SEARCH SOUVENIRS TYPICAL REGION BASED ANDROID

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ABSTRACT

Fruit hand or ordinary people say by-by something brought from traveling. Bandung including major cities in Indonesia and included a tourist destination for local residents and foreign tourists. Already selazimnya when a person traveling either out of town or out of the country either on holiday or on business, and others are certainly becoming a necessity or habit bahwasannya souvenirs is something that can be taken to give the impression that someone is after traveling or want to visit to relatives as the embodiment of compassion to people who loved it family friend or neighbor,

It required a solution that covers all of these problems. In this thesis, the author discusses the problems experienced by people when traveling wanted to get souvenirs. The platform used in this study is an android with the consideration that the current android has a market share of 70% of all smart devices that are enabled.

Based on testing using black box testing methods and acceptance, the software searches for souvenirs, enables the public to know the route to the location of the store, the quality of shops and services.

Keywords :*by - by, android, quality*

1. PRELIMINARY

Fruit hand or ordinary people say by-by something that was taken from traveling [1],Bandung including major cities in Indonesia and included a tourist destination for local residents and foreign tourists. Already selazimnya when a person traveling either out of town or out of the country either on holiday or on business, and others are certainly becoming a necessity or habit bahwasannya souvenirs is something that can be taken to give the impression that someone is after traveling or want to visit to relatives as the embodiment of compassion to people who loved it family friend or neighbor.

The first problem many people who are traveling either within the city or outside the city when the return is certainly not empty-handed, but they want to bring souvenirs for family, relatives and neighbors were at home but not everyone knows the position of the store and the route, to the needs to clarify the existence of a souvenir shop itself so that they get what they want to buy. The next problem most people do not know the service or the quality of the store providing souvenirs making sure people are not buying souvenirs from shops providing souvenirs.

1.1 Android OS

Android is an operating system based on Linux is Open Source is designed for touch screen mobile devices such as smart phones and tablet computers. Android was originally developed by Android, Inc., with financial support from Google, which then bought it in 2005. The operating system was released officially in 2007, in conjunction with the establishment of the Open Handset Alliance, a consortium of companies hardware, software, and telecommunications that promotes open standards mobile devices. The first Android phone went on sale in October 2008 [2]. Android OS has a very good, fast and strong and has an intuitive user interface that is packed with choice and flexibility, Android SDK (Software Development Kit) provides the tools and APIs needed for developing applications on the Android platform using the Java programming language.

1.2 Souvenirs

No souvenirs for their sellers and buyers (people traveling), at its core is the goods brought from traveling [3] for the family or neighbors home runs at home when traveling.

1.3 route

These adalah the distance or the direction that must be taken [4] to a person where a person when traveling requires either that the route to home or away.

1.4 Mobile applications

Mobile applications is an application that lets you perform mobility by using devices such as PDAs, cell phones or mobile phones. By using the mobile app, you can easily perform a variety of activities ranging from entertainment, selling, studying, doing office work, browsing, etc. [5]. Examples of mobile programing for mobile [6]:

1. JavaFX Mobile, is used on Android smartphones.

2. J2ME (Java 2 Mobile Edition) is the most common and widespread that support, blackberry is still using the additional J2ME API. J2ME is a set of specifications and technologies that focus on consumer devices. This device has a limited amount of memory, spend a little power from the battery, the small screen and low network bandwidth.
3. In Symbian C ++ framework, is specifically for mobile phones with Symbian OS.
4. C # .NET, for mobile phones with Windows OS
5. Flash Lite, flash games on mobile.

1.5 website

Website(English: website) is an interconnected web pages which are generally located on the same servant contains a collection of information provided by individuals, groups, or organizations. A web site is usually placed at least on a web server that can be accessed over a network such as the Internet, or a local area network (LAN) via the Internet addresses known as URLs. Combined all publicly accessible sites on the Internet also referred to as the World Wide Web, or better known by the acronym WWW [8].

