# Android-Based Fashion Stylist and Event Outfit Application

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**Abstract**

Fashion or style of dress as a form of self-expression is closely related to the way people communicate values, personality, status, identity, and feelings to others. Adolescence is a period in which a person experiences considerable physical development where they are more sensitive to their appearance, today's teenagers enjoy trends that are appropriate for their time and strive to become a well-known trendsetters in their circles. Fashion has become a character and identity. In accordance with the meaning of fashion itself, which is unique and dares to be different. Free to style or combine things related to fashion that make teenagers creative. The purpose of this research is to help the public, especially teenagers, to have knowledge about modern fashion trends in Indonesia. The application development method used is the agile method and the data collection techniques used are observation, interviews, and literature study. The modeling language used is UML including Use Case Diagrams, Use Case Scenarios, Activity Diagrams, and Class Diagrams and the programming languages that will be used are Java, Android Studio, then SQLite as a place for database design. The results of this study aim to develop an Android-based fashion stylist and event outfit application as well as assist in simplifying the process of choosing clothes that are suitable for use and can save time in choosing clothing ideas of interest so as to provide an overview of modern fashion in Indonesia and can be worn in accordance to the event Outfit to be attended, and according to the number of events to be held.

*Keywords*: *Agile, Android, Application, Fashion, Stylist.*

## 1. Introduction

Fashion is the way how someone presents or expresses himself, especially with the clothes that will be used in public [1]. Fashion or style of dress as a form of self-expression and how people can communicate and influence others is closely related to the way people communicate values, personality, status, identity, and feelings to others [2]. Fashion also develops in line with changing times and ways of life, not only by producing clothes and attributes that cover the body but also by creating an image, personal identity, or social status for the wearer [3].

The fashion industry is increasingly aggressive in offering various products that are popular with the public, especially teenagers who are seen as fast to follow the changing times [4]. Adolescence is a period in which a person can experience considerable physical development in which they are more sensitive to their appearance, today's teenagers like trends that are appropriate for their time and try to become well-known trendsetters for their circles [5]. The way a person dresses was previously determined by shared values and standards, appropriate and inappropriate is something that is jointly legitimized by society so that people or society dress according to the values and standards embedded in society. People no longer dress according to what society wants but according to individual rights and comforts because each individual has the right to his own consumption and to his own clothing. Therefore, clothing or fashion means a form of regulation of how to cover the body then this practice also shapes the way humans perceive the social world and the material world to make certain titles of subjectivity appear in the context of cultivation and everyday life, especially in the community [6].

Along with the development of the times and the latest technology, the advancement of media and technology is also inseparable from the field of education which is also experiencing rapid growth, one of which is technology-based educational media so that teenagers and the public are now familiar with increasingly advanced technology, especially technology in the field of Android [7]. Android is an operating system that can be operated on smartphones and tablets [8]. [9] Android makes the right Operating System to be used in the implementation of the development of the era because Android is generally open source so that it can be used easily and can be carried anywhere because of its flexible and compatible nature so that it can develop very sophisticatedly. Operating system can be illustrated as a bridge between devices and users so that users can interact with other devices by running applications that exist and are available on the android device [10].

The aim of this study is to help the community, especially teenagers, to have knowledge about modern fashion trends in Indonesia. In the Fashion Stylist Application and previous research, the appearance of the fashion style application there are only a few event clothing menus that are limited to public service spaces such as clothing and outfit to go to shopping centers, libraries, and museums [11]. While the application developed and built is an application that can be used on android devices and serves to simplify the process of choosing ideas for clothing, saves time looking for ideas in clothing that are interested, becomes a trendsetter reference for today's teenagers so that they can provide knowledge and insight about fashion or style that is suitable for used in the event Outfit to be attended according to the many menu events that will be held.

## 2. Literature Review

### 2.1. Running System Analysis

Running systems analysis is a process of examining an information system and breaking it down into component parts for further research so that problems and needs that will arise are known, therefore improvements can be made completely and can be offered to the system to be developed [12].

Analysis of the running information system is carried out to find out more clearly how the system works and what problems the system should use as a basis for the project, analysis of the proposed system and will be implemented and executed according to the sequence of events, the sequence of events can be realized as a Android-based fashion stylist and event outfit application [13].

The flow of the system that is running and designed is that the user is required to login to the fashion stylist and outfit application, the user is shown the main homepage where the event menu function is available, the user can select the event menu according to the needs and events attended, the user is shown several clothing menus that are suitable for the event, and the user can directly purchase the selected clothing menu according to the e-commerce options available on the menu.

