

# ANDROID-BASED EVENT INFORMATION APPLICATION IN THE CITY OF MAKASSAR USING LOCATION BASED SERVICE TECHNOLOGY

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**Abstract--Android Based Event Information App in Makassar City using Location Based Service technology is an application that provides information about event information, especially in the city of Makassar by utilizing the Android platform. This research is based on the background because there are still many people who do not know the information about events that are ongoing or will be held in the city of Makassar. That is due to the lack of information obtained and the lack of a forum to convey information about the spread of events easily. The purpose of this research is to build an event information application to help the public receive event information quickly and easily, to help people find the route to the event they want with the help of Location Based Service technology with use of the android platform to convey event information so that it can be accessed whenever and wherever they want. This research produces an Android-based Event Information Application that helping people get event information with 70% testing results and making it easier for people to find routes to the event location according to their wishes by using technology Location-Based Service with a percentage of 60% strongly agrees.**

**Keywords:** Event; Android, Location Based Service,

## I. INTRODUCTION

An event is an agenda, activity or certain festival that shows, displays, and celebrates to commemorate important things that are held at certain times with the aim of communicating messages to visitors. An event is also an activity that is carried out every day, month or year by an organization by bringing people to a place so that they get important information or experiences and other purposes organized by certain parties [1]. An event is an activity held to commemorate important things throughout human life, either individually or in groups related to customs, culture, traditions and religion which are held for specific purposes and involve the community environment which is held at certain times. Many of the people of Makassar City and its surroundings want to take part in events such as music, exhibitions, talk shows and so on, but in their implementation there are obstacles to many people who do not know the existence of these events. That is due to the lack of information obtained and the lack of a forum to convey information quickly that can be accessed easily by the public and sometimes people do not know the information on the location where the event is held. Based on the above background, the authors designed and built an Android-based Event Information Application in Makassar City by utilizing Location Based Service technology

and using the waterfall method in developing the system. This Waterfall method has clear, real and practical stages so that it can avoid repetition in stages so that the system development carried out can get the desired results. The Waterfall method is also a systematic and sequential system development model [2]. With the construction of this information application, it can become an information container that can provide more complete information on events in the city of Makassar and can help people find routes to the event location by utilizing Location Based Services technology which can be accessed anywhere using smartphone tools to get event information optimally.

## II. METHODE

### A. Application Design Methods

In designing the application the author uses the SLDC (System Development Life Circle) method with a waterfall model which is also often called the classic life cycle, by describing a systematic and sequential approach to software development. In this method, the stages must be carried out in sequence before moving on to the next step [3].

The stages of designing an application using the waterfall model are as follows:

- a) Requirement analysis and Definition.
- b) System and Software Design
- c) Implementation and Unit Testing
- d) Integration and System Testing
- e) Operation and Maintenance

### B. Testing Method

The author uses the black box testing method. Black box testing, also known as Behavioral Testing, is a software testing method where the internal structure, design, and implementation of a part being tested are unknown to the examiner. In black box testing that is tested is functionality and non-functionality, although usually what is tested is only functional [4].

### C. System Planning

#### 1) Use Case Diagram

Use case diagrams are one type of diagram in UML that describes the interaction between the system and actors, use case diagrams can also describe the type of interaction between the system user and the system [5].

Use Case Diagrams are used to find out the functions and who has the right to use those functions. The use case diagram of the proposed system is as follows:

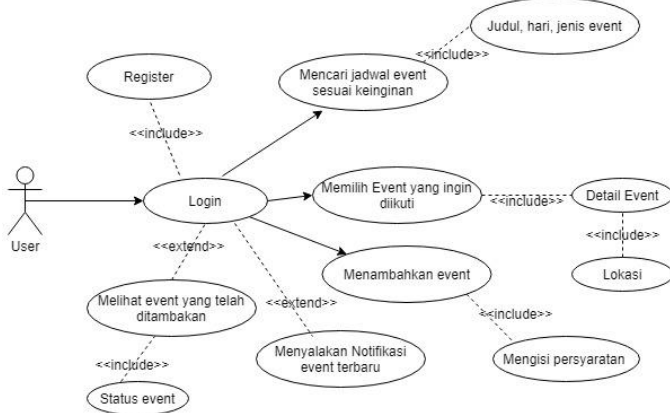


Figure 1. Use Case Diagram User

In figure 1 the actor is people that using the application. Actors who use the event application to find, view and add information about events in the city of Makassar.

2) Class Diagram

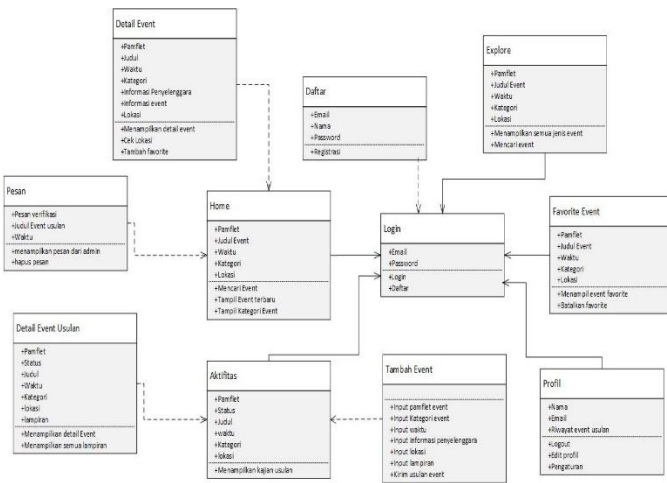


Figure 2. Class Diagram

D. Interface Design

The interface design is a description of the application that will be made. The interface designs of the event information application are as follows:

1) Login Design and Main Menu

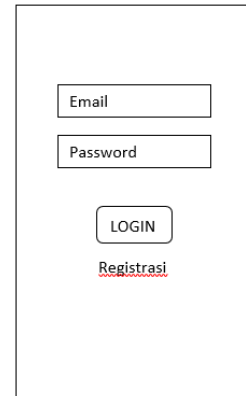


Figure 3. Login Design

In Figure 3 is the login display design, to enter the system the user must first log in by entering an email and password.

