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An Event Announcer System

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Abstract : Nowadays, most event organizers use social media platforms such as Facebook, WhatsApp, and Telegram to disseminate event information. However, because they do not follow or subscribe to the event page or group, this is not an effective platform for event advertising. Aside from that, registering for the event via Google Form is inefficient for participants because the link to the registration page is pushed to the bottom when new messages are added to the page. Furthermore, participant management is difficult for the event manager to manage. As a result, this study developed an Event Announcer System, a mobile application that can help potential participants in finding information about upcoming events and registering for them. This application can also assist the event manager in advertising new events and managing registration efficiently. The rapid application development methodology was used to create this system. The functional requirements were first gathered via interviews and content analysis. Then, based on the requirements gathered, a prototype called event announcer system was created, and a field study was conducted to evaluate the prototype's usability. With 98% satisfaction, the evaluation results show that this system is useful and simple to use. The respondents were also satisfied with the functionality offered by this system.

Keywords: Event Manager, Event Organizer, Announcer System

1. Introduction

An event is a "celebration or display of some theme to which the public is invited for a limited time only, annually or less frequently" [1]. Events allow people to spend time together, appreciate cultural variety, experience it firsthand, and inspire creativity and innovation. To provide the best possible interaction between all participants, a competent handling of the strategic preparation, planning, and coordination of the execution of an event is required such as in university campus [2].

Nowadays, most event organizers use social media platforms such as Facebook, WhatsApp, and Telegram to promote an event and receive participant registration [3]. However, this is not an effective platform for event promotion because it may not reach a larger number of potential participants if they do not follow or subscribe to the event page or group. Aside from that, registering for the event via Google Form is inefficient for participants because the link to the registration page is pushed to the bottom when new messages are added to the page. Furthermore, participant management is difficult for event managers to manage. Hence, this study developed a mobile application called an Event Announcer System that can helps potential participant to seek information about upcoming event and

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make registration. Through an Event Announcer System, it provides campus event organizers a flexible, entirely integrated method of simplifying the event management process.

The Event Announcer System is a mobile application that performs the functions of an event manager. The system allows new users to register the application and log in to the system. There are three types of users: general users, event organizers, and administrators. This system provides the majority of the fundamental functionality required for an event. It enables the event organizer to complete a form when adding an event. The event organizer must provide some details such as the event title, event details, the date and time of the event, the venue, and the maximum number of participants. This system, on the other hand, allows any user to register an event with just a few clicks. General users can choose which events they want to attend, then click the register button at the bottom of the event page and enter their personal information to register.

2. Materials and Methods

This system was developed using Martin's [4] Rapid Application Development (RAD) methodology. RAD is an adaptive software development method that focuses on the designing and prototyping stages in order to obtain immediate user feedback. Although software development methodology is constantly evolving [5] RAD is still relevant and widely used by software developers. It consists of four major phases: requirements planning, user design, construction, and cutover. **Figure 1** depicts the flow of the phases.

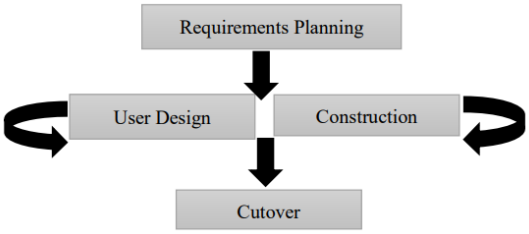

Figure 1: The phases of RAD [4]

The requirement planning phase is to plan the requirements for the interaction based on the event organizers and users in UUM. In this phase, the requirements of the system were identified whether it is suitable to the project or not. The requirements were described and displayed using the Unified Modelling Language (UML) diagrams including 3 type of diagram which is use case diagram, activity diagram and class diagrams. UML diagrams is purpose of used to presents a system along with its main actors, roles and actions as found in Adediran and Al-Bazi [5] and Hussain, et al. [6].

Besides, the user design and construction phases are performed concurrently where the user interface of the mobile app is designed. Users are involved during the design and construction process where they provide feedback for improving the user interface and information flow of the mobile app for event announcer.

