SKPL-xxxx

SOFTWARE REQUIREMENT SPECIFICATION

ANDROID MOBILE BASED SHOES AND CARE SYSTEM

For :

Shoes and Care Business

Created by:

Salsabilla Rinaldi (1301184463)

Yusron Hanan Z.V.I (1301184476)

Muhammad Farhan A. (1301180466)

Raden Aria Gusti Aji (1301180503)

Putra Dharma Bangsa (1301180523)

Bachelor of Informatics – Faculty of Informatics (School of Computing)

Telkom University

Jalan Telekomunikasi Terusan Buah Batu, Bandung

Indonesia

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A	1. Make table of Definition, Abbreviation, and Acronym 2. Add Cardinality in Class Diagram 3. Add some points in Other Requirements
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C	
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1. Introduction

1.1. Purpose of Writing Document

The main purpose of creating this document is to give simplicity for shoes and care.Beside that,this document is also created to do one of the final project of Software Development and Analysis subject.

This SRS document is used as guide for developers and users while the software is being developed. For developers,this document is a technical reference of the software development that gives explanation about the mobile-android based software that's going to be built,there's also general explanation and detailed explanation.As for the user,this SRS document is being used to note the specification requirementss for the software,and user feedback.Beside that,the purpose of the creation of this document is to analyze all of the objects that will be implementated from the software.

1.2. Document Coverage

In the creation of the SRS document, Font that will be used is Times with font size 18pt for chapter title and will use bold effect, 14 pt for sub-chapter and will use bold effect,12pt for every chapter, also 9pt for table and picture names. Spacing that used for line spacing is 1.15.All terms will be typed with italic effects.

1.3. Definition, Abbreviation, and Acronym

TERM / ABBREVIATION	DEFINITION
Android	Services that available for computer users that connected to the internet, provides information for users that connected to the internet
APPL/SAAD	Software Analysis and Design (SAAD) includes all activities, which help the transformation of requirement specification into implementation.
SKPL/SRS	A Software Requirements Specification (SRS) is a description of a software system to be developed.
ERD	An entity-relationship diagram (ERD) is a data modeling technique that graphically illustrates an information system's entities and the relationships between those entities.
GUI	The Graphical User Interface (GUI) is a form of user interface that allows users to interact with electronic devices through graphical icons and audio indicator such as primary notation, instead of text-based user interfacest, typed command labels or text navigation.
Use Case	In software and systems engineering, a use case is a list of actions or event steps typically defining the interactions between a role (known in the Unified Modeling Language (UML) as an actor) and a system to achieve a goal.
Class Diagram	Diagram that shows the system's structure from classes definitiom to build a system
Customer	A person or organization that buys goods or services from a store or

	business
Admin	Person that has more access to control the system's content
User	The person who using the application
Server	A computer system that serves some services in a computer network
Actor	A human entity/machine that interacts with system to do some works
System	A system is a group of interacting or interrelated entities that form a unified whole.
Client	A client is a piece of computer hardware or software that accesses a service made available by a server.
Hardware	Tools, machinery, and other durable equipment.
Software	The programs and other operating information used by a computer.

1.4. References

The source that related with this SRS are :
1. Template SKPL Analisis Berorientasi Objek 2020.
2. SKPL Assistant Recruitment Application at Telkom University
3. SKPL Sistem Pengelolaan Bank Sampah – Telkom University

2. Software Global Description

2.1. Software Statement of Objective

Product that made in the SRS is a development of existed system,that is a shoe laundry system that can be found in vaious places,where the shoe laundry service just provides an offline workshop that the customer must deliver their shoes to the workshop.Just with register and order via smartphone and their shoes will be picked up by provided courier.So,can be conclude that the product that is made is a combination of laundry system and market place system.

Here's some main features that can be done by this product:
- Can give choices to customers for choosing treatment for their shoes
- Can do registration and login for customers.This is done because only customers that have an account that can use the application.
- Can inform required time for the treatment that customer have chosen
- Can inform the price for every treatment that will be chosen by customers
- Tracking feature. The customer can see their shoe maintenance status.
    By the android-mobile based shoes and care system, we expect to make customer and the owner shoes and care manage their business easier.

