DEVELOPMENT OF PROMOTION MEDIA APPLICATION E-CATALOG AT DEALER HONDA AHMAD YANI

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ABSTRACT

In the thesis report entitled "Development of Promotion Media Application E-Catalog At Dealer Honda Ahmad Yani" is expected to be able to assist salesmen in promoting Honda cars. Promotional media currently being used are showrooms and brochures. In doing a promotion there are some obstacles in the media campaign that is used, such as showrooms that have limitations on the size of the room is erratic and brochures that have limited information. The research method used in this research is problem identification, data collection, design, testing and conclusion. In collecting data used are observation, literature study and interview. After doing data collection, then done system design. Design will determine what features should exist on the system and system view. Some features that will be owned by the system is to change the color on the car body, look at the exterior of the car, look at the car's interior and make a rotation on the car. After the design is complete it will enter the stage of development. The system has been built will enter the testing phase after the system is completed. Testing is a step to test errors or bugs in E-Catalog software. The end result of this application development will produce an android based media promotion app. In the hope after the development of media promotion appliakasi this Honda party can be helped in promotional activities Honda car.

Keywords: Car, Promotion, Multimedia, Android, Honda

1. INTRODUCTION

1.1 Background

Honda is a company that produces motorcycles and cars are quite large in the world and of course honda not only one, honda has several branches in every part of the world. In Indonesia itself honda is a well-known motorcycle and car manufacturer and very reliable in creating a vehicle for its customers. One of the honda branch itself there is a road General Ahmad Yani, Bandung. In honda ahmad yani is not only sell a car, but also can fix a honda car a customer, in karda honda branch ahmad yani is a showroom as well as a workshop.

From the results of interviews conducted at dealers honda, honda using television, newspapers, brochures, websites, and showrooms to do promotions. One of the promotional media in use today is Showroom. Showroom is a way of promotion by showing the car in a particular location and showing it off. Honda itself has opened a showroom in several locations, but the most frequent is in the mall. Before opening a first showroom honda must check the location to determine the class showroom. Class showroom will determine how many types of cars that can be displayed in one room, so that in one showroom implementation not every time can display all kinds of cars. In addition to using the showroom, honda also often set up a stand to do promotions without bringing car products, but only using brochures. Promotion using this stand is only done in a place that can not open showroom. At the booth the customer will do consultation about the desired car with sales.

The brochure has information on the type of car and the price of the car. But the brochure has a weakness that is, do not have information about the interior and exterior of the car and the look of the car is still a photo that shaped 2 dimensional. Photo shortage is a static image.

From the above problems, it can be concluded, that honda dealers only use television, brochures, websites, and showroom as a media campaign and does not have an android platform as a media campaign. Besides that honda require an application that can help provide information of car products from start exterior and interior of car. Inside the app, the car's exterior and interior are built interactively to let customers know where the car's

interior is and know what facilities are on each type of car sold by honda.

1.2 Mean

Based on the problems that have been analyzed in honda ahmad yani, will be built an e-catalog car apps honda car.

1.3 Goal

Objectives in building applications are as follows:

1. Provide information about the type of car that can not be on display at the time of opening the showroom..
2. Provide information that can not be displayed in a brochure..

2. RESEARCH CONTENTS

2.1 Multimedia

Multimedia Is a media that can be used as a tool to create and utilize existing technology and combine it in a creative way. For usable media, such as audio media, video media, image media and so on. Multimedia can be useful for promotions, advertising an goods or service product, and even bias to do the presentation. As for some tools for multimedia, that is.

1. Blander

Blender is a free and open source 3D creation tool. Blender supports overall 3D pipe modeling, rigging, animation, simulation, rendering, compositing and motion tracking, even video editing and game creation. Blender has some common toolbar and should be known, here is a common blender toolbar.

