King Saud University
College of Computer and Information Sciences
Department of Information System
IS 240
System Analysis and Design

جامعة الملك سعود
King Saud University
كلية علوم الحاسب والمعلومات
قسم نظم المعلومات

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Course Project Report

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Introduction

Fashion Designing System

World is involving and we are in a technology era, everything is becoming easier with technology, bunch of services are now online, because of that Fashion designing system will be a third party between a customer and a designer and it will serve a lot of people who are interested into designs, this system will help the customer to get a design without visiting a shop or a designer, customer will give the designer the measurement and fabrics desired to make the clothes, the system will help the designer and the customer to communicate through the system's interface and it will provide several payment methods to pay the designer then the order will be delivered to customer.

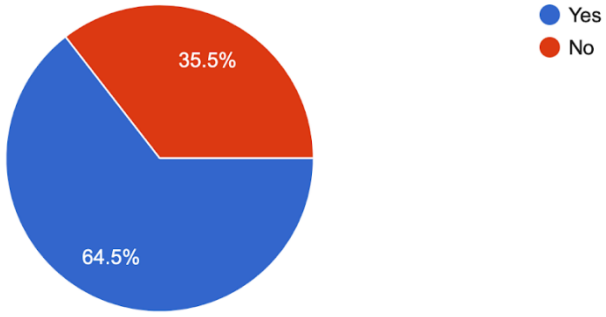
Chapter 1

Information Gathering

Questionnaire answers in graphic form

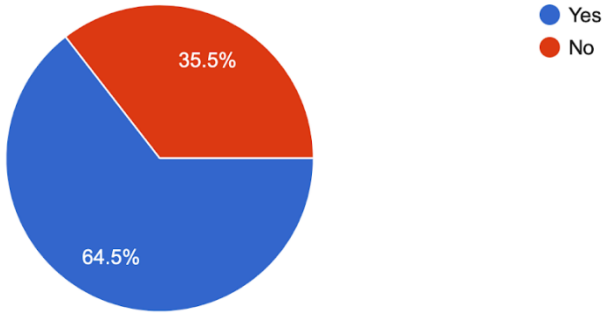
Do you have any interest in fashion design?

31 responses



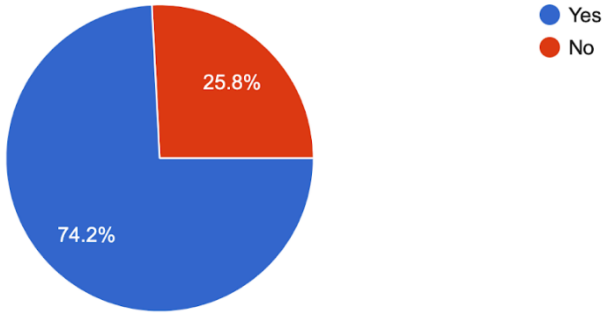
Do you think that watching the previous work of a fashion designer is essential?

31 responses



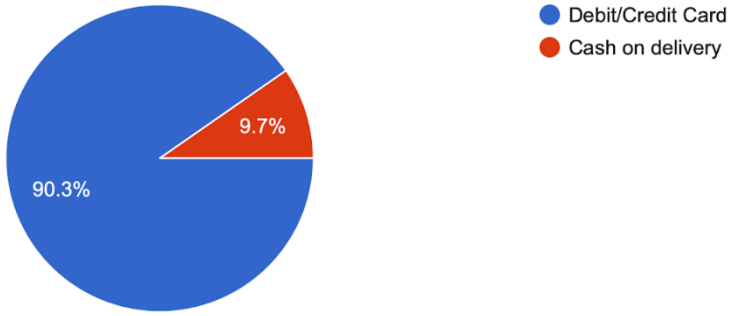
Does the designer's previous work affect your choice of designers?

31 responses



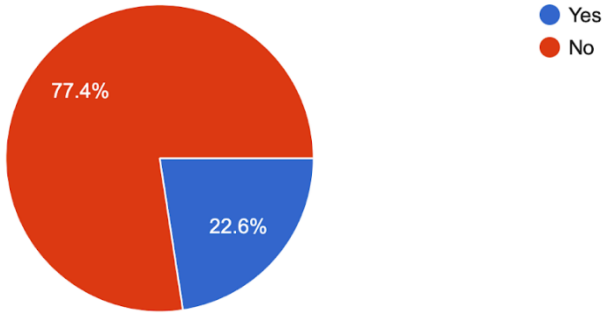
What are the payment method you prefer to use?

31 responses



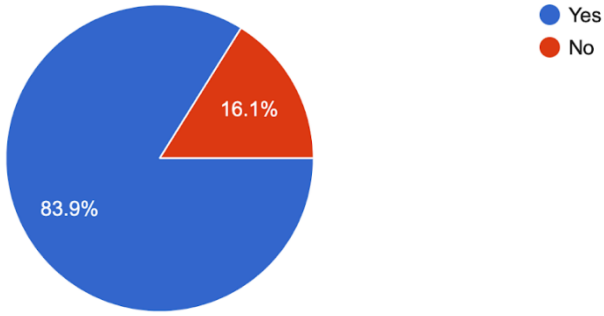
Do you have any experience in fabric types?