2.2. Software Perspective and Function

There's some product functions from the application:
1. Customers can do orders via online or come to the store
2. Customers can choose treatment that compatible for their shoes condition
3. Customers can do check to their order in detail

2.3. User Profile and Characteristic

User Category	Task
Customer	1. Registration 2. Login 3. View Menu 4. Ordering 5. Edit biodata 6. View Order
Admin	1. Login 2. Confirm Customer Order 3. Add Order Process 4. Add Courier Data 5. Edit Order Status 6. Edit Menu Order 7. Edit Order Process 8. Edit Customer Data 9. Edit Courier Data 10. Delete Customer Data

	11. Delete Order Process 12. Delete Courier Data 13. Edit Payment Data
Courier	1. Login 2. Pickup The Order 3. Deliver The Order 4. Edit Payment Data

2.4. Operating Environment

These are the minimum specification requirements to run Shoes annd Care application:

- Hardware:
  - Android Smartphone
  - Memory 1 GB RAM or more
  - Quad Core 1.2GHz CPU
  - 500MB storage free
  - Internet Celuller / Wifi to connect to the internet

- Software:
  - Android 5.0 or more

2.5. Software and System Boundaries

In designing the android based Shoes and Care system there's some boundaries from implementation,those are:
  a. Not all order has to be done via application,but also via offline (come to store) to do treatment and will be handled by admin
  b. This application using english interfaces for nearly for every part of the application.
  c. Payment Transaction is manage by courier, not directly into the system

2.6. Assumption and Dependency

Assumptions :
  ➢ Shoes and Care system can be accessed by anyone, anywhere, and anytime as long as the device connected to the internet
  ➢ Admin can access and manage order data,customer, data,courier, data,transaction, and the admin data itself
  ➢ Customer informed about the courier that will deliver and pick up their shoes

Dependencies :
  ➢ Every actor that will use the applicatio,must be logged in before using the system
  ➢ Admin can decline an order if not appropriate with applied provisions

3. Software Detailed Description

3.1. Requirement Description

3.1.1. Functional Requirement

Number	Requirement Code	Function	Description
1.	FR-01	Create Account	This function is used by user to make account to access the application.
2.	FR-02	Login	This function is used by the user to log in to the application.
3.	FR-03	View Menu	This function is used by the user to view and choose the list treatment of the application
4.	FR-04	Order Process	This function is used by the user to order the shoes treatment
5.	FR-05	Edit Biodata	This function is used by the user to edit the personal data that user want
6.	FR-06	View Order	This function is used by the user to view the user's order
7.	FR-07	Confirm User Order	This function is used by the user to confirm the order
8.	FR-08	Add Order Process	This function is used by the user to add the new order process in offline store
9.	FR-09	Add Courier Data	This function is used by the user to add the data for the courier for courier log in to the application
10.	FR-10	Edit Courier Data	This function is used by the user to edit the data fot the courier
11.	FR-11	Edit User Data	This function is used by the user to edit the current data that user want
12.	FR-12	Edit Order Process	This function is used by the user to edit the current order process

13.	FR-13	Edit Menu Order	This function is used by the user to edit or update list of Shoes treatment
14.	FR-14	Edit Order Status	This function is used by the user to edit the order status
15.	FR-15	Delete Courier Data	This function is used by the user to delete the courier
16.	FR-16	Delete Order Process	This function is used by the user to delete the order
17.	FR-17	Delete User Data	This function is used by the user to delete the data
18.	FR-18	Pickup The Order	This function is used by the user to change the order activities status in to "Process/Pickup"
19.	FR-19	Deliver The Order	This function is used by the user to change the order activities status in to "Delivered"
20.	FR-20	Edit Payment Data	This function is used by the user to edit the payment method

3.1.2. **Non-Functional Requirement**

Number	Quality	Requirement Code	Description
1.	Product Requirement	NFR-01	Shoes and Care System can be accessed anytime
2.	Organizational Requirement	NFR-02	Customer of Shoes and Care Application can do the registration with their Email
3.	External Requirement	NFR-03	The system shall implement the Law of the Republic of Indonesia Number 11 of 2008 concerning electronic information and transactions.

