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Client information



Connect-IT Life



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SystemOps  - Group 25

Project: Multivendor POS system

System name: **AUTOCLEAR**

Iteration 3

This document will outline iteration 3 for our client, Connect-IT life. Its purpose is to describe the design, models, interface development and coding that will go into building our proposed system

This document is composed of the following: Logical use case narratives, technical use case narratives, a sequence diagram, and an activity diagram.

We have conducted in-depth research on our client's needs and have deduced innovative ideas and solutions. We aim to convince our client that our solution will be the best suited for their business by minimizing the tedious process of keeping track of sales, orders and deliveries to their vendors and clients through our system.



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1. Introduction

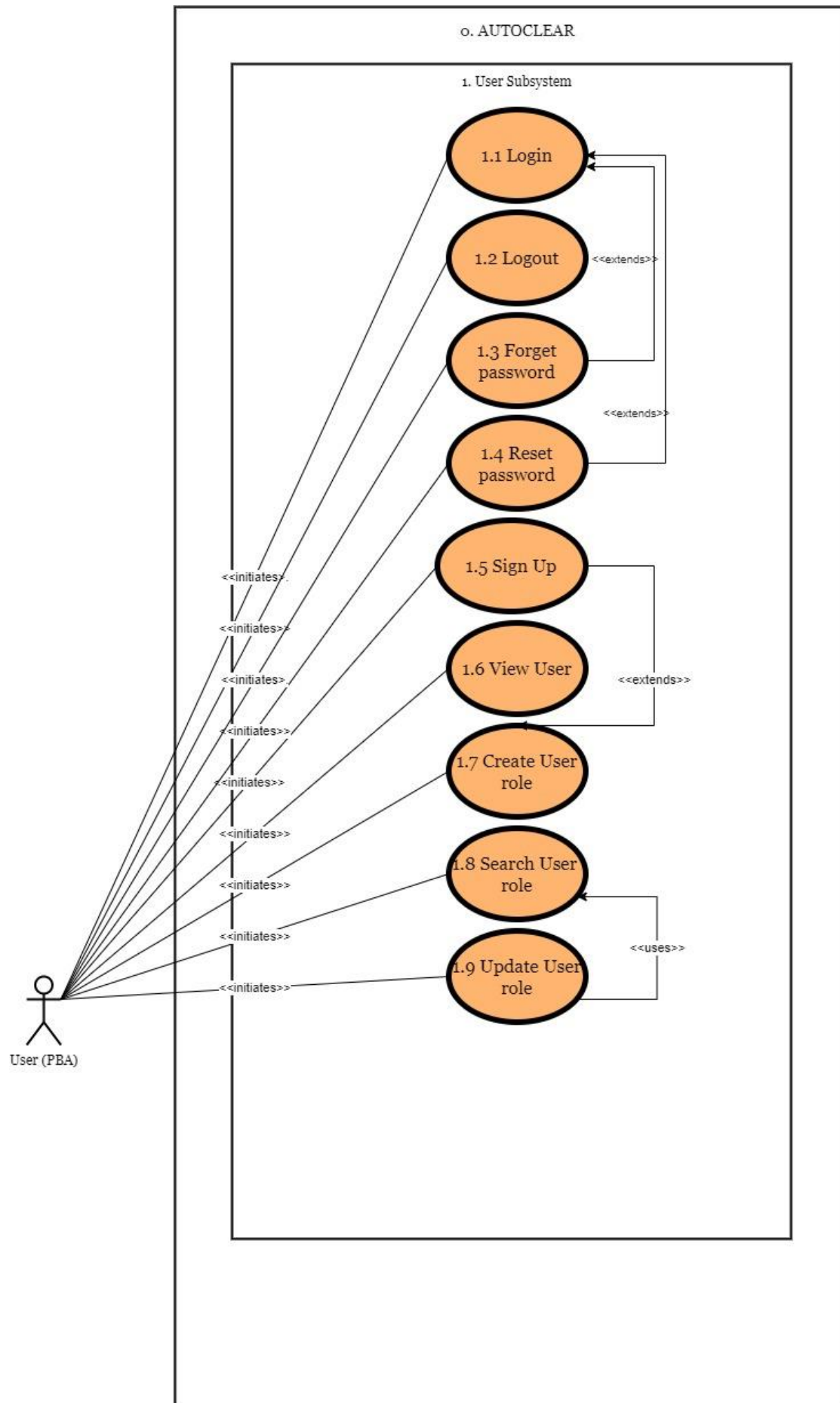
The following document serves as an insight into iteration 5 of the proposed system. The document contains the information of the design, models, interface development as well as the coding of our chosen use cases. Our team is proposing a new multivendor online store that will aim at helping the business with their day-to-day operations of selling 'deadstock', as their current manual system is not helping to solve some of the problems the business faces. The following system will act as a more efficient and safe solution of handling the sales and stock taking information of the business.

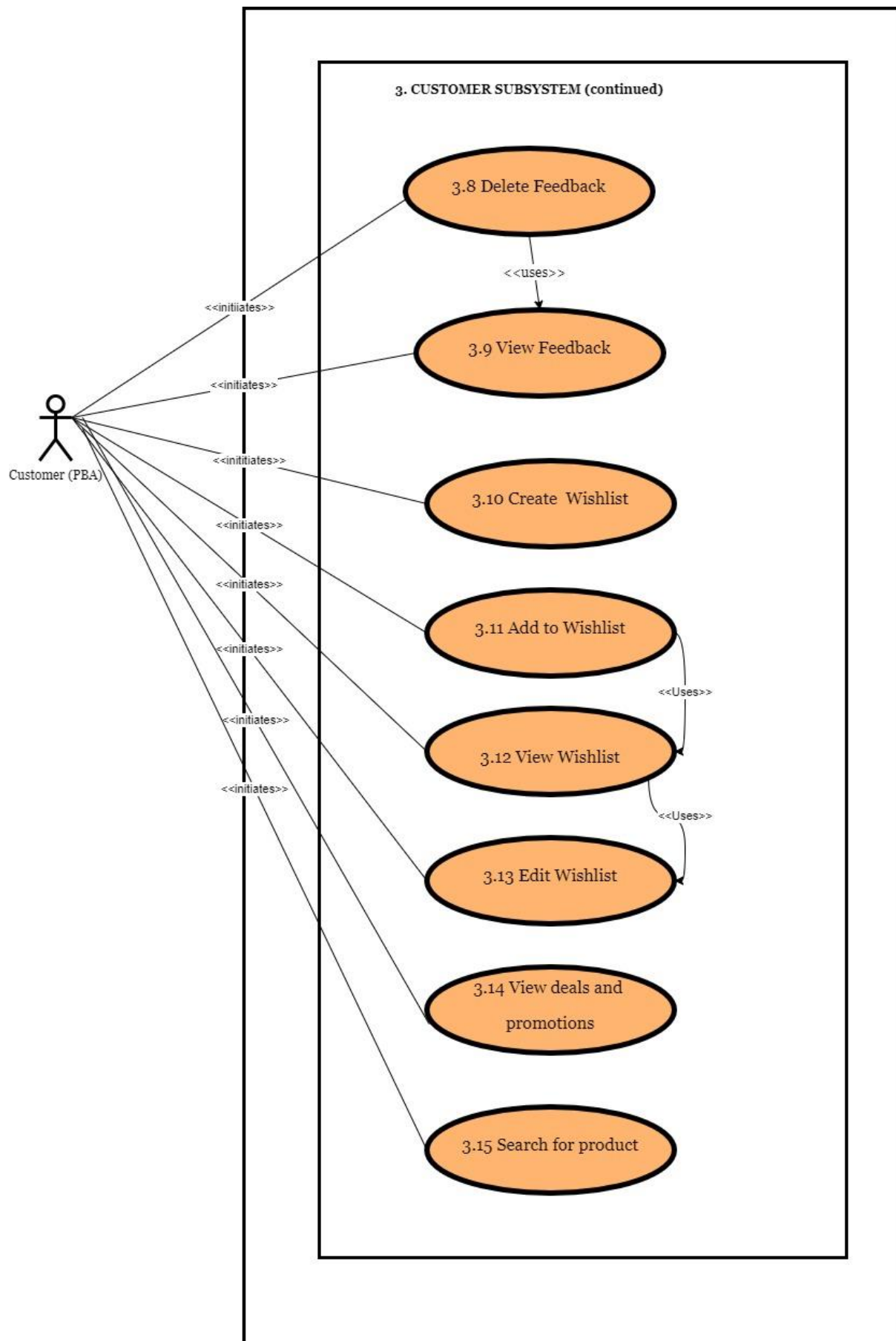
The following document highlights the use case narratives as well as the diagrams that will be used to design the proposed system, that will allow the vendors of the different businesses to focus on bolstering their sales.

