

Wis Semar: Application of Tourism Public Guide with Augmented Reality Technology

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Abstract - Semarang city is a capital city of Central Java, Indonesia which is have some tourism site. Tourism site in Semarang consist of history and cultural tourism site, natural tourism site, and culinary tourism site. History and cultural tourism site such as Lawang Sewu, Sam Poo Kong temple, Blendhuk church, Kota Lama, Agung Semarang mosque, Ronggowarsito museum. Natural tourism site such as Marina beach, Maron beach, Tirang beach, Mangkang zoo, Tinjomoyo forest. For culinary tourism site, Semarang is popular of Lumpia. To get lumpia, tourist can buy it in central souvenirs in Semarang at Pandanaran. Besides lumpia, there are Bandeng Presto, Wingko Babat, and some good foods. Government of Semarang City now combining technology and tourism to give tourist a facility when they are travelling in Semarang. It is a mobile application based Android operating system. The application can give a public service to guide tourist in Semarang. Beside the facts that this application is useful for tourism, this application can be used as a learning material for students, so the students have more knowledge about their city, cultural, and tourism sites. Also, this application are using augmented reality technology. The students will be learning about using this technology to ease their learning. In this paper, there will be discussed about this application of public service of tourism guide that can be useful for learning material to learn about cultural, tourism sites, and technology.

Keywords - Application, Cultural, Android, Augmented Reality, Semarang, Tourism Sites

I. INTRODUCTION

Semarang is a capital city of Central Java, Indonesia which have so many culture and tourism objects such as historical heritage from Netherlands, Java, and China. For example, there are Lawang Sewu, Sam Poo Kong pagoda, Blendhuk church, Kota Lama, Agung mosque, Ronggowarsito museum, Mandala Bhakti museum, and Raden Saleh cultural park.

With the fact that Semarang is a city which rich of culture and tourism object, people still do not know them. Because of this, people need a learning object which can include cultural and tourism object in Semarang. People can learn history and culture of Indonesia.

There are so many developer out there have been created social media, android application, mobile game, or PC. Beside for everyday use, this technology can be useful to learning media. Government of Semarang is starting to use android application to create a digital tourism guide called Wis Semar with augmented reality technology.

Although this public application of tourism guide have a goal to bring a complete description about Semarang cultural and tourism guide, they hope that this application can help tourist when searching tourism site

and as a learning media in augmented reality technology and learn about city, culture, and history of Semarang.

II. LITERATURE REVIEW

A. Tourism

Tourism is a recreation outside of usual living area with the aim to relieve stress from work. As it said in Indonesian constitution number 10, 2009, tourism is an activity and the facility is fully supported by public, business men, and government [1]. World Tourism Organization (WTO) said that tourism is human activities, which do travelling and living in area which is not their living area in more than one night with the aim to relieve stress and get some entertainment.

B. Culture

Koentjaraningrat said that cultural is ideal form of abstract and cannot be touched which is in mind like idea, norm, belief, etc. [3]. Ki Hajar Dewantara said that cultural is a result of age and nature which is a human mind [4]. So, it can be concluded that cultural is a result of human mind which is idea, norm, belief, etc.

C. Augmented Reality Technology

Augmented reality technology is a technology that combine virtual objects including two dimensions or three dimensions objects and real objects to three dimensions real environment, then projecting that virtual objects in real time so it can be integrated and run interactively in real life. This technology can be used in military, communication, and manufacturing which have high risk and need additional objects before make any implementation [5].

D. Learning Media

Reference Kamus Besar Bahasa Indonesia (Indonesia Dictionary) shows that media is devices or communication tools like

newspaper, magazine, radio, television, film, poster, and banner. Media is usually called as audio visual tools, it mean that tolls which can be saw and heard also used in learning process to reach aim as making communication more effectively and efficient. While learning is a communication process, delivery of messages from sender to receiver through channel or certain media. A communication process have to be created and realized through activity of delivering messages, from every teacher to student and vice versa [6]. For conclusion, learning media is a communication tools that can be used to deliver a message in learning activity to reach the aim of study.

III. WIS SEMAR AS A LEARNING MEDIA

Seeing problem in at least citizen knowing tourism objects and cultural in Semarang city, the government of Semarang publishing an application to acquaint Semarang called Wis Semar (Wisata Semar or in English: Semar Tour) which using augmented reality technology. This application can be learning media to citizen so they can be more educated about culture and tourism objects in Semarang. How to use this application can be described like this:

A. Installation

Download it through Google Play Store in Android to get this application. After that, this application automatically installed in smartphone and can be used.

B. How to use

Before using this application, user have to activate GPS. After that, user can open the application which had been downloaded before. The main interface can be seen in fig.

1.



Fig 1. Main Interface of Wis Semar



Fig 2. Interface of "Temukan Lokasi" (Find Location)

If user choose "Temukan Lokasi" (Find Location), it will showing menu like "Wisata" (Tour), Hotel, "SPBU" (gas station), Restaurant, Transport, "Tempat Bermain" (Playground), "Tempat Ibadah" (worship place), and Mall. User can choose Wisata or tour to know about tourism objects and culture in Semarang. It can be seen in fig. 2.

If user choose "Wisata" (Tour), this application will running camera facility, this camera will execute augmented reality technology. User can use this camera to find tourism object in Semarang with distance from user and the tourism object. This feature of augmented reality can be seen in fig. 3.

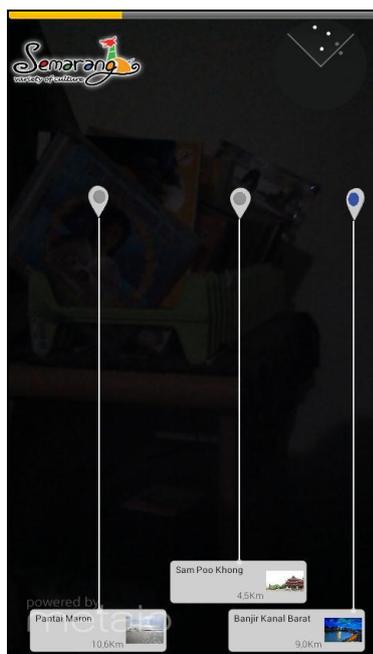


Fig 3. Wis Semar which use Augmented Reality Technology



Fig 4. Interface of "Lihat Daftar" (See the List)

Back to main menu, except for find location, user can choose from “Lihat Daftar” (See the List). This menu contains full explanation about each tourism objects, culture, souvenir, transport, hotel, restaurant, “SPBU” (gas station). This menu can be seen in fig. 4.

If user choose menu of tour or culture in Semarang city, this will be showing information about history of the location. Citizen will be easily to recognize and learn about tourism objects and culture in Semarang city. The example of this menu can be seen in fig. 5 and fig. 6. Fig. 5 shows about Gua Kreo, one of tourism objects in Semarang city and fig. 6 shows about Dugderan, one of culture in Semarang city.



Fig 5. Interface of Tour Menu



Fig 6. Culture Menu

IV. CONCLUSION

In this paper, it can be concluded that one of learning media that can be used to facility citizen and tourist or anyone to learn and recognize tourism objects and culture in Semarang city using an application called Wis Semar with augmented reality technology. Augmented reality technology nowadays has grown better with the proof of this application.

With this application, citizen and tourist or anyone can experience how to use this technology, train ability in using application, and give learning about full explanation about each tourism objects and culture in Semarang city. With this application, citizen and tourist or anyone can easily find tourism objects location in Semarang.

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(Arranged in the order of citation in the same fashion as the case of Footnotes.)

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