3.2. Analytical Modelling

3.2.1. *Usecase Diagram*

Berikut merupakan visualisasi dari *Usecase Diagram* untuk *Shoes and Care based Android Mobile* yang dibahas dalam SKPL ini :
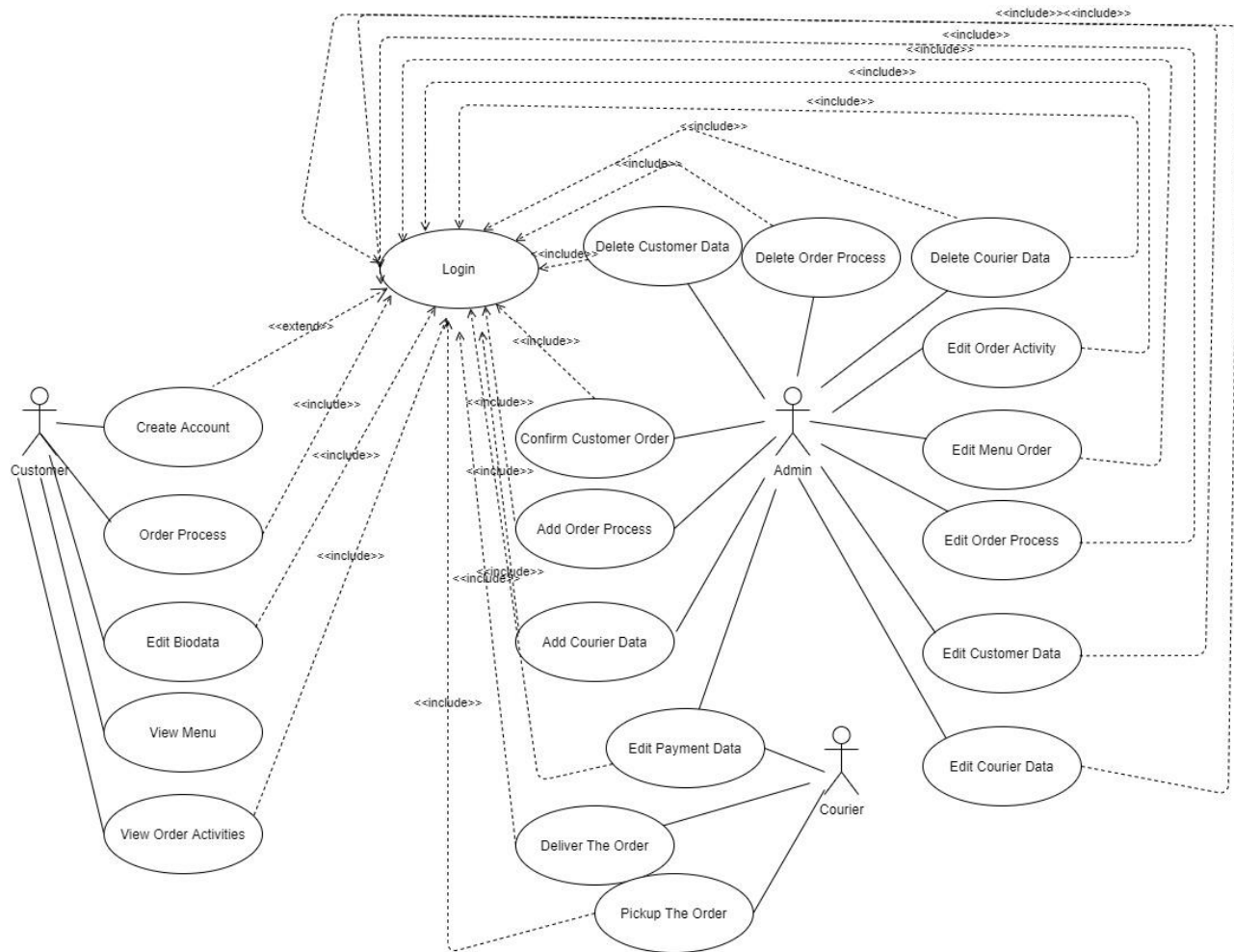
3.2.1.1. *Usecase Scenario #1*