1. Tool Self. Contains tools that are grouped by type. This tool can be hidden (Keyboard T).
2. Properties. Contains general parameters of objects, grids, and viewport views.
3. Info Window. Contains menu, type of interface layout, scane information, and rendering engine.
4. Outliner Window. Displays all the following objects.
5. Editor Window. Sometimes referred to as buttons window or properties window.
6. 3D View Window. Also referred to as viewport
7. Timeline Window and Playback Window are used when making animation. [1]

2. SolidWork

Solidwork is a program used for the needs in engineering such as product design, machine design, Mold design, and other engineering purposes. SolidWork is a proprietary CAD software that features featured-based, pametric solid modeling and moves on 3-dimensional modeling. [2]

3. Photoshop

Adobe Photoshop is Adobe Image's image editor software devoted to photo / image editing and effects creation. The eighth version of this app is called Photoshop CS (Creative Suite), a ninth version called Adobe Photoshop CS2, a version of ten called Adobe Photoshop CS3, the eleventh version is Adobe Photoshop CS4, the twelfth version is Adobe Photoshop CS5, and the latest version is Adobe Photoshop CC.[3]

4. Unity 3D

Unity 3D is a game engine.Game engine is built on the basis of concern for the builders of indi applications that can not buy game engines because it is too expensive. Unity allows one to create a game with 3 dimensions easily and quickly. Initially, Unity has been set up for First Person Shooting (FPS) game making, but unity can also be used to build Role Playing Game (RPG) games, and Real Time Strategy (RTS). In addition, unity is one of the multiplatform engine for various platforms, such as Windows, Mac, Android, iOS, PS3 and Wii [4]

2.2 Promotion

Promotion is a way to advertise or introduce a product or service to a customer, to be known and to attract customers to view and buy promoted items.

Promotions can be made with multiple media, such as television, newspapers, internet advertising, a website, brochures, and even a showroom. But in doing a promotion must be considered in determining the target market, location promotion, and budget to be issued in the promotion.

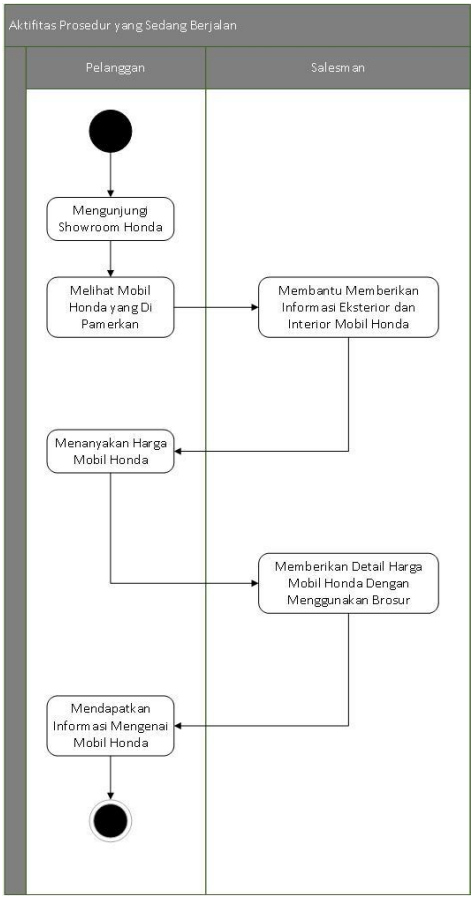
2.3 Problem Identification

With the information described in the background, it can be concluded some identifakasi problems, namely:

1. Showroom has limitations in accommodating the number of cars caused by the limited space.
2. Brochures have limited information, which is information about the type of car and the price of the car.

2.4 Ongoing Analysis

The ongoing analysis is the analysis of the ongoing business processes within the company and processes information about the flow or steps of the business processes being applied by the company right now.



Picture 1 Activity Diagram Ongoing Analysis

From Picture 1 can be seen about the flow of the system that is running in the company. The explanation for the figure in figure 1 is as follows

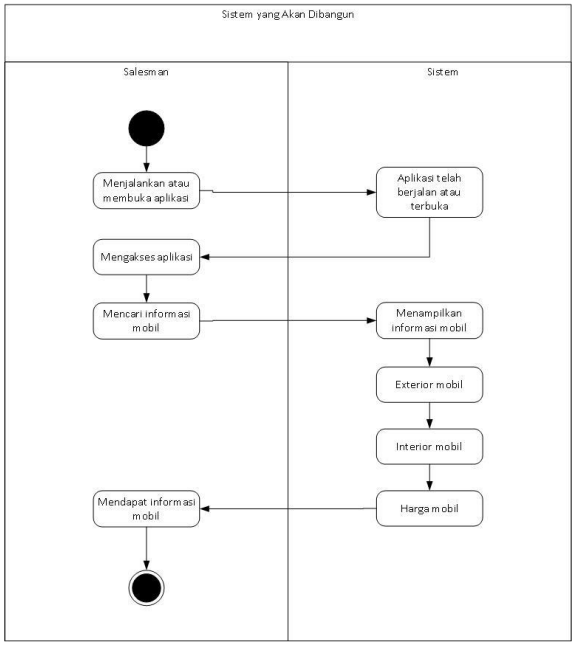
1. Salesman is an employee who interact directly with the customer and served to help convey information.
2. Customers are the part that gets information from Salesman, brochure, and showroom.