### 2.2. System Weakness Analysis

The analysis carried out aims to understand in more detail how the system can be learned from existing problems and faced from the previous system so that the system is used as the basis for proposals in system design [14]. Meanwhile, the updated and redesigned system can display product prices and match fashion according to the event to be held and find out about technological developments for information needs, especially in the fashion industry and help simplify the process of choosing the right dress ideas to wear and can save time in choosing clothes ideas that are interested to provide an overview of the knowledge of modern fashion that is happening in Indonesia.

### 2.3. System Design

System planning is one of the processes in determining how the system will complete what should be completed, at this stage it is obtained in the form of planning, drawing and making designs of several components that will be designed into a unified whole so that it can run situational and according to the functional application [15].

Based on the explanation described above, it can be seen that system design is the next step after the system analysis is carried out so that it can provide a clear picture of what is going on in the system analysis, then the next step is how to think about the shape of the system so that the application to be built and designed according to the steps in the agile methodology to be used.

## 3. Methods

### 3.1. Agile Software Development Method

In making this Fashion Stylist Information System Application, a system development method is used, namely the Agile Software Development method and why this method was chosen because this method is appropriate to use when the system is undergoing renewal, this Agile method is also faster in making improvements so that the system that has been developed can be in accordance with the users wishes [16]. The Agile Method was devised in 2001 by a man named Kent Beck and 16 other teammates. Kent Beck and other colleagues created Agile Software Development as a method for developing applications so that they can make other developers work in a team efficiently in the result that the steps in making decisions about applications are better than before. The process that occurs in the agile method there is an attachment between teams to meet all user needs so that it can be used as a reference for changes to be completed and applications can be quickly responded to and completed by the team [17]. The Agile method has several advantages as one of the other application development methods, here are some of the advantages of the agile method including: (1) Users can see directly the applications created when the application design process can be completed more quickly. (2) If there are errors or bugs in the application, the value of losses and errors caused is not too large and does not move away from what was planned. (3) Creating a ratio of satisfaction to users because existing applications are in accordance with what is desired. (4) Can reduce the risk of failure or error from a non-technical point of view because when the application is implemented, users can run applications that have been designed to be used easily [18]. Then, here are the next steps in developing applications using the Agile Software Development methodology:

### 3.1.1. Planning

This stage is the stage of making a system plan, the system plan that will be made is by collecting data for users by interview or in the form of a questionnaire so that information can be collected and applications can be made similar to the needs desired by the user, then the steps that must be taken are creating a design for the system as a whole by utilizing the UML (*Unified Modeling Language*) tool in the form of Use Case Diagrams, Class Diagrams and Activity Diagrams as well as creating a user interface by system development.

### 3.1.2. Implementation

This stage explains the function of a developer when developing an application so that it can be similar to the design that has been designed, the development of this android system utilizes the Java programming language as well as the Android Studio software.

### 3.1.3. Application Testing

This stage explains how the testing of the system that has been developed, namely the source code that has been written and designed by the developer, can be tested using the black-box testing method as an act of minimizing errors from the system and ensuring that input

processes and outputs can run according to their functions with the result that applications can be expected in accordance with what is desired by the user.

### 3.1.4. Documentation
The documentation stage is carried out to make the functions contained in the fashion stylist system and application used as a note when the system to be developed in the form of an application can make it easier for the team to develop applications in the future.

### 3.1.5. Deployment
The deployment stage is the stage of the information system that has been designed so that it can be used by end-users including managers of fashion stylist and outfit applications and users of fashion stylist and outfit applications.

### 3.1.6. Maintenance
The maintenance stage describes the function rather than performing system or application maintenance within a set deadline so that the application can be ensured to be safe from bugs and errors and the system that has been made is free from bugs and errors [19].

## 3.2. Data Collection Technique
Data collection is used to obtain data and information for the design of the application to be built, several techniques of data collection include:
a. Literature Studies
Literature studies are used to review other journals that are relevant and in accordance with the problems in the application and look for the same theory as the case in making android-based fashion stylist and event outfit applications, the system development method used refers to the theory that has been explained in the journal or other reliable sources of information as a supporting theory discussion in this study [20].
b. Observation
The process of collecting data by conducting observations and conducting direct reviews of the community environment related to data needs to obtain information related to the implementation of making android-based fashion stylist and outfit applications [21].
c. Interview
Interviews are the process of collecting data by conducting face-to-face meetings with fashion stylist fans around the city of Bandung on the running system in the fashion stylist and outfit applications so that the data and information obtained are based on what is experienced and felt, especially in the fashion industry to the people and adolescents of Indonesia. [22].