Use case	Create a customer account
Description	Customer can register to create new account
Preconditions	Customer did not register yet in the system
Postconditions	Customer registered in the system and have an account
Main Scenario	

	Actor	System
	1. Open the	

	registration page	
		2. Display the registration page
	3. Fill the biodata form, the click submit	
		4. Doing data validation
		5. Display notification "Registration Success"
		6. Redirect actor to login page

3.2.1.2. Usecase Scenario #2

Use case	Login Process	
Description	This use case is to explain about the process how actor log into the system	
Preconditions	Actor want to login	
Postconditions	Actor has been loggend in	
Main Scenario		
	Actor	System
	1. Open the login page	
		2. Display the login page
	3. Actor input the requirement data that needed for login	
		4. System match the data that is entered by the actor from database.
	5. The actor has logged in to the system	

3.2.1.3. Usecase Scenario #2

Use case	Order Process	
Description	Customer can order the shoes care treatment	
Preconditions	Customer already login and want to do order the shoes care treatment	
Postconditions	Customer ordered the shoes care treatment	
Main Scenario		
	Actor	System
	6. Open the menu order	

		7. Display the menu order
	8. Fill the order menu form, then click order	
		9. Display the order confirmation
	10. Actor click "Yes"	
		11. Display the notification "Order in Process"

3.2.1.4. Usecase Scenario #3

Use case	Edit Biodata	
Description	Customer can edit their personal data / biodata	
Preconditions	Customer already login and want to change their personal data / biodata	
Postconditions	Customer updated their personal data / biodata	
Main Scenario		
	Actor	System
	1. Open the profile page	
		2. Display the profile data
	3. Actor click edit button	
		4. Display the form of personal data / biodata
	5. Fill the form and click "Update"	6.
		7. Display the notification "Personal data is success updated"

3.2.1.5. Usecase Scenario #4

Use case	View Order
Description	Customer can view their orders activities
Preconditions	Customer already login and want to know their order in detail
Postconditions	Customer know their order in detail
Main Scenario	

Actor	System
1. Open the order list page	
	2. Display the order list page
3. Actor clicks "Detail" in one of order	
	4. Display the order detail page

3.2.1.6. Usecase Scenario #5

Use case	View Menu Order	
Description	Customer can view their menu order	
Preconditions	Customer want to the menu order	
Postconditions	Customer know the menu order	
Main Scenario		
	Actor	System
	1. Open the menu order page	
		2. Display menu order

3.2.1.7. Usecase Scenario #6

Use case	Edit Order Status	
Description	Admin can edit the order status	
Preconditions	Admin already login and want to change the order status	
Postconditions	Admin updated the order status	
Main Scenario		
	Actor	System
	1. Open the list order page	
		2. Display the order list
	3. Actor clicks "Status" in one of the order	
		4. Display the order status
	5. Actor clicks "Edit" button	6.
		7. Display the form of

		order status
	8. Actor changes the status, can be "Pick up", "Process", "Finish", "Delivered", then click "Update" button	
		9. Display notification "Success Updated"

3.2.1.8. Usecase Scenario #7

Use case	Edit Order Process	
Description	Admin can edit the order process	
Preconditions	Admin already login and want to change the order process	
Postconditions	Admin updated the order process	
Main Scenario		
	Actor	System
	1. Open the list order page	
		2. Display the order list
	3. Actor clicks "Detail" in one of the order	
		4. Display the order detail
	5. Actor clicks "Edit" button	
		6. Display the form of the order
	7. Actor fill the order form, then click "Update" button	
		8. Display notification "Success Updated"

3.2.1.9. Use case scenario #8

Use case	Edit Payment Data	
Description	Courier can change customer payment method	
Preconditions	Courier already login	
Postconditions	Courier change the customer payment method	
Main Scenario		
	Actor	System
	1. Open order detail form	
		2. Display the order detail
	3. Change the payment method	