Below is an explanation of the plot of the image.

1. Customers visit the Honda showroom.
2. Customers see the Honda car on display.
3. Salesman will help provide interior and exterior information of Honda cars.
4. Customers ask about Honda's price.
5. Salesman provides details of Honda car price by using brochures.
6. Customers get information about Honda cars.

2.5 System Analysis To Be Built

System analysis to be built merupakaan stages of the flow of applications to be built, so that the process of running the application can be understood and clear.



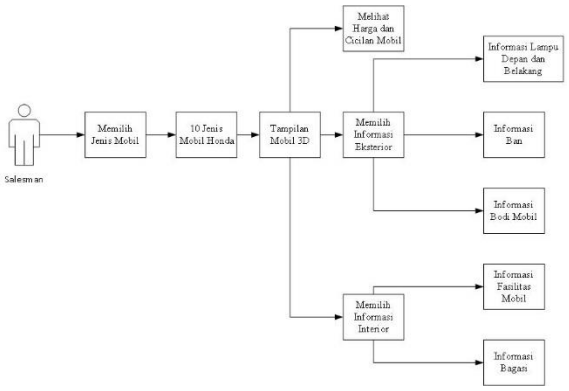
Picture 2 System To Be Built

Below is description about picture 2.

1. Salesman would run or open application with android device.
2. Applicationi will run or open.
3. After application run or open, salesman will access application.
4. Salesman would search information about car who will be see in application.
5. Application will display information about car that was on search.
6. Application will give information about car exterior
7. Application will give information about car interior.
8. Application will give information about car price.
9. Salesman are got information about car.

2.6 System Overview

An overview of the system to be built will show what kind of system will be built in general. At the beginning of the user will enter the main menu, after which the user will choose the type of car to enter the desired car information menu. In the car information menu users can choose information about car interiors, car exteriors and car prices. In the car's exterior information section, users can view car lights information, car engine type, car wheel information, and car colors available. For the interior of the car, the information will be displayed is the car seat information, features provided by the car, and the trunk of the car. While at the price will bring up the total information on car prices and car installments per month. Picture 3 will explain the system overview for the application to be built.



Picture 3 System Overview

2.7 Material Collecting Analysis

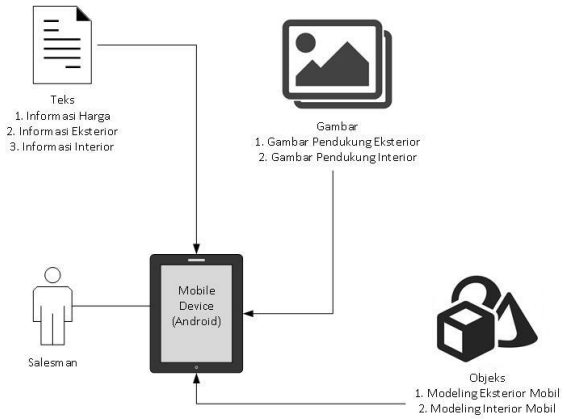
Analysis of collecting materials is a step to collect materials that will be used on the system. As for several things collected in the collecting material that will be described in Table 1.

Table 1 Material Collecting

No	Material Name	Material Type	Description
1	Car Body	Eksterior	Car main part
2	Car Tire	Eksterior	Main part support
3	Car Lamp	Eksterior	Main part support for light the street
4	Price	Informasi	Information about car price
5	Car Fasility	Interior	Support part for inside car.
6	Car Trunk	Interior	Part at back of car that use for place item.

