# **RENTAL APPLICATION ANDROID BASED MAKEUP ARTIST**

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# ABSTRACT

Nowadays quite a lot of makeup services are available but not many people know because not a lot of information circulating on the services of makeup when you're needed. That's because not all have the makeup services office location or home address clearly. Besides a lot of makeup services only based on the information person to person or social media. An online questionnaire was conducted on 35 respondents the result is 28.6% of correspondents expressed obtain information services of makeup for a show of people or relatives, while 71.4% through social media,

Keywords :Services, Makeup Artists, Media, Social, Online

# **1. PRELIMINARY**

*makeup artist* a professional artist who uses a medium that is applied to the skin to change or improve one's appearance. Makeup artist also often referred to as a cosmetologist or a worker of beauty, but the difference is, they specialize only in makeup alone and usually does not offer other services such as hair or nails.

Nowadays, quite a lot of makeup services are available but not many people know because not a lot of information circulating on the services of makeup when you're needed. That's because not all have the makeup services office location or home address clearly. Besides a lot of makeup services only based on the information person to person or social media.

#### 1.1 Identification of problems

Based on the above can be identified the problem as follows:

- 1. Search services difficulty finding a makeup artist makeup artist services around the neighborhood
- 2. Search services makeup artist makeup artist seeking the services according to the criteria desired.
- 3. Helps makeup artist to get customers.

### 1.2 Purpose and objectives

The purpose of this research is to build search applications and subscriber services makeup artist. While the purpose of this study are as follows:

- 1. Make it easier for people to find and book services in accordance makeup artist desired criteria.
- 2. Provide comprehensive information services makeup artist, makeup artist recommendations.
- 3. Providers of services facilitate a makeup artist to get customers.

### 1.3 Makeup Artist

*Makeup Artist* is a professional artist who uses skin, particularly the face, as his medium and makeup products as a tool. Makeup Artist may have a different focus, such as makeup for the wedding and other formal events, traditional and custom makeup, Face and Body painting, or special effects are used by fiction films. [1].

### 1.4 Android

Android is a mobile operating system that is intended for touch screen devices. Android provides an open platform for developers to create applications. Applications built using the Java programming language. At first android developed by a company newcomers who make software for mobile is Android Inc. which was later purchased by Google Inc. Currently Android has released version 8.0 and continues to evolve. [3].

### 1.5 Clarifai

Clarifai company artificial intelligence that excels in visual recognition (Visual Recognition), Clarifai was founded in 2013 by Matthew Zeiler, a leading expert in Machine Learning, Clarifai has been the market leader since winning the top five places in the classification of the image on the competition ImageNet 2013 [6].

Clarifai is a tool that can identify or recognize the picture or video being entered as input to a subsequent predictions about what is in the picture or video in the form of a probability scale likely [7]. FIRE Clarifai built with the basic idea is simple concept where you load an image or video input, for example if you choose a model food to enter the picture Clarifai images based on the model will predict foods that have been known and so forth.



Source: https://www.clarifai.com/developer/guide/#gettingstarted Figure 1.1 The concept of Work Clarifai

# 1. General Model

*General models* is a model which contain a more general tag and contains a variety of different topics and will generate general predictions contained in the image.



Figure 1.2 General models

#### 2. Face Model

*Face models* may predicted probability of such magnitude to the detected based on the model's face is known of the image that you enter



**Figure 1.3 Face Detection** 

There are still many models on clarifai such as color, wedding, travel, food, nfsw, moderation, demographic.

#### 1.5.1 Train

*Train* or training allows you to create your own model using your own custom concept. You start by adding images that you already know you minati.anda contains concepts that do not necessarily need a lot of pictures to start should start with 10 and add more appropriate kebutuhan.kemudian model and determine what is in his biological concept. After creating a model, you train it based on pictures and concepts that will be given. This training is an asynchronous operation may take several seconds for your models are trained and ready sepenuhnya.setelah completed an exercise, you can use the model to predict the concept of the new image.



Source<u>https://www.clarifai.com/developer/guide/trai</u> <u>n#train</u>

# Figure 1.4 Train

### 1.5.2 Authentication

Authentication is handled through an API to API key. You can limit the scope of the API key, which allows the key to perform an operation that is very specific to a given application, so your applications remain secure.