## 4. Discussion Result

## 4.1. Use Case Diagram
In the process of designing the use case diagram, it can be said that the design has been made according to the design and will involve two actors namely admin and user, the difference between admin and user actors is that admin can manage all users and application data, while users can only access and use android-based fashion stylist and event outfit applications [23]. The following is a Design Use Case Diagram that has been designed also accompanied by the functions of each connected system. The use case can be seen in Figure 1 below.
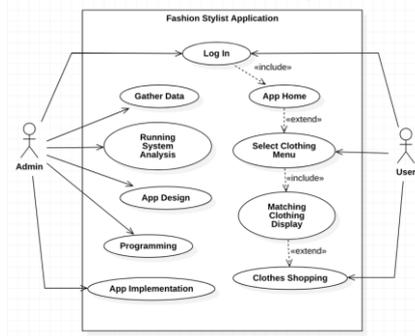


**Fig 1.** Use Case Diagram Fashion Stylist and Outfit App Design

Based on Figure 1 above, it can be interpreted that the image describes and displays 2 application user entities and are interrelated with systems that run from application logins until these entities can fulfill the functionality of the Android-based fashion stylist and event outfit applications so that it can run according to the design in the picture.

## 4.2. Use Case Scenario
The following is a Use Case Scenario Design accompanied by the functions of each connected system.

**Table 1.** Use Case Scenario – Select Menu

| | |
|---|---|
| **USE CASE NAME** | Login Admin and User |
| **SHORT DESCRIPTION** | Admin and User must Login to the system in order to access |
| **PRE-CONDITION** | User is required to register first |
| **POST-CONDITION** | Admin and User can access the system |

| ERROR SITUATION | Username and Password don't match |
|---|---|
| SYSTEM STATE IN THE EVENT OF AN ERROR | Account cannot be accessed |
| ACTOR | User |
| TRIGGER | User |
| STANDARD PROCESS | (1)  Registration<br>(2)  Input username and password<br>(3)  Go to application home view |
| ALTERNATIVE PROCESS | (1)   – (3) Same as above |

Based on Table 1 above, it can be interpreted that the use case scenario explains how to select a menu on a running application and can be used on Android so that the application can meet the needs of the running system.

**Table 2.** Use Case Scenario – Select Menu

| USE CASE NAME | Clothes Shopping |
|---|---|
| SHORT DESCRIPTION | *User* can directly shop for clothes available on the system |
| PRE-CONDITION | Choose clothes that suit the event |
| POST-CONDITION | *User* gets a *link* to buy clothes |
| ERROR SITUATION | *The Link* cannot be opened by the buyer |
| SYSTEM STATE IN THE EVENT OF AN ERROR | Clothes are *sold out* |
| ACTOR | *User* |
| TRIGGER | *User* |
| STANDARD PROCESS | 1)  Display Clothes<br>2)  Click the purchase link |
| ALTERNATIVE PROCESS | (1)  Same as above<br>(2)  Purchase *Link, such as:* Shopee, Lazada, Tokopedia |

Based on Table 2 above, it can be interpreted that the use case scenario explains how to shop for clothes on a running application and can be used on Android so that the application can meet the needs of the running system.

## 4.3. Activity Diagram

Activity Diagram functions as a depiction of a series of flows in the form of activities from a business process or use case, activity diagrams function to model actions then can be performed when an operation can be executed, here is the interface design of the Activity Diagram accompanied by the functions of each system and the relationships that have been created based on the use case diagram previously described.
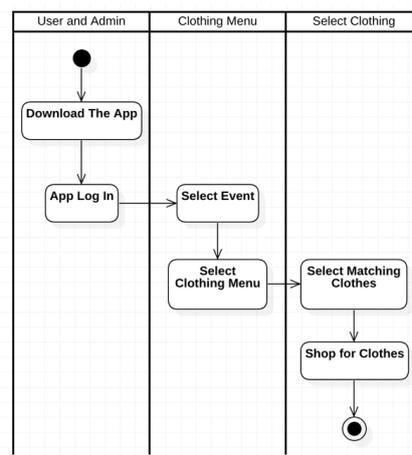


**Fig 2.** Activity Diagram Fashion Stylist and Outfit App Design

Based on Figure 2 above, it can be interpreted that the activity diagram image explains how the application runs and can be used on Android so that the application can meet the needs of the running system.