2. RESEARCH

2.1 Problem analysis

In traveling either out of town or in the city usually most people want to bring souvenirs for family home or neighbors, but to get a souvenir sometimes not easy because there are some problems. The problems include the following:

1. Not much information is associated with souvenirs.
2. Do not know where the store position and the route to the store.
3. Not sure of the quality of service and a souvenir seller.

2.1.1 Business Process Analysis Software

The business process is a structured set of activities or work interrelated to solve a particular problem.

1. Business Process Sales
   a. Registration seller
      Registration business processes become sellers are as follows:
      1. Prospective sellers entering personal data such as name of the shop, the shop owner's name, telephone number, email, address, and password.
      2. The system verifies the accuracy of data entered.
      3. The system provides notification successfully register and send a verification code via email
   b. Product additions
      Business processes addition of the product are as follows:
      1. Sellers enter data such as photos of the products, categories, product name, price, and tag line that contains the words figuratively.
      2. The system verifies the accuracy of data entered
      3. The system notifies the data has been stored
   c. Booking
      Business process order is as follows:
      1. Sellers do the approval of an order made by the buyer
      2. The system verifies the order approval
      3. The system notifies the order is received to the buyer

1. Buyer Business Process
   a. Registration buyer account
      Buyer account registration business process is as follows:
      1. Prospective buyers enter personal data such as name, telephone number, email, address, and password.
      2. The system verifies the accuracy of data entered.
      3. The system provides notification successfully register and send a verification code via email
   b. Ordering Products
      The business process product orders are as follows:
      1. Buyers select the products that will be ordered
      2. Buyers enter the number of products to be put into order basket
      3. After that the buyer given the option of directly ordering or booking mebatalkan
      4. If the buyer directly ordered the buyers waiting for the availability of the product purchased, if available, followed by navigation to the store sellers.
      5. If the product is not available then the buyer receives a notification that the product is not available

2.1.2 Analysis of Algorithms for Distance What Using Google Maps

Google Maps Directions API is a service that calculates directions between locations using Google HTTP.Dengan request fire direction can search for directions to several modes of transport, including public transport, driving, walking or cycling. Directions may specify the place of origin,

destination and waypoints either as a text string (eg, "Bandung Dipatiukur" or "jl. Dipatiukur No. 24, Bandung, jawabarat") or as latitude / longitude. Directions API can return multi-part directions using a series of waypoints.

The service is usually designed to calculate the direction of the static address (previously known) for placement of application content on a map; This service is not designed to respond to user input in real-time, for example. For the calculation of dynamic directions (for example, the user interface elements).

1. The use of Google API Direction
   To use the Google API Direction can access the HTTP request. Google Maps API request Direction take the following forms:

```
https://maps.googleapis.com/maps/api/direction/output?parameters
```

2. parameters
   To access google fire directioan with http, the parameters are divided into two, the first mandatory parameter should be required, and additional parameters.

3. output
   By accessing google fire directioan as follows:

```
http://maps.googleapis.com/maps/api/directions/json?origin=-6.889715,107.616349&destination=-6.891817,107.612876&mode=driving&key=***key***
```

4. Accessing Google API Direction Using Android

```
http://maps.googleapis.com/maps/api/directions/json?origin=-6.878680,107.539334&destination=6.917464,107.619123&mode=driving
```

Assume variable output JSON string stringrequest result of respone http request google fire direction

```
JSONObject json = new JSONObject (stringrequest);
JSONArray routeArray = json.getJSONArray ( "routes");
JSONObject routes = routeArray.getJSONObject (0);
JSONArray legs = routes.getJSONArray ( "legs");
JSONObject steps = legs.getJSONObject (0);
JSONObject distance = steps.getJSONObject ( "distance");
double ddistance = distance.getDouble ( "value");
```

Variable distance is the distance results from google fire direction with the output format JSON