### 1.5.3 Predict

*Predict,* make predictions and analysis of images that you enter and tell you what the content contained in the image. The API will return a list of concepts with corresponding probabilities of how likely these concepts contained in the images. When you make predictions via the API, you will be notified of which model to use a model contains a group konsep.Model will only see the concepts it contains, you can use different models to analyze the image in various ways.

## 1.6 Google Maps API

*Google*Maps API is a library derived from the Google Maps service in the form of JavaScript, which contains the programming functions that can be integrated into websites or applications that are being made [14]. Only by using the Google Maps API Key, which made the application can access the maps on Google Maps.

GoogleMaps API can be used free of charge and do not need to pay a license. But the maximum request on a map only allowed as many as 2500 requests / day. If more users need to purchase a Google Maps API for Business. Because the Webbased Google Maps API, it's making its application only need to use the Text Editor tool, and other devices must be set up that browser and an internet connection.

Application planning and travel guide is also in need of a map display as a medium of information an accurate location and therefore by implementing Google Maps API technology in the application to be built, in addition to displaying the geographic location on a Google map. In Googel Maps API's technology can identify the presence of the users of the application are located.

### **1.6.1** The Global Positioning System (GPS)

Global Positioning System (GPS) is nabigasi system or satellite-based positioning. The system is designed to provide information about the position and walti continuously worldwide. GPS positioning is described using the X and Y coordinate value in which the value of longitude and latitude. GPS is a working system of GPS satellites send the signals to a device that already has a GPS feature, the GPS will not work accurately and if the use is optimal natural did the room.

## 2. ISI RESEARCH

### 2.1 Analysis System

Analysis system is a system teradap stage in understanding which applications are running or will be built. Stages in this analysis aims to determine the mechanism or procedures of the processes that are running or will be made. The analysis is divided into several parts, the problem analysis, analysis of current procedures berjalanan, analysis of non-functional requirements, software requirements specification analysis, analysis of non-functional requirements, functional requirements analysis.

## 2.1.1 Problem analysis

Analysis of the problems found after the formulation process of the things that become obstacles and barriers in perancanaan Service Orders Makeup Artist as following:

- 1. The community is still difficult to obtain information about the Makeup Artist located in the city of Bandung and surroundings. With applications that will be built will be facilitated to obtain the best information based Makeup Artist Branch, booking services with the booking system, information portfolio makeup results.
- 2. Makeup Artist will make it easier to get a customer or consumer service users makeup artist on a particular -acara.
- 3. Lack of application that facilitates Peoples, to obtain information about the price of services Makeup Artist Makeup Artist information possessed of every Makeup Artist and Best Makeup Artist recommendation. People with this application will get the information providing services price Makeup Artist and airport activities that require the services of Makeup event in Bandung and surrounding areas,

#### 2.1.2 analysis Technology

Analysis technology is an explanation of the technology and methods used for the construction and development on an application to be made and the research being conducted. Analysis of this technology aims to explain in more detail in technical matters used in the manufacture of application systems.

#### 2.1.3 Analysis API Clarifai

Clarifai used in the manufacture of this application is the general model is a model of which contain more general tag and contains a variety of different topics and will generate general predictions contained in the image.

analysis API *Clarifai*aims to define the image input data in this application, In the case of Mua, General models of clarifai will be used when uploading portfolio .Here is a flow diagram Figure 3.1 on the input data analysis API Clarifai:



Figure 3.1 general data flow models

Explanation flowchart Clarifai API users can be seen below:

1. The system checks the Internet network

Mua input the next image is sent to the API Clarifai
 The system APIs to process the image data input results Mua

4. The system sends the result of input API Clarifai form of the photo tags

5. Mua receive image data that has been processed API Clarifai

### 2.1.4 Getting the Process Flow Tag API Clarifai

The following is the process flow to get the tag clarifai described in Figure 3.2:



Figure 3.2 Process Flow getting the tag

### 2.1.5 Analysis of the Google Maps API

analysis Google Maps API to map the current location of the search booking

services makeup artist. The following figure 3.5 example locations where we



#### **Figure 3.5 instances where Locations**

- 1. Examples of locations where services makeup artist page to the Google Map API.
- 2. The results of the process on the Google Map API in the form of JSON format. The JSON format contained element distance, duration, status.
- 3. To get the distance from the starting point to the end point is the tourist attractions, the system only take a distance element.