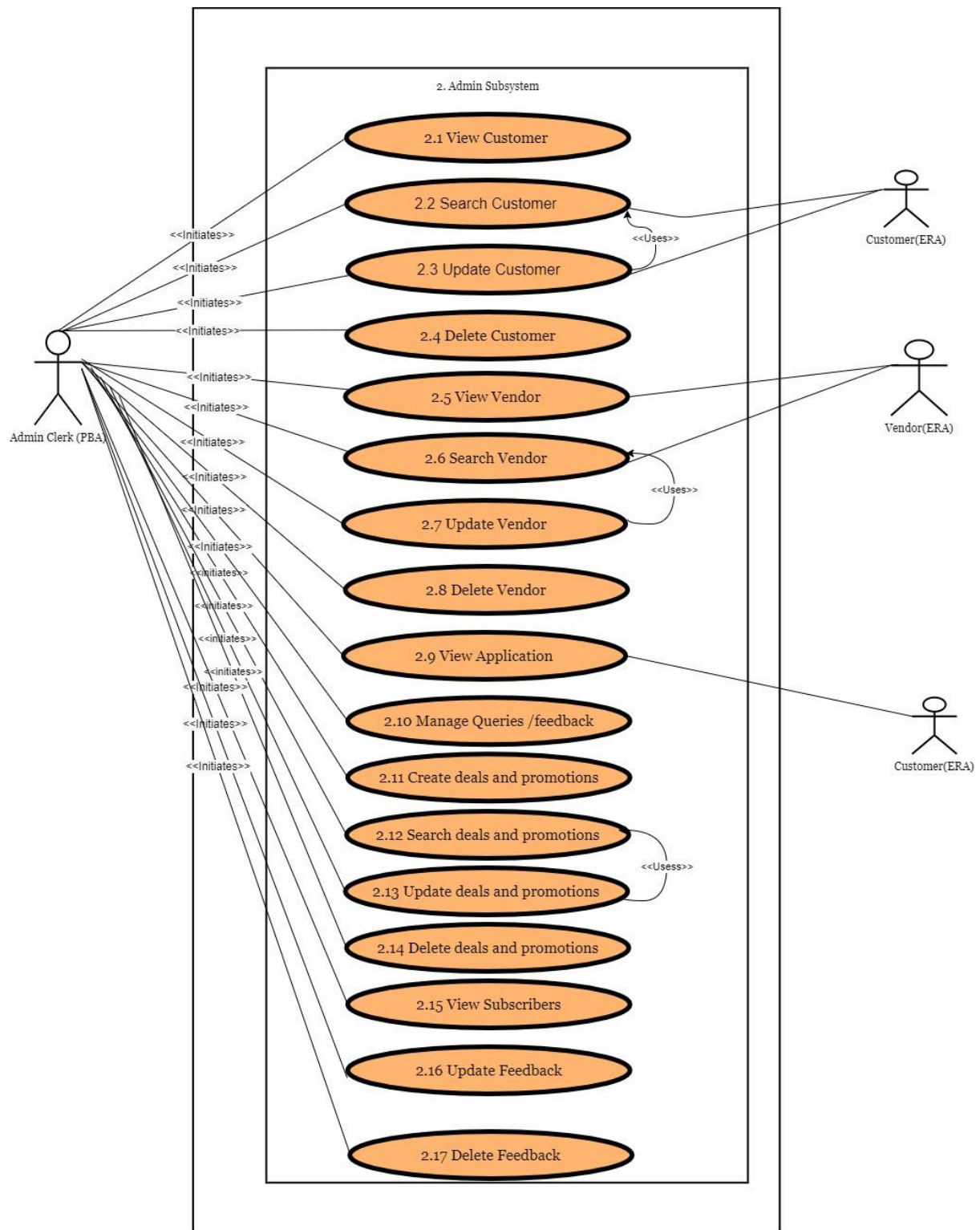
2. Technical Use Case Diagram

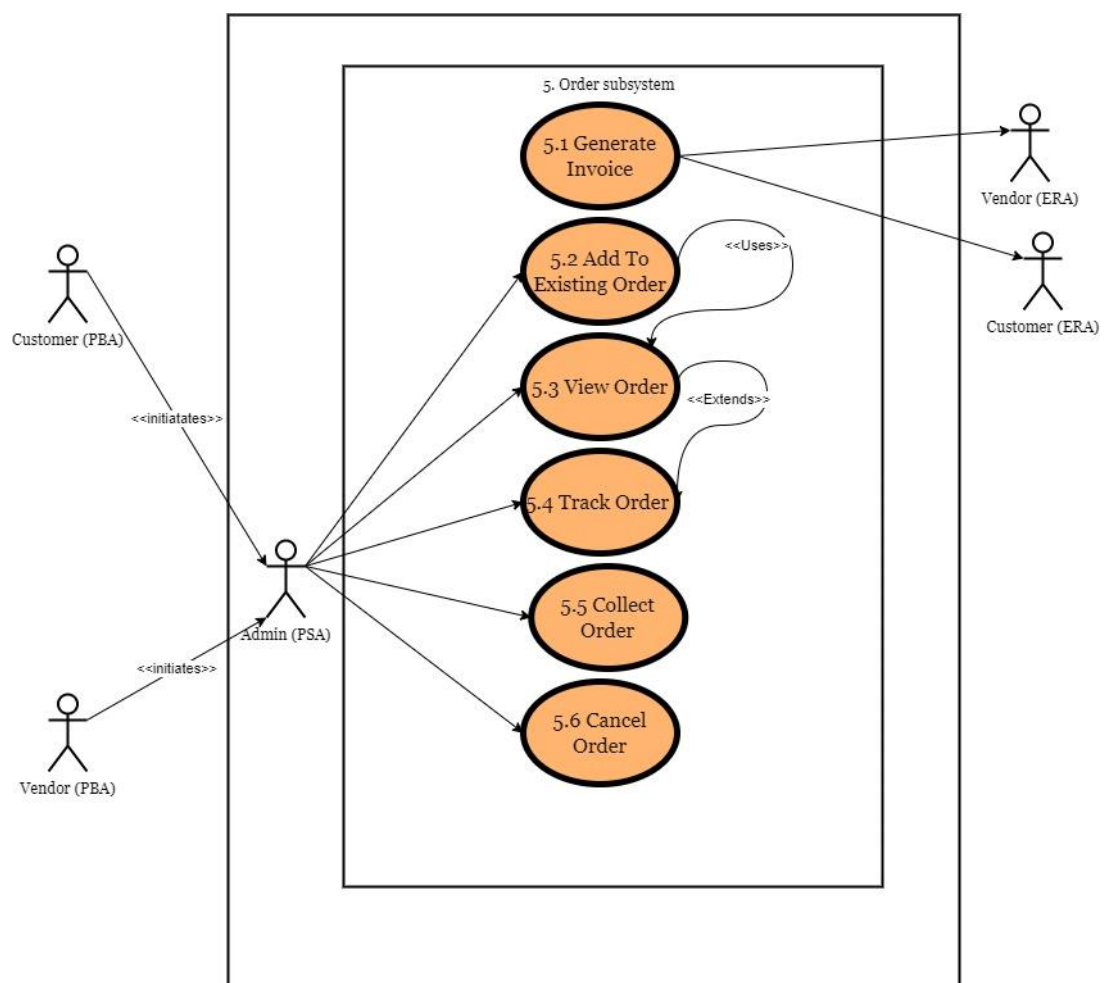
Introduction

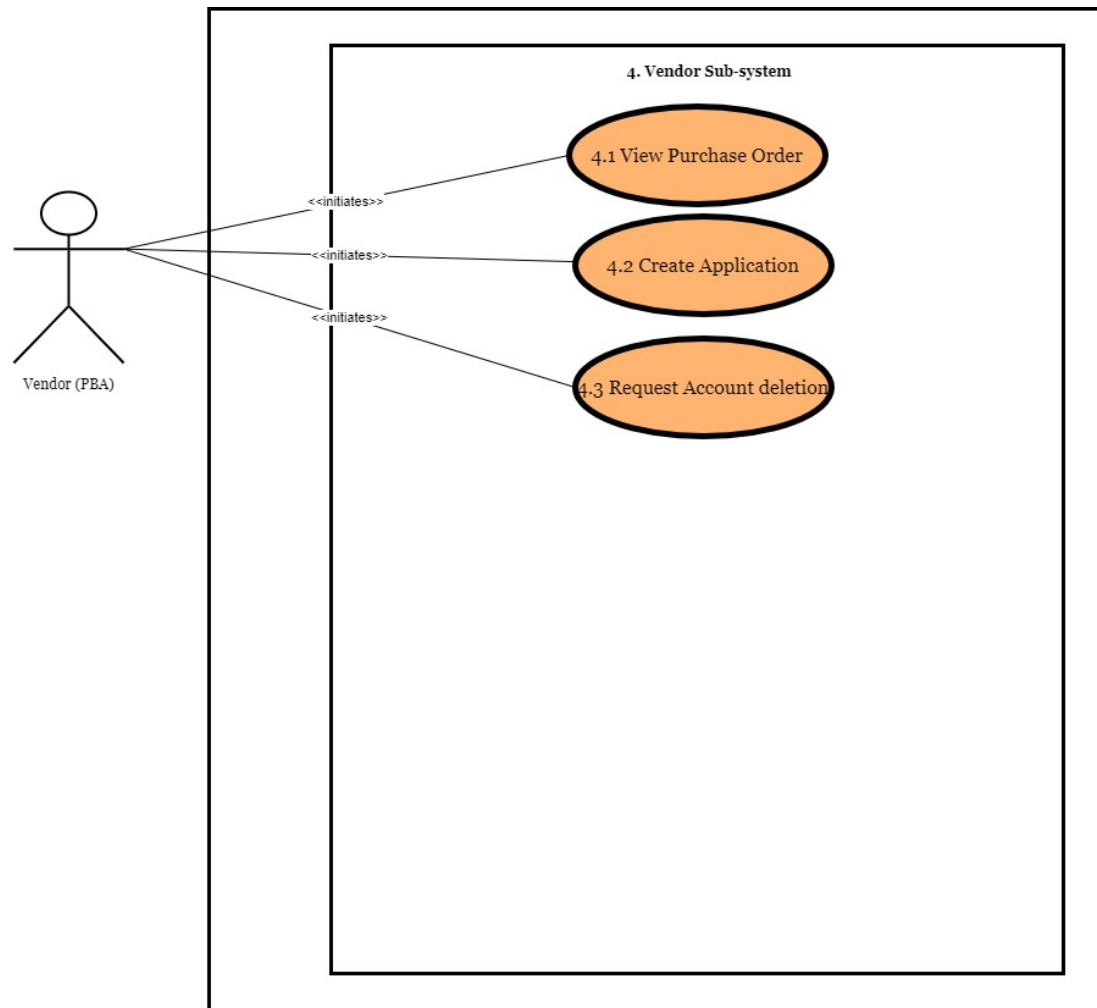
This section will give a detailed description of the technical use case diagram. This diagram will help us when designing our screens for the system.