## 4.4. Class Diagram

Class Diagram is a design specification of the system so that it can produce an object and the relationship between classes is also the core of object-oriented development and design [24]. The following is a Class Diagram design accompanied by the functions of each class.
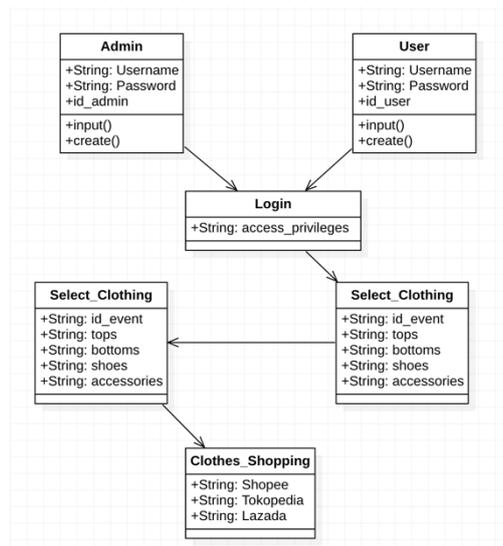
**Fig 3.** Class Diagram Fashion Stylist and Outfit App Design

Based on Figure 3 above, it can be interpreted that the class diagram image explains starting from the class name, attributes and operations so that between classes are involved with each other to fulfill all functions that have been designed and exist in the application.

## 4.5. Interface Implementation

The following is an interface design or *screen layout* accompanied by the function of each interface, the *Home Screen Dialog* functions to select a menu, how to use select the program to be used and then click the button according to the program to be used. The home page is shown in Figure 4.



**Fig 4.** Homepage

The Event Clothing Display dialog serves to view the clothes to be worn, how to use select left and right to view clothes and then click clothes to proceed to clothing details. The Event Clothing Display page is in Figure 5.



**Fig 5.** Event Clothing Display Page

The Clothing Product Details dialog functions to proceed to the purchase, how to use it, select an online ship purchase, then click an online shop and click the button to shop now. The Clothing Product Details page is shown in Figure 6.
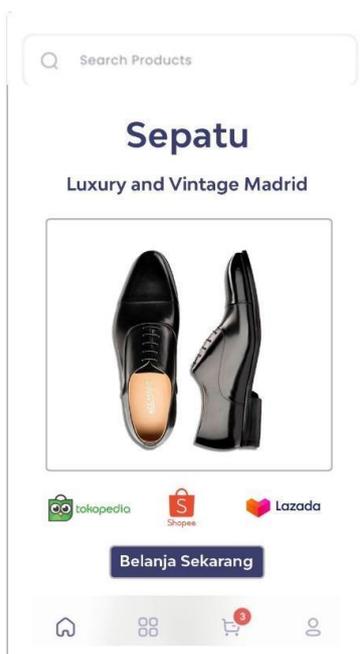
**Fig 6.** Clothing Product Details

The following is a table of results from tests carried out using the black-box testing method.

**Table 3:** Results of Black-Box Testing

| Test Data | Input Data | Expected results | Test result |
|---|---|---|---|
| *Login* Page | Enter *username* and *password* | Can enter the *homepage dashboard* | Compatible |
| Select Menu | Select Event Menu | Can go into clothing details | Compatible |
| Showing Clothes | Click the Event Button | Can see clothing product details | Compatible |
| View Clothing Details | *Button Link* Purchase | Showing to *e-commerce* marketplace | Compatible |

Based on Table 4 above, it can be explained that the test is carried out using the black-box testing methodology, so that the application can focus on the functionality side, especially on input, process and output so that the application can match the design that has been made.

## 5. Conclusion

Based on the results of research on the Android-based fashion stylist and Event Outfit application, it can be concluded that the Fashion Stylist application developed with previous research is that the fashion display only has a few menus for clothing events and is also limited to public service spaces such as clothes to go to shopping center. libraries and museums events, while the applications that are developed and built are applications that can be used on android devices and serve to simplify the process of choosing dress ideas, save time looking for ideas in clothing that are interested, become a trendsetter reference for today's adolescents so that they can provide knowledge as well as insight into fashion or style that is suitable for use in the event Outfit to be attended according to the number of events that will be held.

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