		4.	Display chosen payment method
	5. Driver receive payment from customer and click confirm		
		6.	Display order receipt

3.2.1.10. Use case scenario #9

Use case	Deliver the order	
Description	Courier deliver the order and change order status to "delivering"	
Preconditions	Courier already log in and will deliver the finished order. The order status is "cleaning finished"	
Postconditions	Order status become "delivering"	
Main Scenario		
	Actor	System
	1. Open the order detail form	
		2. Display the order detail
	3. Change the status to "delivering" and click confirm	
		4. Display the updated order detail

3.2.1.11. Use case scenario #10

Use case	Pickup the order	
Description	Courier deliver the order and change order status to "picked up"	
Preconditions	Courier already log in and will pick up the order.	
Postconditions	Order status become "picked up"	
Main Scenario		
	Actor	System
	1. Open the order detail form	
		2. Display the order detail
	3. Change the status to "Picked up" and click confirm	
		4. Display the updated order detail

3.2.1.12. Usecase Scenario #11

Use case	Edit Menu Order
Description	Admin can edit the menu order
Preconditions	Admin already login and want to change the menu order
Postconditions	Admin updated the menu order
Main Scenario	

	Actor	System
	1. Open the menu order page	
		2. Display the menu order page
	3. Actor clicks "Edit"	
		4. Display the menu order form
	5. Actor fill the form, then click "Update" button	
		6. Display notification "Success Updated"

3.2.1.13. Usecase Scenario #12

Use case	Edit Customer Data
Description	Admin can edit the customer data
Preconditions	Admin already login and want to change the customer data
Postconditions	Admin updated the customer data
Main Scenario	

	Actor	System
	1. Open the list customer page	
		2. Display the customer list
	3. Actor clicks "Detail" in one of the customer	
		4. Display the customer in detail
	5. Actor clicks "Edit" button	
		6. Display the form of the customer edit
	7. Actor fill the order form, then click "Update" button	
		8. Display notification "Success Updated"

3.2.1.14. Usecase Scenario #13

Use case	Edit Courier Data
Description	Admin can edit the courier data
Preconditions	Admin already login and want to change the courier data
Postconditions	Admin updated the courier data
Main Scenario	

	Actor	System
	1. Open the list courier page	
		2. Display the courier list
	3. Actor clicks "Detail" in one of the courier	
		4. Display the courier in detail
	5. Actor clicks "Edit" button	
		6. Display the form of the courier edit
	7. Actor fill the order form, then click "Update" button	
		8. Display notification "Success Updated"

3.2.1.15. *Usecase Scenario #14*

Use case	Delete Courier Data	
Description	Admin can delete the courier data	
Preconditions	Admin already login and want to delete the courier data	
Postconditions	Admin deleted the courier data	
Main Scenario		
	Actor	System
	1. Open the list courier page	
		2. Display the courier list
	3. Actor clicks "Detail" in one of the courier	4.
		5. Display the courier in detail
	6. Actor clicks "Delete" button	
		7. Display confirmation about to delete the courier data
	8. Actor click "Yes" button	
		9. Display notification "Success Deleted"

3.2.1.16. Usecase Scenario #15

Use case	Delete Order Process	
Description	Admin can delete the order process	
Preconditions	Admin already login and want to delete the order	
Postconditions	Admin deleted the customer data	
Main Scenario		
	Actor	System
	1. Open the list order page	
		2. Display the order list
	3. Actor clicks "Detail" in one of the order	
		4. Display the order in detail
	5. Actor clicks "Delete" button	
		6. Display confirmation about to delete the order
	7. Actor click "Yes" button	
		8. Display notification "Success Deleted"

3.2.1.17. Usecase Scenario #16

Use case	Delete Customer Data	
Description	Admin can delete the customer data	
Preconditions	Admin already login and want to delete the customer data	
Postconditions	Admin deleted the customer data	
Main Scenario		
	Actor	System
	1. Open the list customer page	
		2. Display the customer list
	3. Actor clicks "Detail" in one of the customer	
		4. Display the customer in detail
	5. Actor clicks "Delete" button	
		6. Display confirmation about to delete the customer data
	7. Actor click "Yes"	

	button	
		8. Display notification "Success Deleted"