### 2.1.6 System Architecture Analysis

Analysis of system architecture aims to identify the architecture to be built. Here is a system architecture of applications to be built:



**Figure 3.6 Mobile Platform System Architecture** Below is a description of the image to be built System Architecture:

- 1. The mobile device user request data to the database through an API interface that is contained in the server.
- 2. API which has been getting request data from the user, and then make the request in the form of a query command to obtain data from the database.

- 3. API to get data from the database according to the query is made, then the API create a data structure in the form of JSON.
- 4. The system in the user's mobile device to get the response data from the API in JSON format and then do the parsing process.

# 2.1.7 Analysis System Running

Analysis system is a phase that aims to understand the system, identifying system deficiencies, and determine the needs of the system and determine the needs of the system to be built. By analyzing the system procedures that each system to be built can be evaluated so that it can be made a proposal as the construction or development of a new system, until now, have not provided search application services makeup artist adequate Here is a groove guide that can be done to seek the services makeup artist in the city of bandung and surrounding areas:

1. Hunter makeup artist looking for information services makeup services on google or Instagram but not until the information required details such as the price of services which are still separate the information.

2. Hunter services are usually difficult to determine the makeup artist makeup artist selection services will be used.

3. Hunter makeup artist services sometimes do not know where the position of a makeup artist.

#### 2.1.8 Software Requirements Specification

Software requirements specification consists of Software Requirements Specification Functional (SKPL-F) and the Software Requirements Specification-Non-Functional (SKPL-NF). Below is a table of SKPL-F and SKPL-NF.

code	Software Requirements	
SKPL	Specification	
SKPL-F-01	Mobile systems provide facilities to	
	log in to the service seekers makeup	
SKPL-F-02	Mobile system provides the facility	
	to register an account for the service	
	seekers makeup	
SKPL-F-03	Mobile system provides the facility	
	to forget the password for the	
	service seekers makeup	
SKPL-F-04	Mobile systems provide facilities to	
	login to services makeup	
SKPL-F-05	Mobile system provides the facility	
	to register an account for makeup	
	services	
SKPL-F-06	Mobile systems provide facilities	
	for forgotten passwords for makeup	
	services	

table 1.1	Software	Specifications
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-	-	
SKPL-F-07	Mobile system provides a facility to seek the services of search services	
	for makeup according to criteria	
SKPL-F-08	Mobile system provides the facility	
	to make a reservation booking	
	services for service seekers makeup	
SKPL-F-09	Mobile system provides the facility	
	to confirm the booking orders for	
	services makeup	
SKPL-F-10	Mobile system provides the facility	
	to change the search profile for	
	makeup services	
SKPL-F-11	Mobile system provides the facility	
	to change the profile for the makeup	
	services	
SKPL-F-12	Mobile system provides the facility	
	to give ratings for service seekers	
	makeup ever ordered	
SKPL-F-13	Mobile system provides the facility	
	to change your availability status	
	for makeup services	
SKPL-F-14	Mobile system provides the facility	
	to add to the portfolio of services	
	makeup	
SKPL-F-15	Mobile system provides a facility to	
	remove the services portfolio for	
	makeup	

table 1.2 Software Requirements Specification Non-Functional

code SKPL	Software Requirements Specification
SKPL-NF-01	The system is built in the form of mobile android
SKPL-NF-02	Minimal system built android operating system version 4.4 Kit Kat to the top
SKPL-NF-03	Systems built with hardware specifications that meet the minimum standard requirement
SKPL-NF-04	Mobile systems provide facilities to login to services makeup

#### 2.1.9 Hardware Analysis

Systems built with hardware specifications that meet minimum standards include the following requirements:

The following are the hardware requirements for mobile systems:

table 1.3 Minimum specifications Hardware Mobile Systems

No.	Hardware	Minimum requirements
1	processor	800 MHz
2	memory	512 MB
3	Screen	3.5 inch
4	Other devices	Internet connection