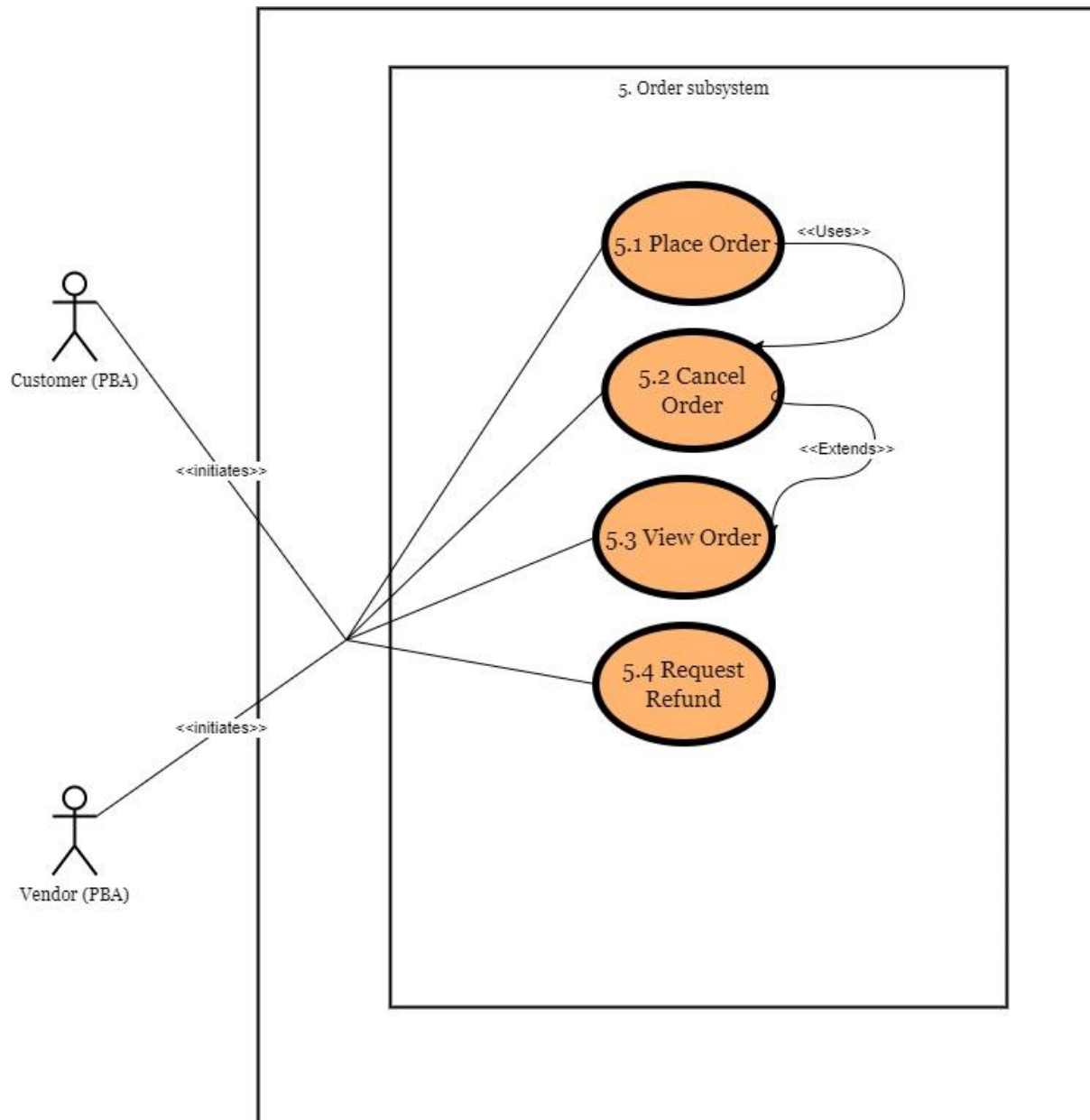


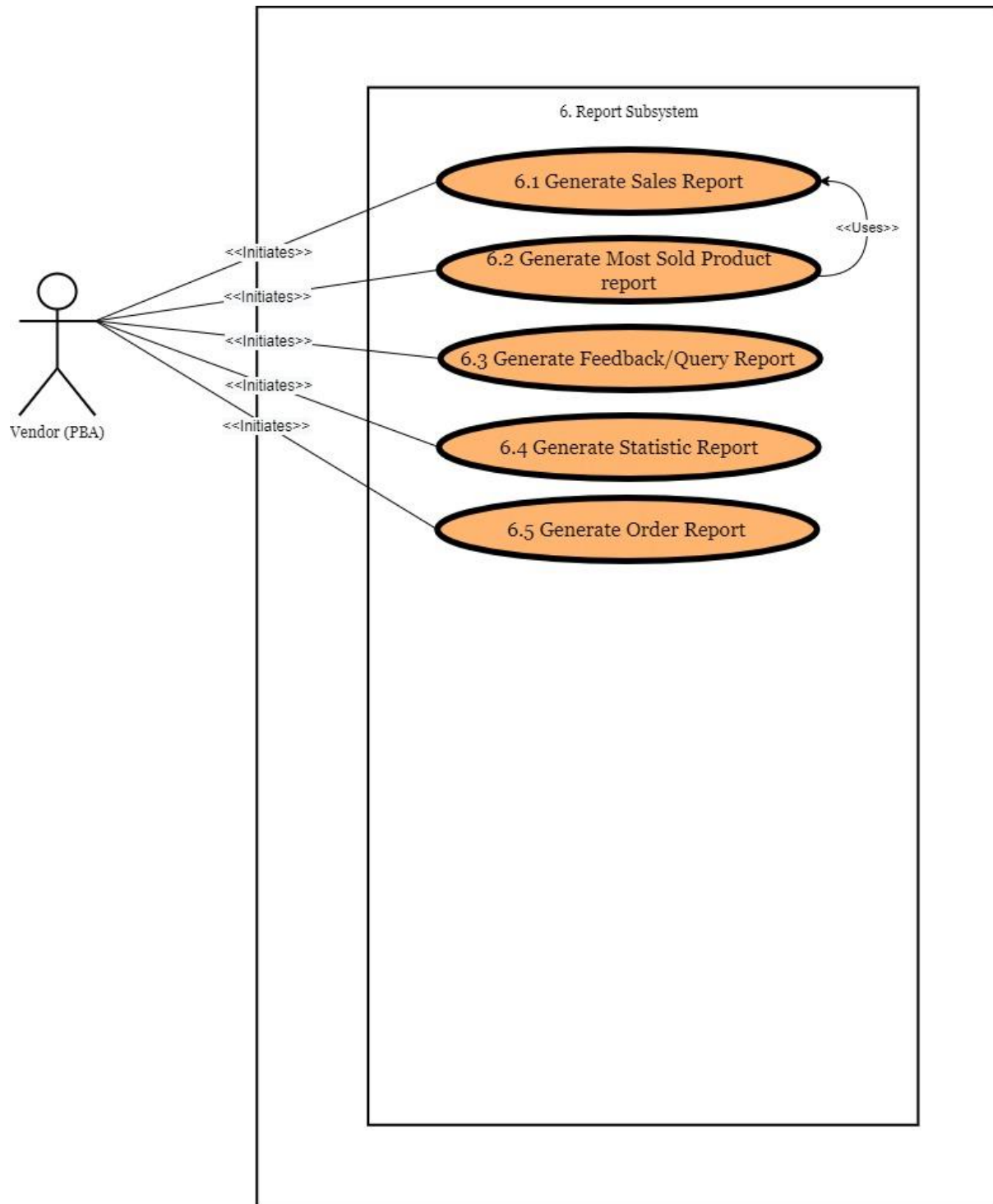


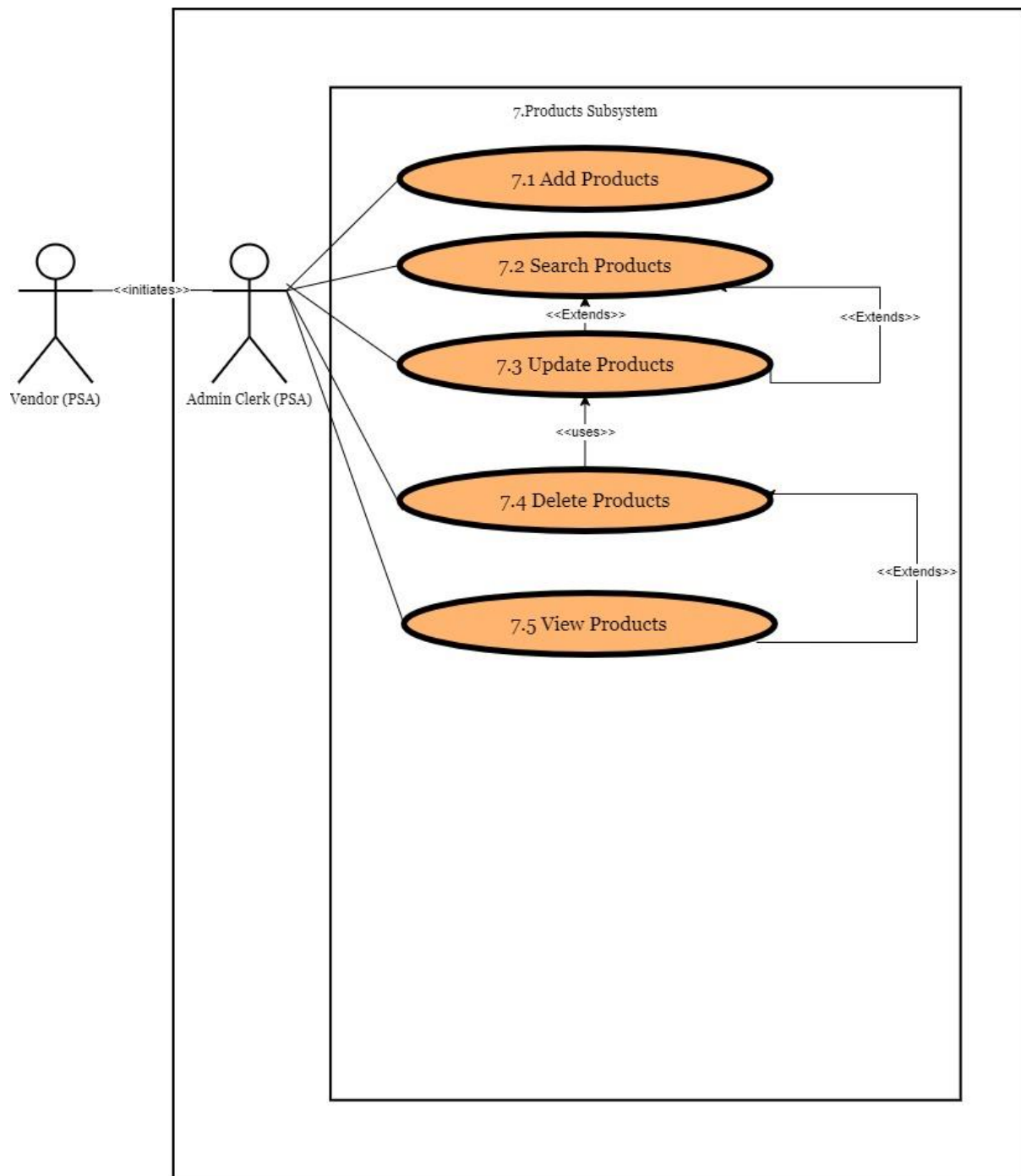