Finally, during the cutover phase, an evaluation is conducted to measure the usability of the mobile app. The details implementation of the phases is explained in the following sections. The requirement planning, user design, and construction phases are covered in the Design and Development of Event Announcer System section, while the cutover phase is explained in evaluation of Event Announcer System section.

3. Results and Discussion

A mobile app prototype for Event Announcer System was developed. It denotes the specifications given in the preceding subsection. Software prototyping is a popular method of displaying software requirements so that users can provide additional feedback and recommendations based on their

interactions with the prototype. **Figures 2, 3**, and **4** show screenshots of the Event Announcer System's selected interfaces.

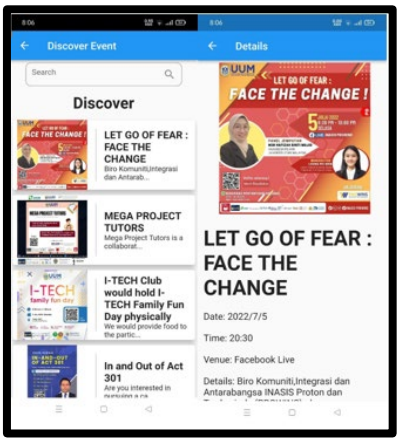

Figure 2: The interfaces for main page (left) and the event detail (right)

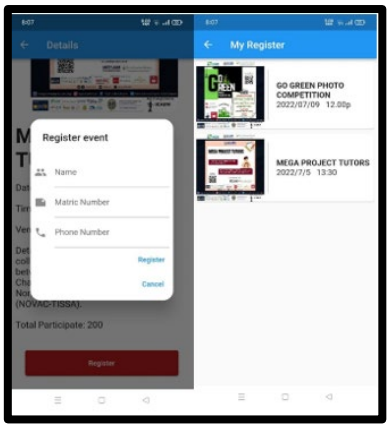

Figure 3: The interfaces for registration event page (left) and the record for success register (right)

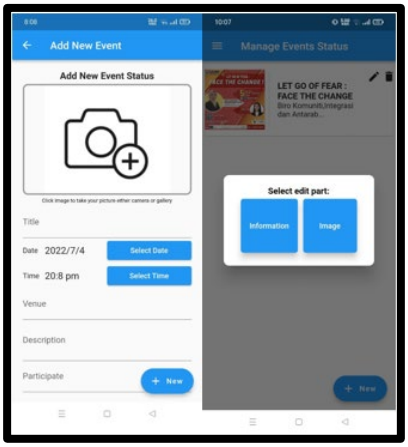

Figure 4: The interfaces for add new event (left) and select edit part (right)

A usability test was also carried out on 30 Universiti Utara Malaysia students. They were approached at random and asked to use the system and complete a questionnaire. The survey respondents' responses in Section B were examined. The section assesses respondents' attitudes toward the design and layout of the event announcer system interface, ease of use, learnability, usefulness, satisfaction, and overall recommendation. It also measured respondents' opinions on the event announcer system. The frequency and average of the responses are shown in **Tables 1, 2, 3, 4,** and **5**.

Table 1: The respondents' views on the layout and design of the interface

Questionnaire Items	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Average
The interface is pleasant to use.	0	0	2 (6.7)	11 (36.7)	17 (56.7)	4.5
The background color of the application is appropriate.	0	1 (3.3)	1 (3.3)	17 (56.7)	11 (36.7)	4.27
The layout of the application looks neat and clean.	0	0	1 (3.3)	9 (30)	20 (66.7)	4.63
The design of the application is attractive.	0	0	1 (3.3)	13 (43.3)	16 (53.3)	4.5

Table 2: The respondents' opinions on usability

Questionnaire Items	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Average
The Event Announcer System is easy to use.	0	0	0	7 (23.3)	23 (76.7)	4.77
The system is user friendly.	0	0	1 (3.3)	12 (40)	17 (56.7)	4.53
The system is meet my needs.	0	0	0	9 (30)	21 (70)	4.7
I can use it without instructions.	0	0	0	9 (30)	21 (70)	4.7