2.2 Software Requirements Specifications

Software requirements specification requirements are divided into two non-functional requirements and functional. Web software requirements specification is as follows:

code SKPL	Software Requirements Specifications
SKPL-F-001	Web system provides the facility to log into the system admin
SKPL-F-002	Web system provides facilities for managing data store owner for admin
SKPL-F-003	Web system provides the facility to manage the data public for admin

Mobile software requirements specification is as follows:

code SKPL	Software Requirements Specifications
SKPL-F-001	Mobile systems provide facilities for the public to see the Home view into system
SKPL-F-002	Mobile systems provide facilities for the public's products into the system
SKPL-F-003	Mobile systems provide facilities for the public to list into the system

Non-Functional Requirement as follows:

code SKPL	Non Specifications Software Requirements
SKPL-NF-001	The system is built is a web and mobile
SKPL-NF-002	Minimal system built using the android operating system version 4.0 Ice Cream Sandwich
SKPL-NF-003	Systems built with the hardware specifications that meet minimum standards needs
SKPL-NF-004	System user interface on the software that will be built referring to the design of the menu

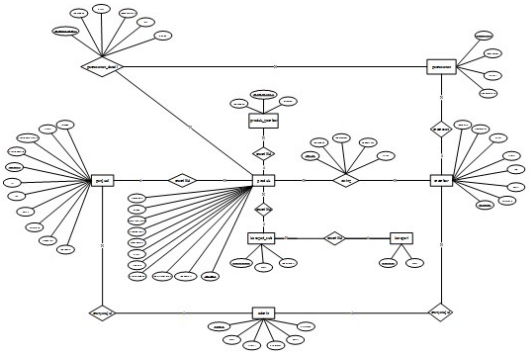
2.3 Data analysis

Analysis of the data which is used in building this software is a document - a document relating to the object - the object is associated. Here is an analysis of data from the development of this software:

ENTITIES	ATTRIBUTE
Admin	= {Id_admin *, name, address, permissions, email, password}
Seller	= {Id_penjual *, id_admin, ness is enforced, nama_pemilik, telephone, address, lat, lng, email, password, st_penjual}
member	= {Id_member *, id_admin name, phone, address, email, password, st_member}
Booking	= {Id_pemesanan *, id_member, date, st_pemesanan}
rating	= {Id_rating *, id_penjual, id_member, kode_rating, rating}
Sub Category	= {Id_kategori sub *, id_kategori, name}
Category	= {Id_kategori *, name}
product Image	= {Id_produk_gambar *, id_produk, directory}

booking details	= {Id_pemesanan_detail *, id_pemesanan, id_produk, id_penjual, qty}

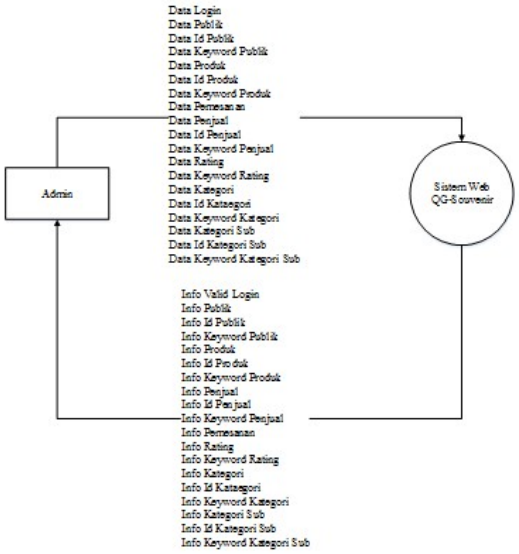
Based on Table Entities and attributes are there then follows is the entity relational diagram and cardinality:



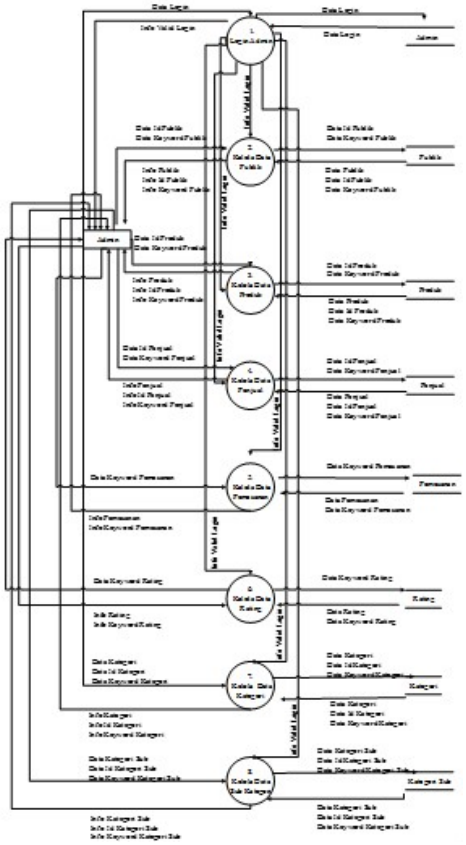
2.4 Functional Needs Analysis

2.4.1 Functional Needs Analysis *web*

1. Context diagram is a diagram illustrating generally being input, process and output that occurs in a system. Here is a context diagram for the software to be built.

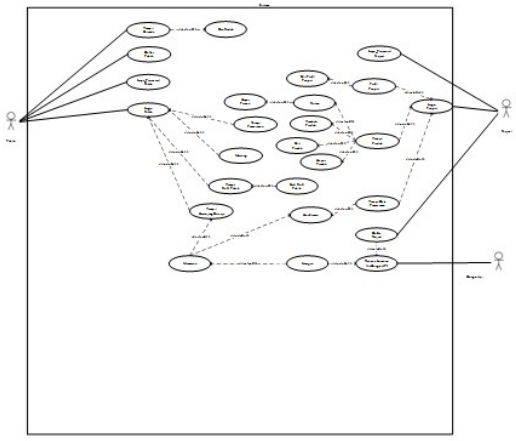


2. DFD (Data Flow Diagram) level 1



2.4.2 Functional Needs Analysis *Mobile*

1. Use Case Diagram is a model to describe the behavior (behavior) software that will be created.



2. Identification of the actor in this table is filled with actors and a description of the role for the actor. Role description should explain the role of authority in the software.

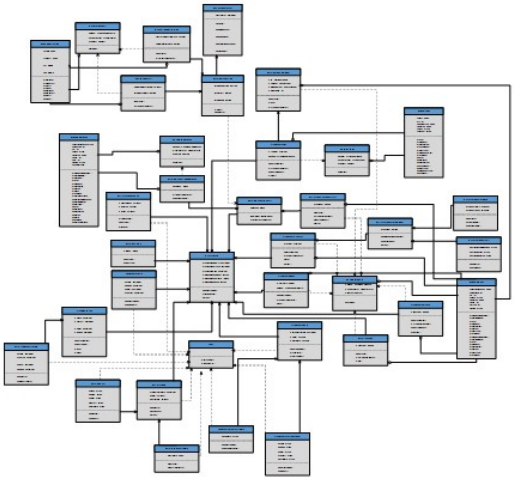
No.	Actor	Description
1	Public	actor with this rule has the authority to use the functionality in the public mobile systems such as viewing the product, order products and provide a rating.
2	Seller	actor with this rule has the authority to use the functionality in mobile systems such sellers manage product data and managing the booking data.
3	*Google Maps API*	actor with this rule only has the authority as a source of location data used and the applications running in the background.

3. Identification Use Case
In this table lists the identification use case use case and a brief description of the use case.