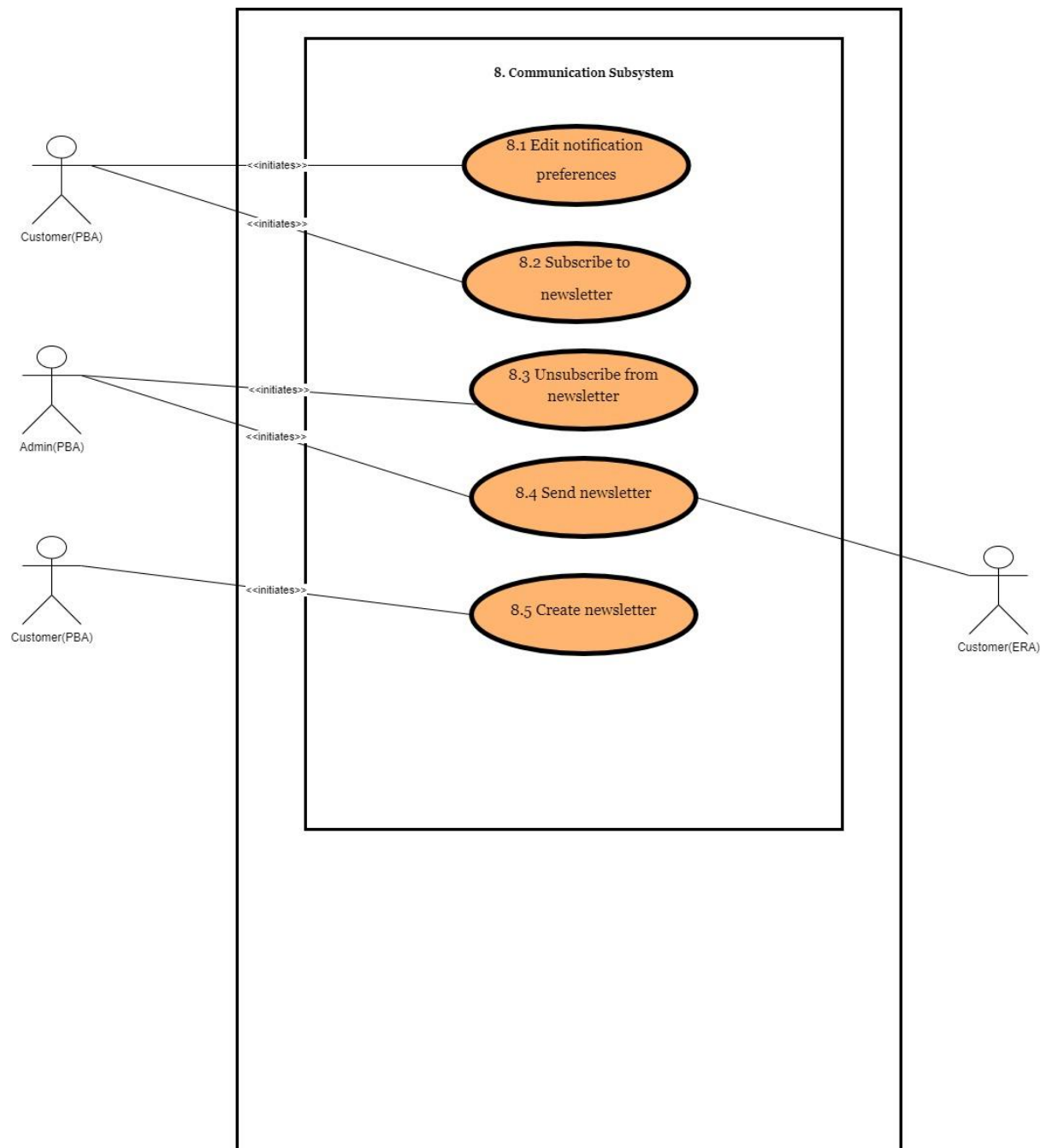


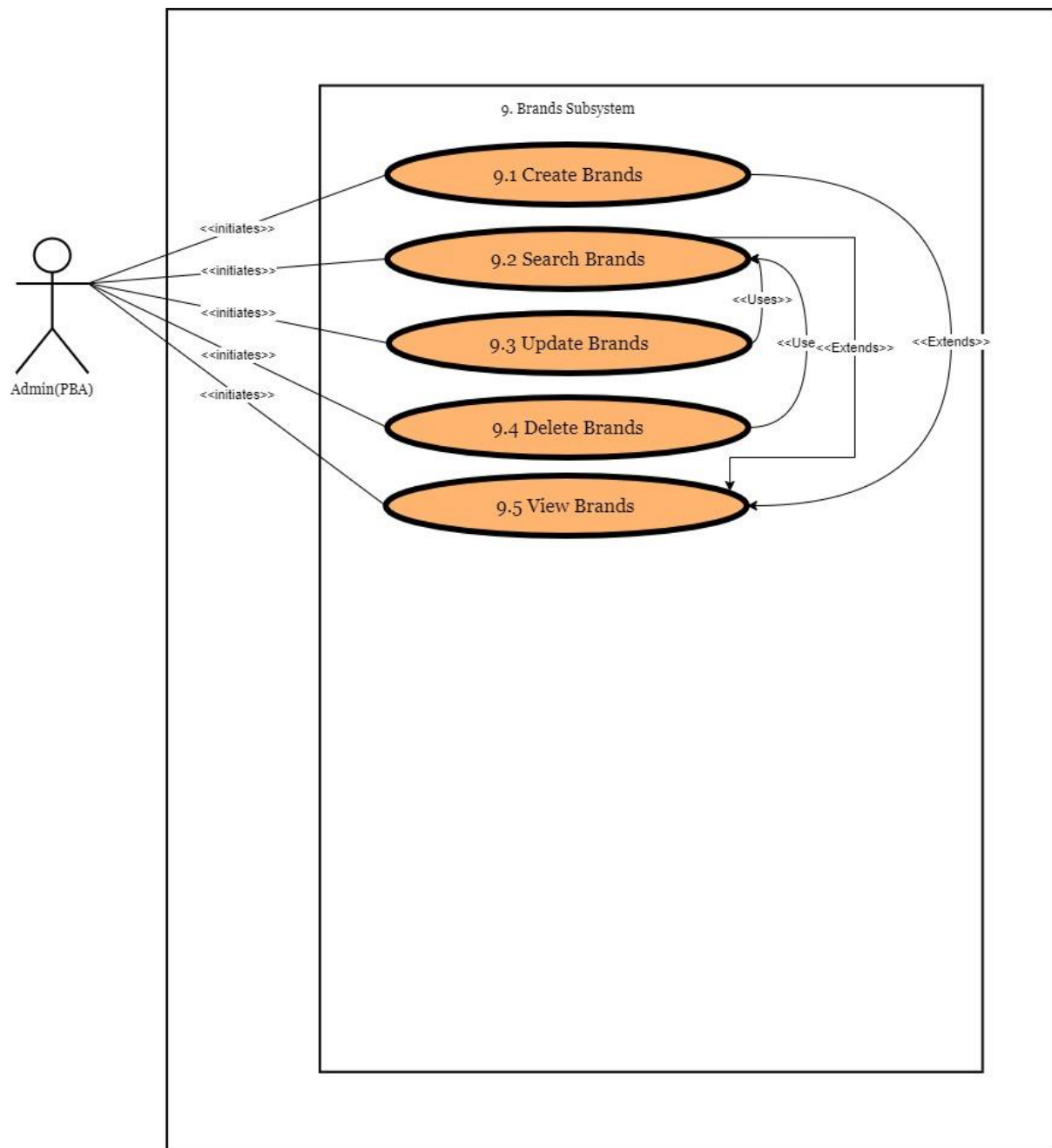


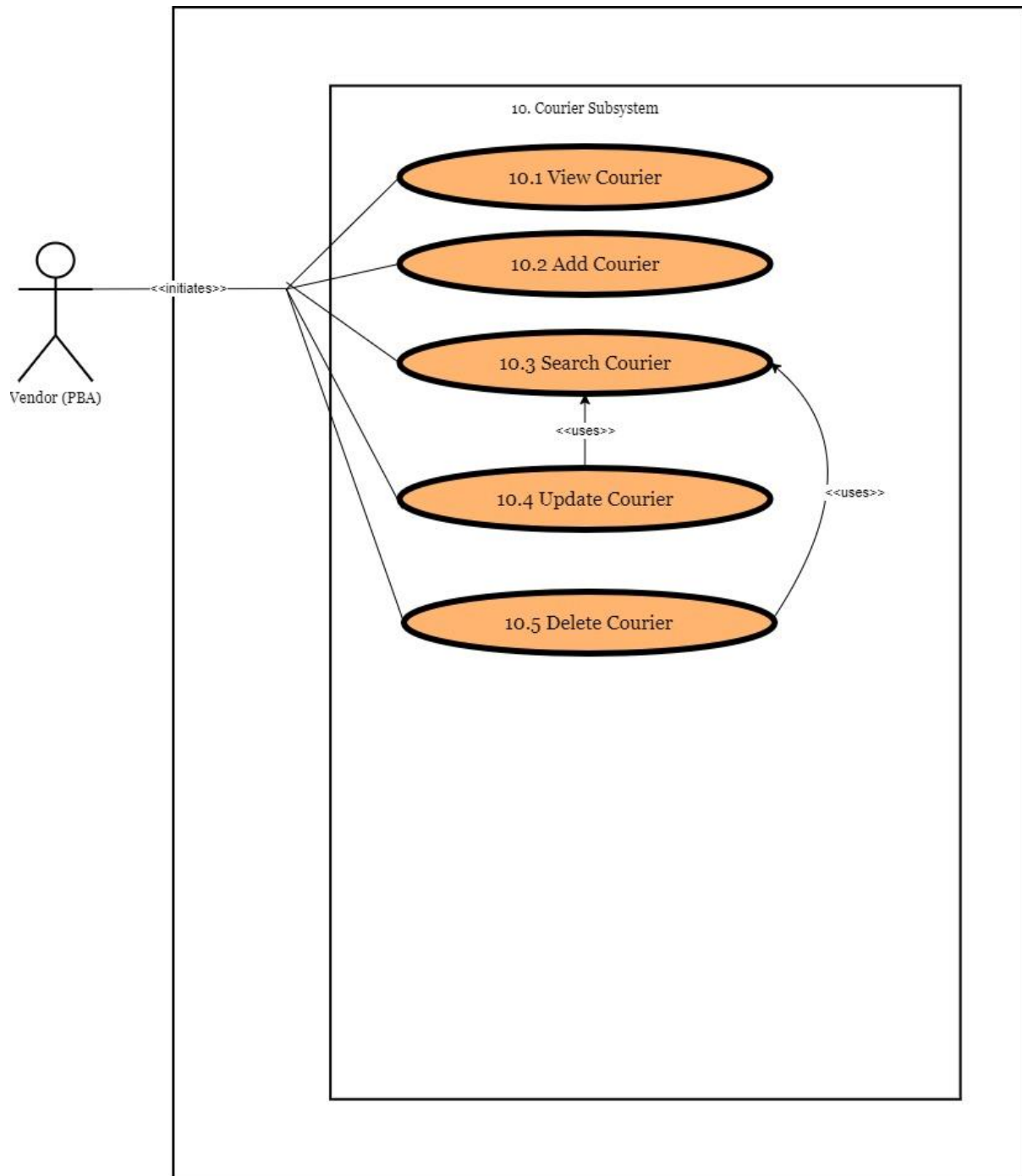


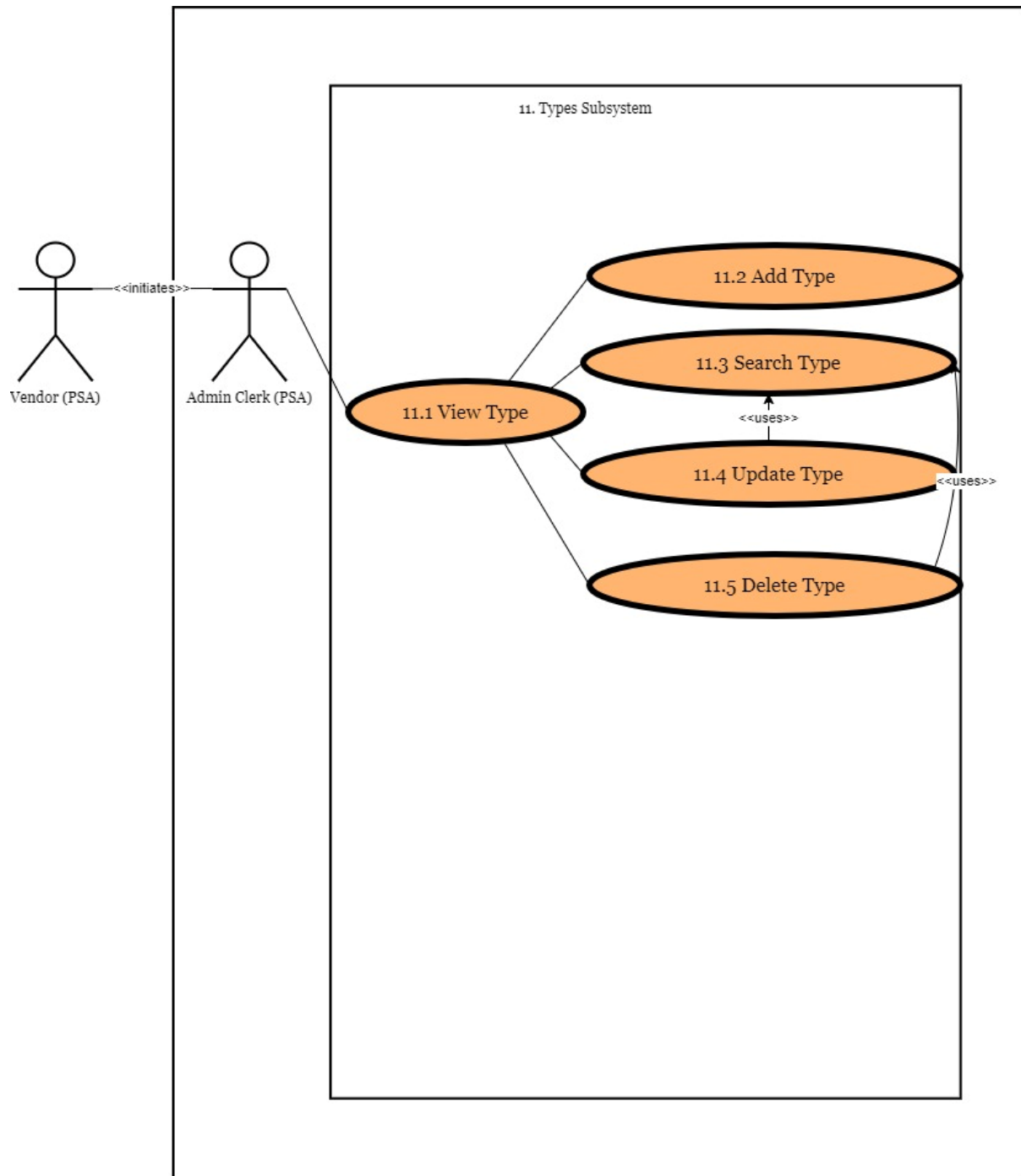