Table 3: The respondents' responses on the learnability

Questionnaire Items	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Average
I learned to use it quickly.	0	0	0	8 (26.7)	22 (73.3)	4.73
I easily remember how to use it.	0	0	0	9 (30)	21 (70)	4.7
I quickly became skillful with it.	0	0	1 (3.3)	9 (30)	20 (66.7)	4.63
It is easy to learn to use it.	0	0	0	11 (36.7)	19 (63.3)	4.63

Table 4: The respondents' responses on the usefulness

Questionnaire Items	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Average
It helps me be more effective.	0	0	1 (3.3)	4 (13.3)	25 (83.3)	4.8
It helps me be more productive.	0	0	0	11 (36.7)	19 (63.3)	4.63
It is useful.	0	0	0	8 (26.7)	22 (73.3)	4.73
It saves my time when I use this system.	0	0	1 (3.3)	7 (23.3)	22 (73.3)	4.7

Table 5: The respondents' responses on the satisfaction

Questionnaire Items	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Average
This system has all the functions and capabilities I expect it to have.	0	0	0	6 (20)	24 (80)	4.8
I feel comfortable using the system.	0	0	0	7 (23.3)	23 (76.7)	4.77
Overall, I am satisfied with this system.	0	0	0	9 (30)	21 (70)	4.7

Users also provide valuable recommendations during the usability test, such as improvements to the system's interface and suggestions for new functions. **Figure 5** portrays the comments.

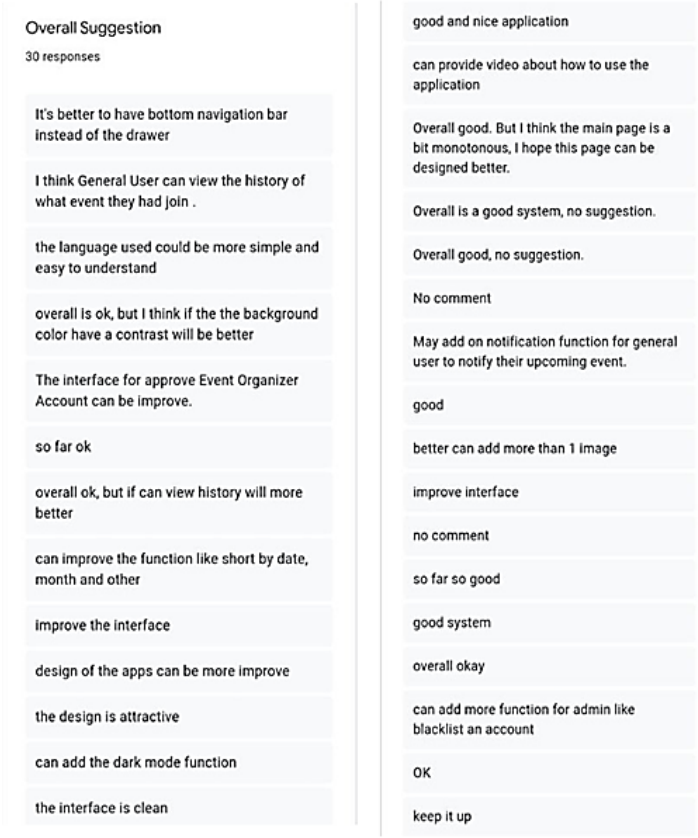

Figure 5: Recommendation

4. Conclusion

The design and development of a mobile app for an event announcer system was described in this paper. This system is useful and simple to use, according to the evaluation results, with 98% satisfaction. The functions provided by this system were also well received by the respondents. There are numerous ways to improve the event announcer. In the future, we plan to expand the functionality of the Event Announcer System by allowing general users to search by date and time, making it easier and faster for them to find events. In the future, we plan to expand the functionality of the Event Announcer System by allowing general users to search by date and time, making it easier and faster for them to find events. In addition, based on previous suggestions from respondents, we intend to implement a history function

that will allow users to review what events they have previously attended. It could also have a comment section where users can leave feedback or suggestions and rate the event organizers. It will give all event organizers the opportunity to improve the event.

Acknowledgement

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