3.2.1.18. Usecase Scenario #17

Use case	Confirm Customer Order	
Description	Admin confirm the customer order	
Preconditions	Admin already login and want to confirm the customer order	
Postconditions	Admin confirmed the customer	
Main Scenario		
	Actor	**System**
	1. Open the list new order	
		2. Display the new order list
	3. Actor clicks "Detail" in one of the new orders	
		4. Display the new order in detail
	5. Actor confirms either "Accept" or "Decline", but not both	
		6. Display confirmation
	7. Actor click "Yes" button	
		8. Display notification "Success Confirmed"

3.2.1.19. Usecase Scenario #18

Use case	Add Order Process	
Description	Admin can add the order of shoes care treatment	
Preconditions	Admin already login and want to add the order of shoes care treatment	
Postconditions	Admin added the order of shoes care treatment	
Main Scenario		
	Actor	**System**
	1. Open the menu order	
		2. Display the menu order
	3. Fill the order menu form, then click order	

		4. Display the order confirmation
	5. Actor click "Yes"	
		6. Display the notification "Order in Process"

3.2.1.20. Usecase Scenario #19

Use case	Add Courier Data	
Description	Admin can add the courier data	
Preconditions	Admin already login and want to add the courier data	
Postconditions	Admin adds the courier data	
Main Scenario		
	Actor	System
	1. Open the list courier page	
		2. Display the courier list
	3. Actor clicks "Add New Courier" button	
		4. Display the form of new courier
	5. Fill the form, then click "Add New"	
		6. Display the confirmation
	7. Click "Yes" button	
		8. Display the notification "Success Added"

3.2.2. *Class Diagram:*
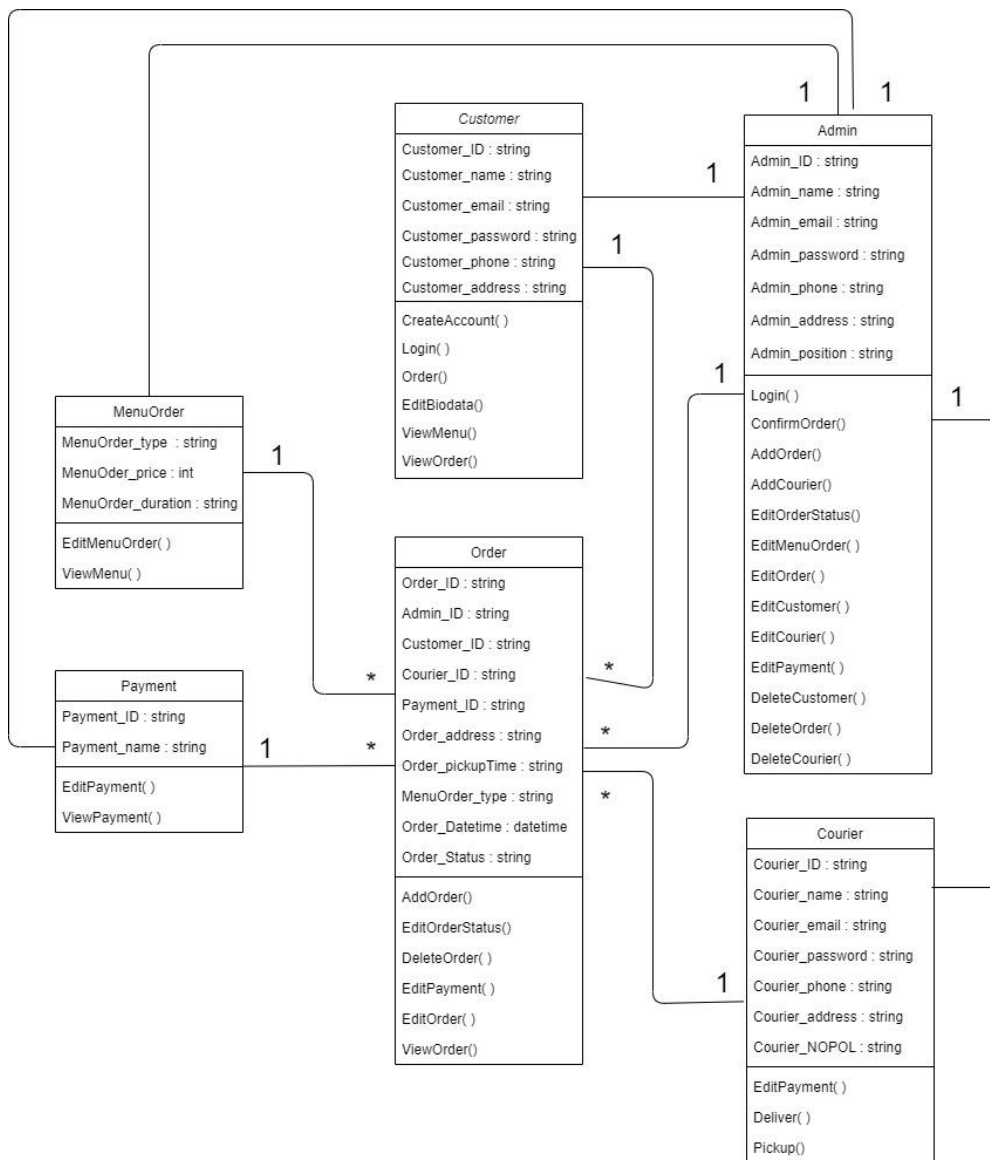
4. External Interface Requirement