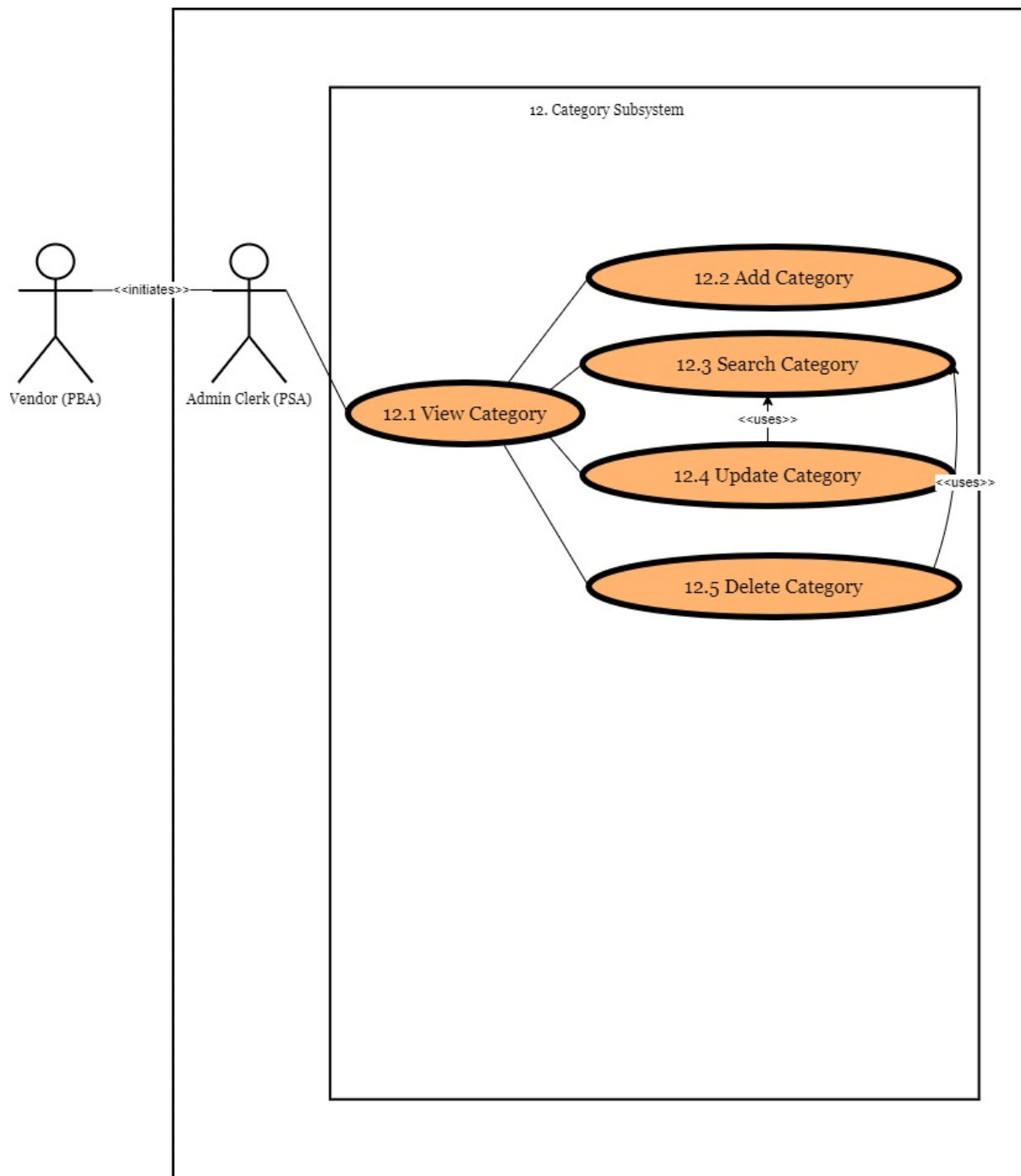












Conclusion

This concludes the technical use case diagram section.