2.8 System Architecture

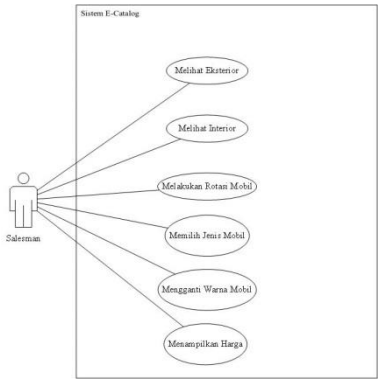
System architecture defines more specific and regular components. With the aim that the designed structure responds to current needs. In built applications, the type of architecture used is a component of a hardware that interacts with a user with some content that contains text, images, and objects. Picture 4 will describe the system architecture used in the E-catalog application of Honda.



Picture 4 System Architecture

2.9 Use Case Diagram

Use case diagram is a model to explain a relationship between the actors with the activities contained in the system. In this system there is only one person actor ie user or user. Detail use case diagram can be seen in Picture 5.



Picture 5 Use Case Diagram

2.9.1. Actor Definition

An actor is an object to show who or what can access the system in the use case. The details of the actor can be seen in Table 2

.

Table 2 Actor Definition

Actor Name	Actor job
Salesman	Run application

2.9.2. Use Case Definition

Use cases are objects that help explain what activities are in the system and use cases can relate to one another. Use case modeling aims to help explain the functional and operational requirements of the system. Detailed use case explanations can be seen in Table 3.

Table 3 Use Case Definition

Use Case Number	Use Case Name	Description
UC-001	Menampilkan Eksterior	Display car eksterior
UC-002	Menampilkan Interior	Display car interior
UC-003	Melakukan Rotasi Mobil	Do rotation to object
UC-004	Menampilkan Jenis Mobil	Display type of ca
UC-005	Mengganti Warna Mobil	Change car color
UC-006	Menampilkan Harga	Display car price

2.10 System Testing

System Testing is a stage to test the system with several conditions that have been planned first to achieve optimal system conditions and find out what are the errors that exist in the system. The test to be used is a blackbox test, which consists of alpha testing and beta testing.

2.10.1 Blackbox Testing

Black box testing is software testing in terms of functional specifications without testing the design and program code. Black box testing is done by making a test case that is trying all the functions by using the software whether in accordance with the required specifications. In this case the tests taken from one part of the black box testing are alpha testing and beta testing.[5]

2.10.1.1. Alpha Testing

Based on a pre-planned test scenario, it will test every functional compound of the system and will also note the test results whether the test is accepted or rejected. Here are the cases and results.

Table 4 Display Main Menu

Case and Result				
No	**Deskripti on**	**Which are Expecte d**	**Output**	**Informati on**
1	Salesman press continue button	Enter applicati on	Enter applicati on	[√] Accepted [ ] Not Accepted
2	Salesman press exit button	Applicati on close	Applicati on close	[√] Accepted [ ] Not Accepted

Table 5 Display Car Type Selector

Case and Result				
No	**Deskripti on**	**Which are Expecte d**	**Output**	**Informati on**
1	System will display available car	Display type of car	Display type of car	[√] Accepted [ ] Not Accepted
2	Salesman press to change list of car	Change list of car	Change list of car	[√] Accepted [ ] Not Accepted
3	Salesman press button each type of car	Enter display car object	Enter display car object	[√] Accepted [ ] Not Accepted
4	Salesman press exit button	Applicati on close	Applicati on close	[√] Accepted [ ] Not Accepted

Table 6 Display Car Object

Case and Result				
No	**Deskripti on**	**Which are Expecte d**	**Output**	**Informati on**
1	System display car object	Display car obejct	Display car obejct	[√] Accepted [ ] Not Accepted
2	Salesman press interior menu	Enter interior menu	Enter interior menu	[√] Accepted [ ] Not Accepted
3	Salesman press eksterior menu	Enter eksterior menu	Enter eksterior menu	[√] Accepted [ ] Not Accepted
4	Salesman press back button	Back to display of car type selector	Back to display of car type selector	[√] Accepted [ ] Not Accepted
5	Salesman press and hold car object	Can rotation to car	Can rotation to car	[√] Accepted [ ] Not Accepted
6	Salesman press car color button	Can change car color	Can change car color	[√] Accepted [ ] Not Accepted

7	Salesman press car color button	Information about teks color is change	Information about teks color is change	[√] Accepted [ ] Not Accepted