4.1. User Interface

In the making of Shoes and Care Based Android Mobile System, user use Android Mobile System Interface to interact with the software where the software show the menu and other to user with their android based device. Software can receive text, click, and option chosen as input from user by using their device. Output of the software can be seen on user's android based device. Interface from Shoes and Care application include some point, that:

- Register form for customer.

For a new customer, they have to sign up first

- Login form for customer, admin, and courier.
Customer, admin, and courier can access the application if they input valid username and password. The login page will be in different page

- Order form for customer
Customer must input their order type and their data before submit the order.

- Order transactions page for customer
Customer can view their order transactions.

- Profile page for customer
Customer can view and edit their profile
- User data list for admin
Admin can manage the entire user (admin, courier, customer)
- Order data list for admin
Admin can manage the entire order data (new order, history order, etc)
- Configuration page for admin
Admin can manage the payment, menu order, etc of the apps

4.2. Hardware Interface

Shoes and Care application that discussed on this SKPL can be access with hardware as follow:
1. Android based smartphone with minimum specification as follow:
    o Android 5.0
    o Quad Core 1.2GHz CPU
    o 500MB storage free
    o 1GB RAM

4.3. Software Interface

Shoes and Care application that discussed in this SRS is built to improve services for cutomers that want to use shoe maintenance service. The Product will be built using Android studio using Java. Thus, Shoes and Care application can be downloaded by link that will be provided later.

4.4. Communication Interface

       Main goal this application that we make is for run shoes and care business. At first customer have to input their e-mail, name, and address. We're provide the menu/order type detail so the customer know well the information of what order type they will choose on the order form. Beside, their also need to input their shoe type and their delivery address so they don't need to come to the store to take their order that already finish.

We're also add feature to customer see their order progress status and track the courier that deliver their order.

5. Other Requirements

5.1 Database
Database is an organized collection of data, generally stored and accessed electronically from a computer system. Where databases are more complex they are often developed using formal design and modeling techniques.

5.2 Android Studio
Android Studio is the official integrated development environment (IDE) for Google's Android operating system, built on JetBrains' IntelliJ IDEA software and designed specifically for Android development.

5.3 SQLite
SQLite is a software library that provides a relational database management system. The lite in SQLite means light weight in terms of setup, database administration, and required resource.

5.4 Firebase Database
The Firebase Realtime Database is a cloud-hosted NoSQL database that lets developer to store and sync between users in realtime.

5.5 GitHub
GitHub is a web-based version-control and collaboration platform for software developers. It make the developers can work remotely.

Attachment A: Glossary Words

TERM	DEFINITION
Realtime	Real time is a level of computer responsiveness that a user senses as sufficiently immediate or that enables the computer to keep up with some external process (for example, to present visualizations of the weather as it constantly changes).
Developer	Developer is the key individual behind all software applications. Generally, developers are well versed in at least one programming language and proficient in the art of structuring and developing software code for software or a program.

Attachment B: Analysis Models (Entity Relational Diagram)