3. Preliminary description of hardware and software

Introduction

This section contains the description of the hardware and software needed for the system to run. It will discuss the requirements needed for the web application as well as the mobile app.

Hardware requirements

Our web application hardware requirements will be based on the minimum requirements of a web browser (Google Chrome).

Web Application Hardware Requirements		Mobile App Hardware Requirements
Windows/Linux products	Mac products	
<ul style="list-style-type: none"> Desktop/laptop with enough processing power to prevent lag (Intel Pentium 4 processor) Max CPU clock rate: 1.3 GHz to 3.8 GHz 1 GB RAM (32-bit) or 2 GB (64-bit) A screen resolution of at least 1024x768 pixels. Internet connectivity Mouse and keyboard (Input devices) Printer (Output devices) 	<ul style="list-style-type: none"> OS X El Capitan 10.11 or later 	<ul style="list-style-type: none"> 1.2 GHz processor or faster 850mb and 1.2 GB Storage RAM 512 Mb, 2GB Storage is recommended.

- 16 GB available hard disk space or 20GB (64 Bit)

Software requirements

	Web Application Software Requirements	Mobile App Software Requirements
Operating system	<ul style="list-style-type: none">• Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, or Windows Server 2016.• 64-bit Ubuntu 18.04+, Debian 10+, openSUSE 15.2+, or Fedora Linux 32+	<ul style="list-style-type: none">• Android Marshmallow 6.0 or later

	<ul style="list-style-type: none"> • Mac OS 	
Browser	<ul style="list-style-type: none"> • Firefox/Chrome latest 	<ul style="list-style-type: none"> • Firefox/Chrome latest
Development	<ul style="list-style-type: none"> • Google Chrome, Mozilla Firefox, Safari • Microsoft SQL Server (v. latest) / My SQL Visual Studio 2019 for ASP.NET Development • Visual Studio Code (v. latest) • Filezilla • Navicat 	

Conclusion

The above section provided a detailed overview regarding the required hardware and software needed for the Autoclear multi-vendor store detailing from the software that will be used, the client and admin specification and the software requirements.

4. Physical Entity Relationship Diagram

Introduction

This section contains the description of the physical entity relationship diagram needed for the system to run. It will discuss the requirements needed as well as the screens needed for the mobile app and website.

Add Product Screen	
Control	Description
1. Side Navbar	Allows users to select the different links related to the screen they are currently on. By clicking on the links users will be taken to the different screens of their choice.

2. H1 Automotive Clearance Store	A heading clearly describing the name of the system and company.
3. Navbar labels (Add, Search, Update, Delete)	Describes to users what screen the navbar links will take them.
4. Title: Add Product	Title of the screen user is currently on.
5. Angular material card system	Describes the product/s that have been selected to be added on the screen. It clearly gives the name and description of the products as well as labels and input fields that can be edited for that product such as price.
6. Product name label	Label describing the product being added.
7. Product description	Provides descriptive details of the product to the admin clerk/vendor who's adding the product.
8. Label: Duration	Label describing the policy this specific product has now.
9. Label: Code	Label describing the assigned code for that specific product on the system.
10. Save Button	Allows the user to update the product details once it is clicked.

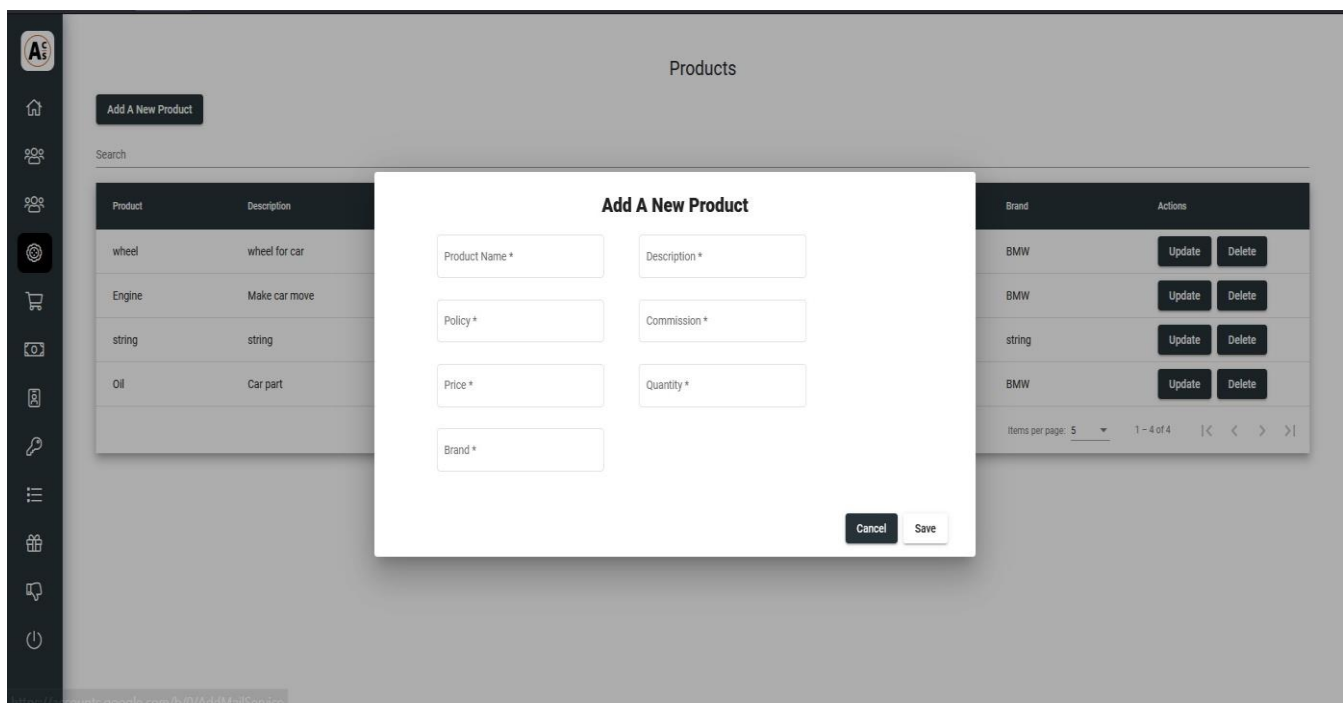


Figure 1.2 Add Product Screen

Update Product Screen	
Control	Description
11. Side Navbar	Allows users to select the different links related to the screen they are currently on. By clicking on the links users will be taken to the different screens of their choice.
12. H1 Automotive Clearance Store	A heading clearly describing the name of the system and company.
13. Navbar labels (Add, Search, Update, Delete)	Describes to users what screen the navbar links will take them.
14. Title: Update Product	Title of the screen user is currently on.
15. Angular material card system	Describes the product/s that have been selected to be updated on the screen. It clearly gives the name and description of the products as well as labels and input fields that can be edited for that product such as price.
16. Product name label	Label describing the product being updated.
17. Product description	Provides descriptive details of the product to the admin clerk/vendor who's editing the product.
18. Label: Duration	Label describing the policy this specific product has now.
19. Label: Code	Label describing the assigned code for that specific product on the system.
20. Save Button	Allows the user to update the product details once it is clicked.