#### 2.1.10 Analysis Software

The system is built to the specifications of the software that meets minimum standards include the following requirements

table 1.4 Minimum Specifications Smartphone Software Needed

No.	No. Software Specification	
1	processor	Android
2	memory	Version 4.4 Kit Kat

table 1.5 Specifications Softw	vare For Making Pc /
Laptop	

No.	Software	Specification
1	IDE (Integrated Development	Android Studio
	Environment)	
2	Android SDK (Software	Version 4.4
	Development Kit)	(API 19)
3	JDK (Java Development	Version 7 inch
	Kits)	
4	Operating system	Windows 10
5	web Browser	Google Chrome,
		Mozilla Firefox

### 2.1.11 User analysis

User analysis was conducted to determine which users are involved in a system. In this application involves two types of users. Here are the required characteristics:

**Table 1.6 User Analysis** 

No.	users	characteristics
1	Hunter makeup services	<ol> <li>Understand the use of mobile devices android.</li> <li>Having the ability to use the internet.</li> </ol>
2	Makeup services	<ol> <li>Understand the use of mobile devices android.</li> <li>Having the ability to use the internet.</li> </ol>
3	Management	<ol> <li>Have Traffic in internet use</li> <li>Understand android</li> </ol>

### 2.1.12 testing Systems

The next stage is the stage of testing the system in applications that are built. This stage is the most important thing that aims to find errors or deficiencies in the application being built. This test is intended to determine whether the application is made have met the criteria in accordance with the purpose of designing an application or not. Tests on the application system will use the test strategy, test alpha (black-box) and beta testing.

### 2.1.13 Alpha Testing Plan

Alpha testing is done using black-box method that focuses on the functional requirements of the software. Testing the program uses black-box method. Black-box testing is a program based on functional testing of the program. The purpose of this black-box method is to find a malfunction in the program. Testing with black-box method is done by providing a number of data input to the application which is then processed in accordance with the functional needs to see whether the application is then processed in accordance with the functional needs to see if the application produces output that is used and in accordance with the functions of the program. If the input data supplied from the process of generating output in accordance with the functional needs, then the application has been made has been correct. But if the output produced does not match the functional needs, then there is still an error in an application.

# 2.1.14 scenario Testing

Scenario examination will explain order in examination which

will do on device soft that built. Scenario testin g

devices soft will constructed divided into two th at is scenario functionality testing and scenario examination beta.

#### 1. Scenario Testing Functionality

In this test all the features of the software sub-systems will be tested mobile built menggukan blackbox method. Here is Table 4.5 Scenario Testing Sub System Mobile describing the features that will be tested.

class Test	Point Testing	types of Tests
Login	Input data log	Black Box
	Data validation	Black Box
	log	
Registrai	Input registration	Black Box
	data	
	Registration data	Black Box
	validation	
Forgot the	Input data	Black Box
password	forgotten	
	Data validation	Black Box
	forget	
	Storing data forget	Black Box
	to database	
Searching	Input data search	Black Box
for MUA		
	Search data	Black Box
	validation	

table 1.6 Table Plan Alpha Testing

	Displaying data MUA	Black Box
booking	Input data booking	Black Box
	Data Validation booking	Black Box
	Storing data to get into the database	Black Box
giving Rating	Input ratings data	Black Box
	Validation ratings data	Black Box
	Store ratings data to the database	Black Box
Adding Fortopolio	Input data portfolio	Black Box
	Data validation portfolio	Black Box
	Storing data to a database portfolio	Black Box
Status Change Booking	Input data change booking	Black Box
	Change data validation booking	Black Box
	Storing data change to get into the database	Black Box
Removing Fortopolio	Input data delete	Black Box
	Remove data validation	Black Box
	Deleting data in a database portfolio	Black Box
Edit profile	Input profile data Validation of the profile data	Black Box Black Box
	Change the profile data to the database	Black Box

# **3 COVER**

From the results obtained from the stages which have been done through the process of planning, implementation, and testing of applications, it can be concluded about the rental application development services based makeup artist android as follows:

1. The services of makeup artists seekers can obtain information about the location where makeup artist who was in the city of Bandung and its surroundings.

2. makeup artist search services get detailed information about the services of makeup artist profile.

3.pencari services of a makeup artist to get information on services of makeup artists and comparing among makeup artist make it easier to choose the services of makeup artist to use the services which the makeup artist.

4.Jasa makeup artist easier to get customers or service users makeup.

# SUGGESTION

The advice in the development of this application in the future the is as follows:

a. No payment is made manually traksaksi

b. develop appropriate recommendations in the changing times

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