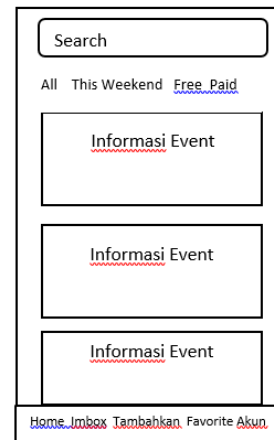


Figure 4. Main Menu Design

In Figure 4 is the Main Menu Design which consists of a search feature, all event feature, this weekend feature, and free or paid events.

2) Details Event Design

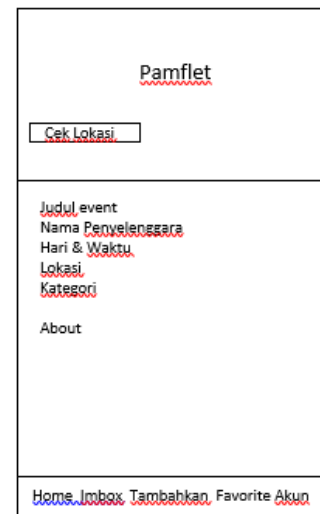


Figure 5. Details Event Design

Figure 5 is the Detail Event Design which consist of an event pamphlet, location feature, and details event.

### III. RESULT AND DISCUSSION

#### A. Implementation

##### 1) Login Design and Main Menu

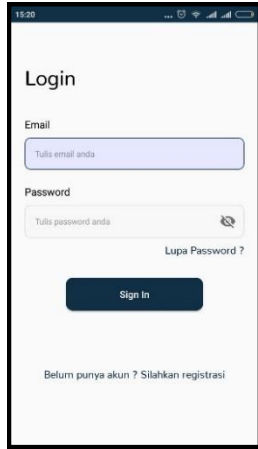


Figure 6. Login Interface

Figure 6 is a user login interface, before accessing the system the user is required to log in first by entering the email and password then clicking the Sign in button.



Figure 7. Main Menu Interface

Figure 7 is a main menu interface that's shows your account name, your location, search feature, category feature, and list of the main events.

##### 2) Details Event Interface

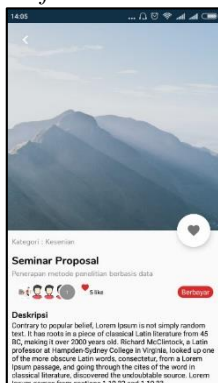


Figure 8. Details Event Interface

Figure 8 is a details event interface that's shows details of the selected event in the form of title, time, location, category and a flyer image of an event.

#### B. Testing

Betha testing is done by the author to directly test the application. Beta testing, also known as user testing takes place at the location of the end user by the end user to validate the usability, functionality, compatibility, and reliability of the software being created [6]. Through the media commissioner, users make an assessment of the application. By making a questionnaire aimed at 10 people to test the appearance and application process with 8 questions.

TABLE I  
Overall Presentation Questionnaire

NO	Pertanyaan	Keterangan					TOTAL
		SS	S	CS	KS	TS	
1	Apakah aplikasi dapat berjalan di <i>smarthphone</i> dengan baik?	70%	30%	-	-	-	100%
2	Apakah tampilan aplikasi mudah di pahami dan <i>userfriendly</i> ?	60%	40%	-	-	-	100%
3	Apakah fitur pencarian memudahkan menemukan sebuah <i>event</i> ?	60%	30%	10%	-	-	100%
4	Apakah informasi yang di sajikan dalam aplikasi sudah baik?	60%	40%	-	-	-	100%
5	Apakah aplikasi membantu penyelenggara dalam menyebarkan <i>event</i> mereka?	50%	50%	-	-	-	100%
6	Apakah anda sangat terbantu dengan aplikasi ini?	70%	30%	-	-	-	100%
7	Apakah Aplikasi mempermudah user untuk menemukan rute menuju lokasi <i>event</i> sesuai keinginan mereka dengan bantuan teknologi LBS?	60%	30%	10%	-	-	100%
8	Aakah notifikasi muncul dan bekerja dengan baik pada <i>smatphone user</i> ketika ada <i>event</i> di sekitar user berada?	50%	40%	10%	-	-	100%

### IV. CONCLUSION

Based on the test results of this research, it can be concluded that the application can help organizers to spread their event with a percentage of 50% agreeing, this application also helps the public to get event information with a percentage of 70% strongly agree. The use of Location Based Service technology also makes it easier for people to find a route to the event location according to their wishes with a percentage of 60% saying they strongly agree.

### IV. ACKNOWLEDGMENT

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