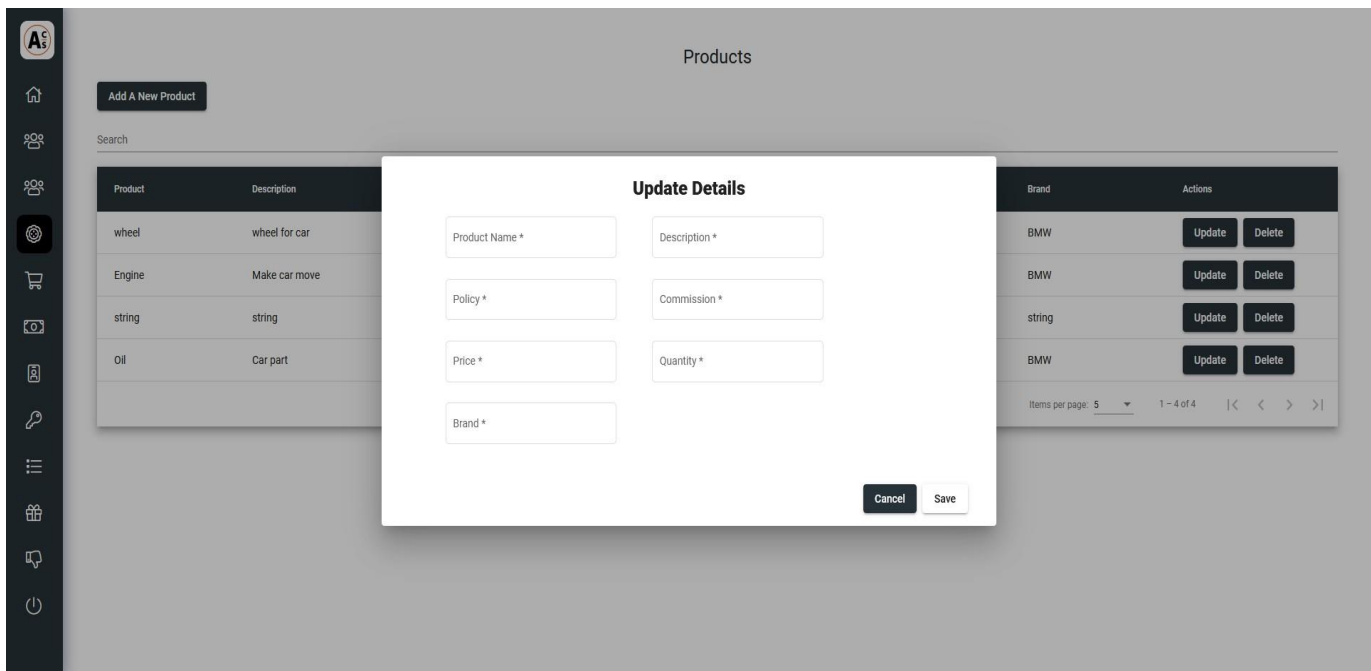


Figure 1.3 Update Screen Design

Search Product Screen	
Control	Explanation
1. Navbar	Allows users to select the different links related to the screen they are currently on. By clicking on the links users will be taken to the different screens of their choice.
2. Automotive Clearance Store h1	A heading describing the name of the system.
3. H2 Title View Product	Title of the screen user is currently on.
4. Navbar labels (Add, Search, Update, Delete)	Describes to users what screen the navbar links will take them.
5. Image of Product	Visual representation of product.
6. Product name label	Label describing the product being sold.

7. 5 Star rating	Rating allows the user to see if others who have bought this product recommend it.
8. Rand value label	Label describing the rand value of the product.
9. Add to Cart button	Button which allows the user to add the product to their cart.
10. Paragraph text	Description of the product's brand and where the product was sourced and what it can be used for.
11. Toggle Labels for: (Description, Specifications, Reviews)	Describes to users the description, specs and reviews of the product they wish to add to their cart. Users will be able to toggle through these labels.
12. Image of Product	Visual representation of product.
13. Product heading	Describes to users the name of the product.
14. Product description	Provides descriptive details of the product to users.
15. H2 Related products	Describes the products below the heading.
16. Bootstrap card system	Describes the products related to that of the one the user is currently looking at on the screen and gives the name of the product, star rating as well as the rand value.
17. Label: Categories	Describes to users what radio button they need to click to achieve their required result.
18. Categories Radio Buttons	Allows the user to filter to the category they prefer.
19. Label: Brand	Describes to users what radio button they need to click in order to achieve their required result.
20. Brands Radio Buttons	Allows the user to filter to the brand they prefer.
21. Label: Price	Describes to users what radio button they need to click in order to achieve their required result.
22. Price Radio Buttons	Allows the user to filter to the price they prefer.
23. Filter Button	Allows the user to filter the products once it is clicked.

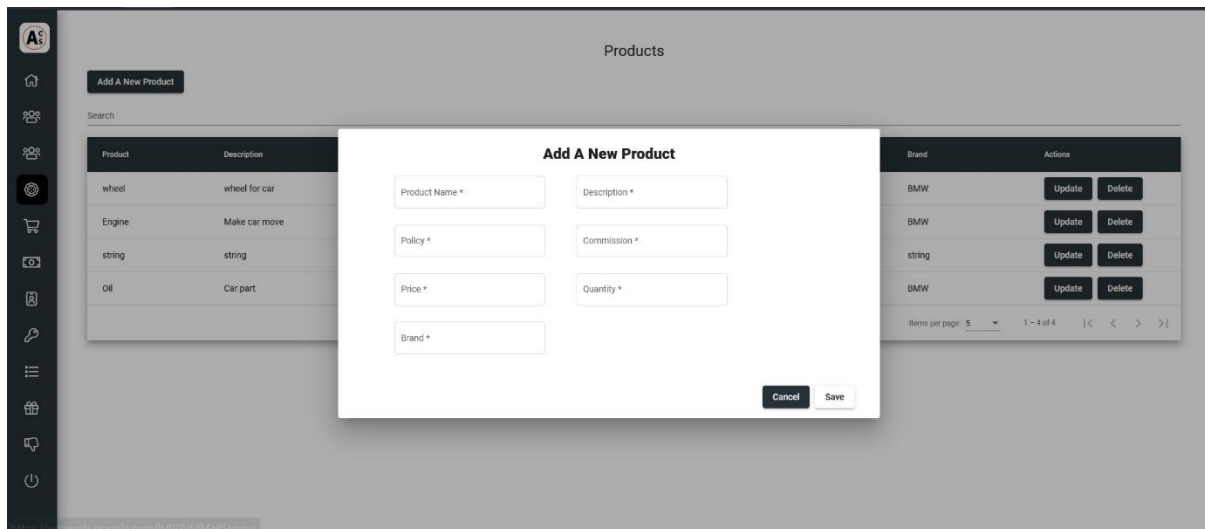


Figure 1.4 Search Product Screen

2.2 Report Subsystem

2.2.1 Report Output

2.2.1.1 General Information

Report Number:	2.1
Report Name:	Generate Sales Report
Short Description:	A report that shows the details of the sales report for a selected time period.
Frequency:	Ad Hoc

2.2.1.2 Output Criteria

Criteria	Default	Type	'All' Selection?	Multiple Selections?	Values
Start Date	Current Date	Date Picker	None	None	Any date, prior or equal to today's date

End Date	Current Date	Date Picker	None	None	Any date, prior or equal to today's date
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2.2.1.3 Report Fields

Field name	Form at	Max Length	Justifie d	Leading zero suppressio ns	Overflo w	Source
Auto Clear Logo	Image	None	Left	None	No	Predefined
Report Title	Text	45	Center	None	No	Predefined
Generate d On	Date Time	yyyy/mm/d d	Left	No	No	System.DateTime.N ow on generation of the report.
End Of Report	Text	None	Center	None	No	Predefined

2.2.1.4 Output Layout

Orders Report

Issue Date: Sun Aug 14 2022 22:54:02 GMT+0200 (South Africa Standard Time)

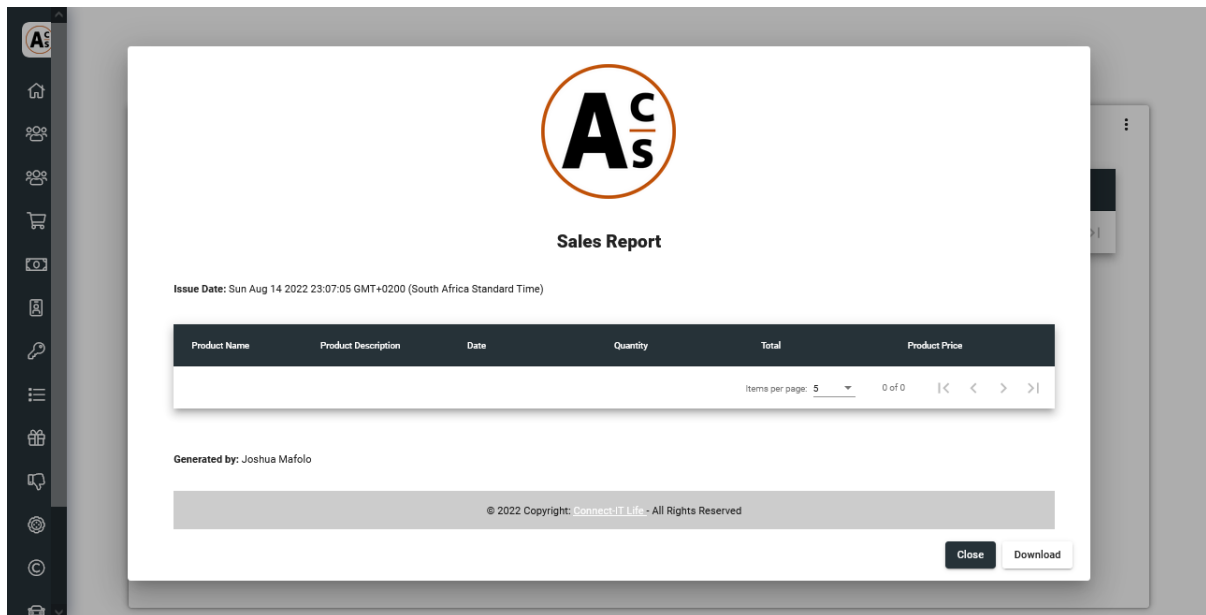
Order Number	Quantity	Total	Order Status
2022-08-12T14:00:56	56	R 56759	Pending
2020-07-12T12:00:56	56	R 56759	Pending
2020-07-12T12:00:56	560	R 700000	Delivered
2020-09-12T12:00:56	876	R 7654324	Delivered
2022-08-14T13:12:15.6	2	R 68755	Pending

Items per page: 5 1 - 5 of 10 |< >|

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2.3 User Subsystem

2.3.1 Email Output

2.3.1.1 General Information

Report Number:	1.6
Report Name:	Create user
Short Description:	A successful notification detailing that the user has been successfully registered to the AutoClear Database.
Frequency:	Ad Hoc

2.3.1.2 Output Criteria

Criteria	Default	Type	'All' Selection?	Multiple Selections?	Values
None	None	None	None	None	None

