changes in term of availability or status. They also can view and update their profile.

An evaluation of usability was performed on 30 respondents. For the evaluation, the respondents followed the steps listed: (1) used the provided URL to access the system, (2) checked the system's

functionality, and (3) completed the questionnaire. Majority of the respondents agreed that they were able to complete the task successfully. This shows that the work and the time required to perform it are acceptable and reasonable. Majority of the respondents also believed that HabJariah@Changlun is useful. The results for HabJariah@Changlun's ease of use are shown in Figure 3. The vast majority of respondents believed that the system is simple to be used. This means that no additional training is required to utilise the system. However, the respondents believes that the prototype can be improved, especially on the interface design and navigation menu to make the system more user friendly.
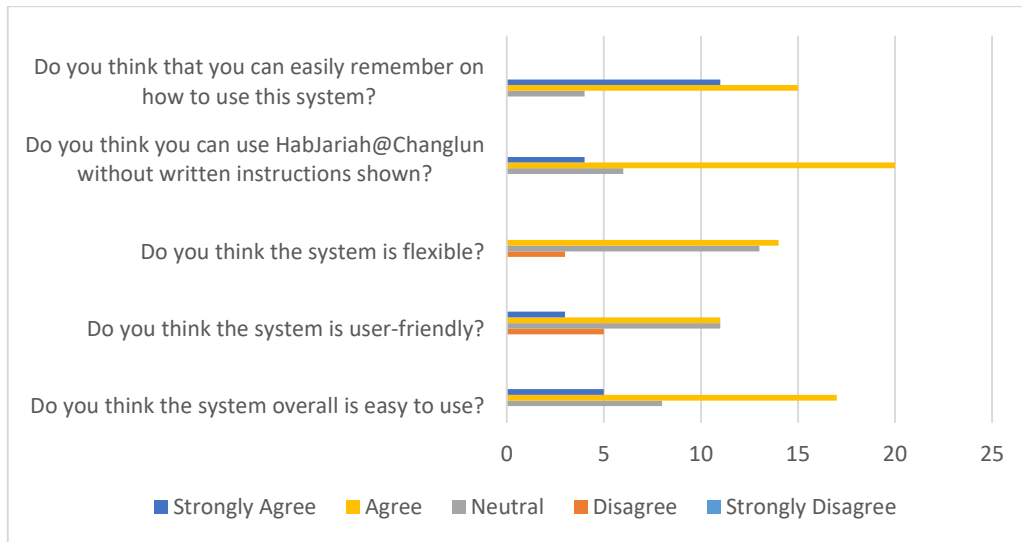
Figure 3: The ease of use of HabJariah@Changlun

More importantly, the HabJariah@Changlun was well-liked by most respondents. The result for HabJariah@Changlun's satisfaction is shown in Figure 4. This implies that the application meets the requirements of the potential users and satisfies them. Majority of the respondents agreed that the system works as what they wanted and willing to recommend the system to their family and friends.
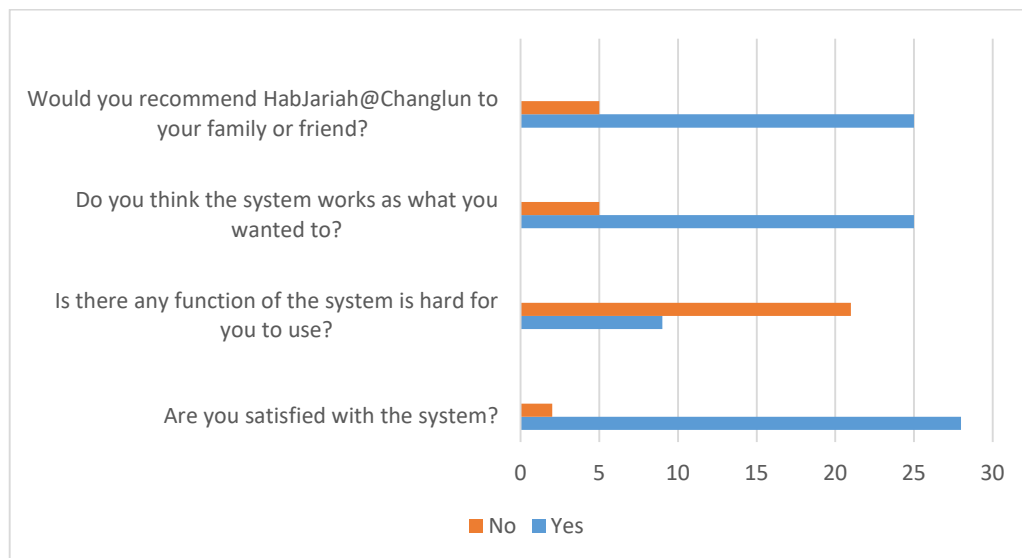
Figure 4: The satisfaction of HabJariah@Changlun

4. Conclusion

In conclusion, HabJariah@Changlun is well developed as the expected time, requirements. and evaluated to offer a more systematic and effective means to make donations as well as a platform for individuals to show kindness and assist those in need within their Changlun community. By having HabJariah@Changlun system, it is hoped that the users can use this system to make donation and help the people in need. According to the evaluation's findings, the majority of respondents are satisfied with the HabJariah@Changlun. However, to ensure that this system will work with better performance and having more useful functionality, some improvement need to be done in the future.

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