Table 7 Display Interior Menu

Case and Result				
No	**Deskripti on**	**Which are Expecte d**	**Output**	**Informati on**
1	System display list of interior	Display list of interior	Display list of interior	[√] Accepted [ ] Not Accepted
2	Salesman press each list of interior	Enter to every interior that press	Enter to every interior that press	[√] Accepted [ ] Not Accepted
3	System display objek interior	Display object interior	Display object interior	[√] Accepted [ ] Not Accepted
4	Salesman press back button	Back to display of car object	Back to display of car object	[√] Accepted [ ] Not Accepted
5	Salesman press button of rotation mode	Enter rotation mode	Enter rotation mode	[√] Accepted [ ] Not Accepted
6	Salesman press button of animation	Can play animati on	Can play animati on	[√] Accepted [ ] Not Accepted

Table 8 Display Eksterior Menu

Case and Result				
No	**Deskripti on**	**Which are Expecte d**	**Output**	**Informati on**
1	System display eksterior list	Display list of eksterior	Display list of eksterior	[√] Accepted [ ] Not Accepted
2	Salesman press each of list eksterior button	Display informati on about eksterior	Display informati on about eksterior	[√] Accepted [ ] Not Accepted

Table 9 Display Panel Interior Information

Case and Result				
No	**Deskripti on**	**Which are Expecte d**	**Output**	**Informati on**
1	Salesman press button each interior at list	Display teks informati on about interior	Display teks informati on about interior	[√] Accepted [ ] Not Accepted
Case and Result				
No	**Deskripti on**	**Which are Expecte d**	**Output**	**Informati on**
2	Salesman press button each interior at list	Display picture informati on about interior	Display picture informati on about interior	[√] Accepted [ ] Not Accepted

Table 10 Display Panel Eksterior Information

Case and Result				
No	**Deskrip si**	**Yang di Harapka n**	**Keluara n**	**Keterang an**
1	Salesma n press button each eksterio r at list	Display teks informati on about eksterior	Display teks informati on about eksterior	[√] Accepted [ ] Not Accepted
2	Salesma n press button each eksterio r at list	Display picture informati on about eksterior	Display picture informati on about eksterior	[√] Accepted [ ] Not Accepted

Tabel 11 Tampilan Panel Informasi Harga

Kasus dan Hasil Uji				
No	**Deskrip si**	**Yang di Harapka n**	**Keluara n**	**Keterang an**
1	Salesma n telah meneka n tombol pada harga	Munculk an informasi teks untuk harga	Munculk an informasi teks untuk harga	[√] Diterima [ ] Ditolak

2.10.1.2. Beta Testing

After doing the determination of the scenario to perform beta testing, it will be interviewed with application users to find out the results of

applications that have been tested actual dikeadaan. Here are the results and beta test questions.

Table 12 Result Beta Testing

No	Question	Answer
1	Does the information contained in the application help in promoting in a showroom?	Implementation of the application in the showroom event in the short term, has not been able to determine whether the application helps or not.
2	Is the information in the application clear and understandable?	For the information in the show is clear, but there is still a need to detail the information.
3	Is the application easy to use?	Easy
4	Does the application contain correct information about the price of the car?	For the price information is correct.
5	Will interior and exterior car information inside the application help in promoting on a stand?	Similarly to question 1, it takes a long time to know whether the app is helpful or not.
6	Is the function of every menu in the app working properly?	For functions on every menu works fine.

3. Closing

3.1 Conclusion

Final conclusions from the results of problem analysis, data collection, design, and system testing, then get.

1. The built application has not proven that the application can assist in providing information on a car showroom.
2. The built application can provide car information that is not displayed on a brochure.

3.2 Suggestion

Suggestions to be given for application development E-Catalog Media Promotion Application Promotion At Honda Dealer in the future is

1. The information on the application is still not optimal
2. 3D objects in the application is still not perfect.
3. Cars in the app are not all there yet.
4. Application has not used database.

BIBLIOGRAPHY

[1]. Hendratman, Hendi 2015. The Magic Of Blender 3D Modelling. Informatika, Bandung.

[2]. Arsada, Robbi 2012. SolidWork Professional. Informatika, Bandung.

[3]. Agung, M. Leo 2011. Adobe Photoshop CS5 untuk Pemula. ANDI, Yogyakarta.

[4]. Roedavan, Rickman 2016. Unity Tutorial Game Engine. Informatika, Bandung.

[5]. Rosa A.S, M.Salahuddin. Rekayasa Perangkat Lunak Terstruktur dan Berorientasi Objek. Informatika, Bandung.