2.3.1.3. Email Fields

Field name	Format	Max Length	Justified	Leading zero suppressions	Overflow	Source
Auto Clear Logo	Image	None	Left	None	No	Predefined



Description	Text	255	Centre	None	No	Predefined
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2.3.1.4 Output Layout

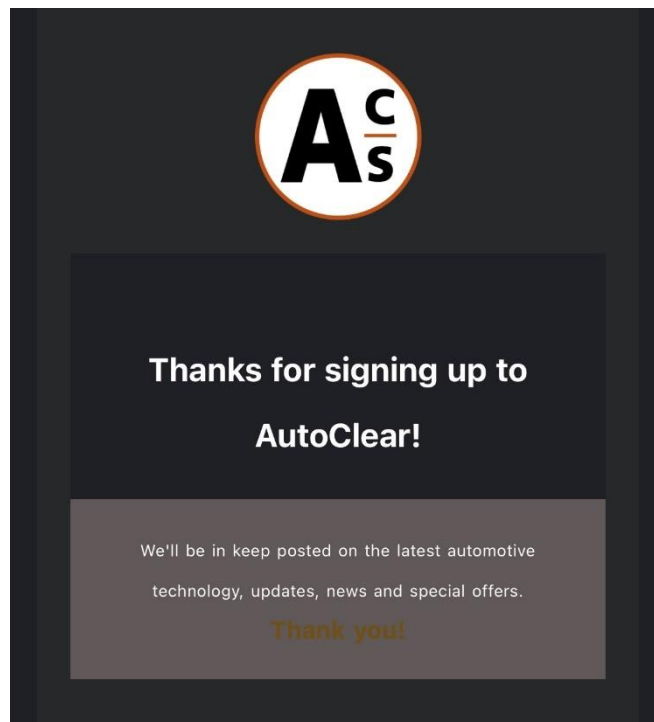


Figure 2.1 - Email Notification

2.4 Customer Subsystem

2.4.1 Notification Output

2.4.1.1 General Information

Report Number:	3.4
Report Name:	Checkout



Short Description:	A successful notification detailing that the user has successfully purchased a product on the AutoClear system.
Frequency:	Ad Hoc

2.4.1.2 Output Criteria

Criteria	Default	Type	'All' Selection?	Multiple Selections?	Values
None	None	None	None	None	None

2.4.1.3 SMS Fields

Field name	Format	Max Length	Justified	Leading zero suppressions	Overflow	Source
Icon	Image	None	Centre	None	No	Predefined
Notification title	Header	None	Centre	None	No	Predefined
Notification body	Text area	None	Centre	None	No	Predefined
Autoclear link (Back to main page)	Text area	None	Centre	None	No	Predefined

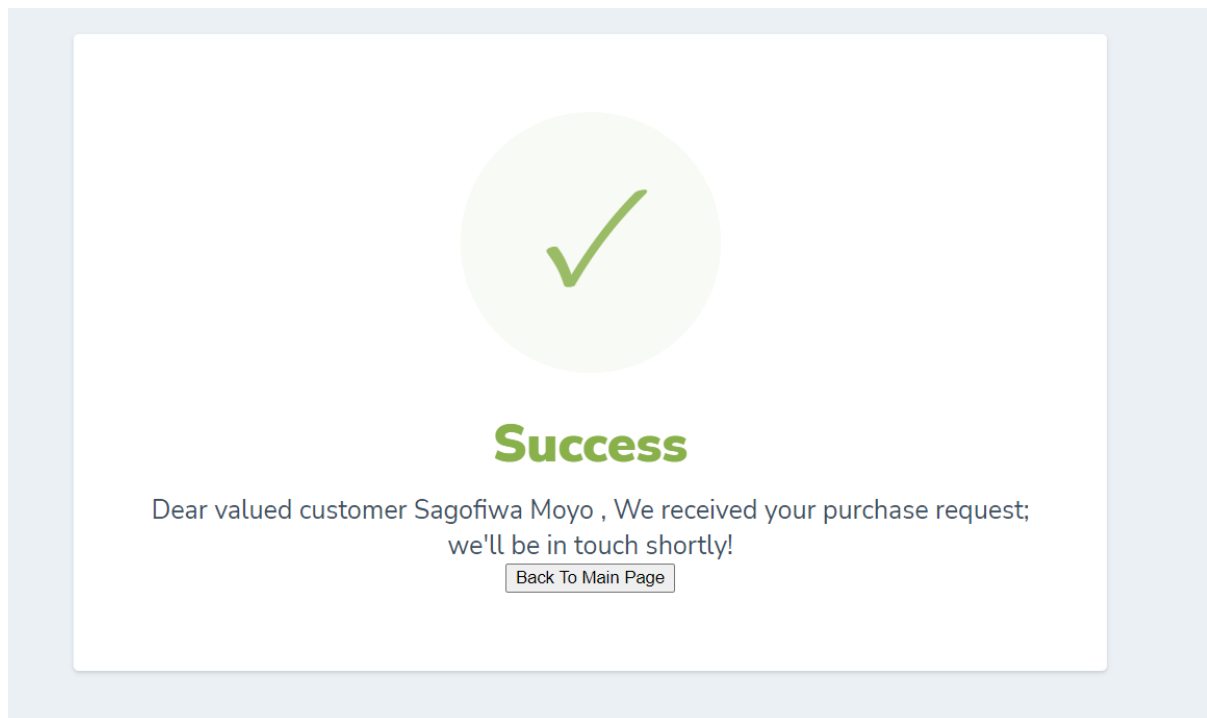


Figure 2.4 - Notification Pop-up

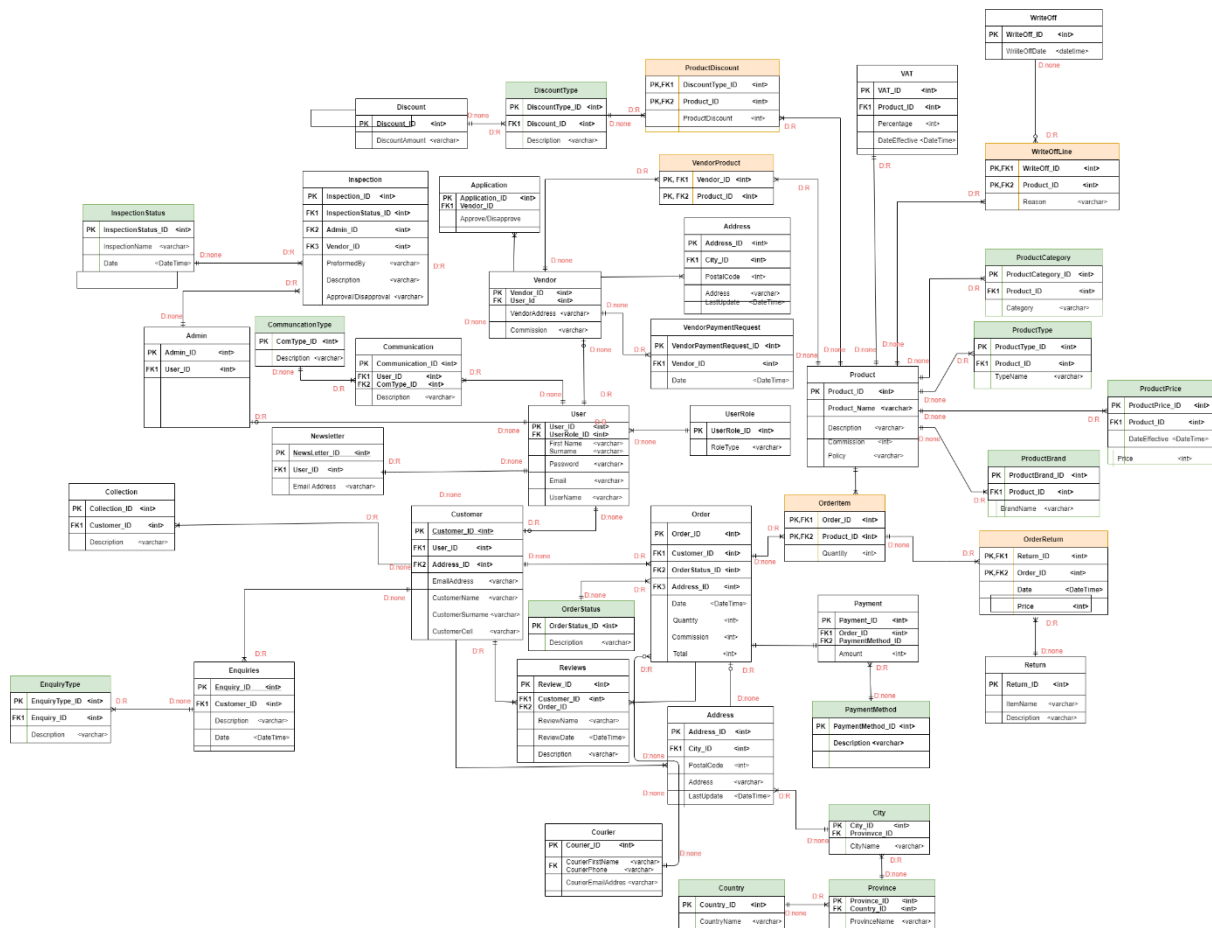
Conclusion

The above section provided a detailed overview regarding the physical entity relationship diagram needed for the Autoclear multi-vendor store detailing from the requirements that will be used, the client and admin specification.

5. Physical Entity Relationship Diagram

Introduction

This section contains the technical entity relationship diagram. This will help the construction of the system database to give us an in-depth view of the referential integrity.



Conclusion

This concludes the physical entity relationship diagram section.

1. Conclusion

This document concludes iteration 3 for our system AutoClear. SystemOps have proposed a multi-vendor online store to solve the problems that they business is currently facing and assist in easing their daily operations. The team sign-off will end off this document

2. Team sign-off

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