No.	*Use Case*	Description
1	Shown homepage	The functionality that is used by the public to see the main page as a list of products seller
2	Find a product	The functionality that is used by the public to search for products
3	public data	The functionality that is used by the public to sign up to the system.
4	Login public	This functionality is used by the public to get into the system
5	Forgot the password	This functionality is used if the public forget the password to log into the system.
6	Shown public profile	The functionality that is used by the public to see the public profile data
7	Edit your public profile	The functionality that is used by the public to change public profile data
8	rate the	This functionality is used to make a public rating to the seller
9	Shown booking	This functionality is used public to view the status of the proposed reservations
10	Shown shopping cart	The functionality that is used by the public to

		view shopping cart
11	reserve	This functionality is used public to see the product order to the seller
12	Navigation	This functionality user used to track public journey towards the goal and toward a store that has been previously.
13	Retrive location via google API	This functionality provides location data from Google Maps database flames
14	Login seller	This functionality is used by sellers to log into the system
15	sellers list	The functionality used by sellers to sign up to the system.

4. *Class* diagram



2.5 System implementation

Here are the hardware requirements specification used in the construction of this software:

No.	item	Specification
1	processor	Intel (R) Core i3-3217U CPU @ 1.80 GHz (4CPUs) 1.70 GHz
2	harddisk	500 GB
3	memory	4 GB
4	VGA	2 GB
5	monitor	14 inch
6	USB port	2 pieces
7	Internet connection	There is
8	Android	Studio Android 1.3

Here are the software requirements specification used in the development of this software are:

1. Windows 7 Operating System
2. PHP & Java programming language
3. DBMS: MySQL 5.5.36
4. Web Browser: Google Chrome
5. Code Editor use Sublime Text 3.
6. Web Server: XAMPP version 1.7.3 upwards
7. Applications built using android studio android 1.3
8. Data exchange is done using JSON.
9. Balsamiq Mockup version 2.7

2.6 Software Testing

2.6.1 Alpha testing

Alpha testing is performed at the software is divided into several parts, the scenario testing, case, test results, and the conclusion of testing.

2.6.2 Scenario Testing web system

class Test	points Testing	types of Tests
Login Admin Application	Input data is logged	Black Boxes
	Validation login	Black Boxes
Edit Data Admin	Input data admin	Black Boxes
	Data validation admin	Black Boxes
	Pressing the button admin	Black Boxes
Search Public Records	Filling the public search keywords	Black Boxes
Search Product Data	Filling the product search keyword	Black Boxes
Data Search Sellers	Fill in the keywords seller	Black Boxes

2.6.3 Scenario Testing mobile systems

class Test	points Testing	types of Tests
Search Products	Filling the product search keyword	Black Boxes
Public listing	Input data public listing	Black Boxes
	Validation of public listing	Black Boxes
Login Public	Input data is logged Public	Black Boxes
	Validation public login	Black Boxes
Forgot the password	Input data public password	Black Boxes
	Password validation public	Black Boxes

2.6.4 Cases and Test Results

Results of testing the functionality of Admin Login Application (Data True)

Cases and Test Results (Data True)			
Data Input	Expected results	Observation	Conclusion
E-mail: admin@gmail.com *Password: admin*	Successful login screen to move the main kehalaman	Login succeeded main page appears on the screen	Be accepted

Results of testing the functionality of Admin Login Application (Data One)

Cases and Test Results (Data One)			
Data Input	Expected results	Observation	Conclusion
E-mail: admin *Password: 1234*	Login failed primary layer does not appear	The message email or password please repeat	Be accepted

2.6.5 Alpha Testing Conclusion

Based on the results of software testing is done, it can be concluded that the application software community built on android platform has been running as expected both in terms of process validation and error handling.

3. COVER

3.1. Conclusion

Based on test results QGSouvenir mobile application software on android platform it could be concluded as follows:

1. Software QGSouvenir mobile application on android platform is already helping the public to obtain these objectives into a position where the shop seller.
2. QGSouvenir mobile application software on android platform already helps in knowing the quality and service of places selling souvenirs.

3.2. Suggestion

QGSouvenir application software is built is a product-focused search process by the - by. Hence there are some suggestions that can be used as a guide to software development towards the better. As for advice - advice on the development of mobile application software QGSouvenir are as follows:

1. Developing software to transfer feature
2. Develop a platform that can be supported by other software since currently only supports the android platform.

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