31 responses



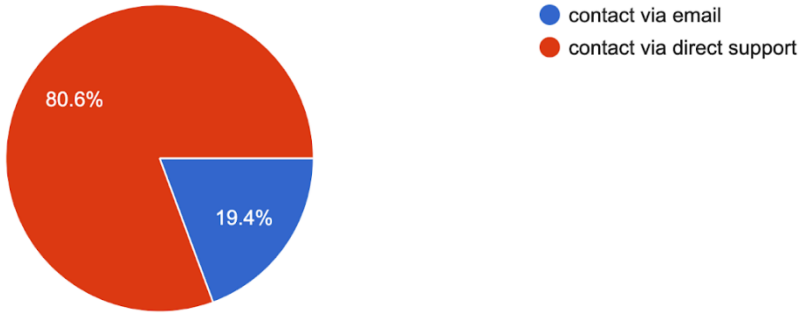
Do you care about the packaging of the product?

31 responses



When you have an issue with the system, do you prefer direct support or send an email to technical support?

31 responses



Functional and Non-Functional Requirements

1- Functional Requirements

1. Customer choose payment method
2. Customer login
3. Customer logout
4. Customer search for designer
5. Customer cancel order
6. Customer choose a designer
7. Customer choose colors
8. Customer choose fabric
9. Customer choose language
10. Customer choose style
11. Customer choose suitable offer
12. Customer communicate with designer
13. Customer make order
14. Customer pay bill
15. Customer rate the designer
16. Customer register
17. Customer send location
18. Customer upload an image
19. Customer view previous designs
20. Designer close order
21. Designer login
22. Designer logout
23. Designer make profile
24. Designer rate the costumer
25. Designer receive order
26. Designer register
27. Designer set price
28. Designer take Costumer length
29. Designer take Costumer nick size
30. Designer take Costumer width

31. Designer view comments and ratings

2- Non-Functional Requirements

1. Image Quality
2. Type of currency
3. System Performance
4. System Security
5. System Maintainability
6. Height and Width scale (inch, meter)

Use Cases

1- Identify Events

External events	Resulting Use Case
1- Customer wants to order and choose payment method 2-Customer wants to cancel the order 3- Customer created an account and wants to make order 4-Designer completed the order and wants to close the order 5- Designer created an account and wants to login 6- Designer ask the Customer for his length 7- Designer finished the product then Customer will rate designer 8-Customer wants to order then customer will login 9-Designer ask customer to upload image 10- After the work is done customer pay bill 11- Designer to receive order should login 12- Designer ask the customer for his width 13- Designer ask the customer for his neck size	1- Customer choose payment method. 2- Customer cancel order. 3- Customer make order. 4- Designer close order 5- Designer login. 6- Designer take customer length. 7- Customer rate designer 8- Customer login. 9- Customer upload image. 10- Customer pay bill. 11- Designer receive order. 12- Designer take customer width 13- Designer take customer neck size

2- Fully Developed Use Case

1-

Use case name:	Login to system	
Scenario:	User wants to login to system	
Triggering event:	A user wants to order	
Brief description:	A user logs in to the fashion designing system	
Actors:	Customer, Designer	
Related use cases:	Receive order, make order	
Stakeholders:	Customers, designers	
Preconditions:	Customer must be registered in the system and User information must be available to login	
Postconditions	System interface must show up to the user	
Flow of activities	Actor	System
	1. Customer/designer will go to system to fill information and login 2.Customer/Designer will be logged in and ready to use the system	1.1 The system will verify if the username and password are valid 2.2 The system will show the user the interface of the system
Exception conditions:	1.User information are wrong 2.User is not registered	

2-

Use case name:	Make order	
Scenario:	Make online order through system	
Triggering event:	Customer wants to create online order	
Brief description:	Customer visits online system and contact designer to order a desired design and send the order to the system	
Actors:	Customer	
Related use cases:	Must be invoked by *Customer Login* to make order	
Stakeholders:	Designer, Customer	
Preconditions:	Customer must be Registered and log-in to make order	
Postconditions	The order will be sent to designer	
Flow of activities	Actor	System
	1. Customer desired to make order 2. Customer contact with designer and send measurements and product details	1.1. Request received 1.2. Sent to the designer 2.1. Designer received order 2.2. And start preparing for the order
Exception conditions:	1. No designers are available 2. The type of the style not available	

3-

Use case name:	Take length	
Scenario:	Designer take sizes of the costumer.	
Triggering event:	Designer wants to take sizes of the costumer.	
Brief description:	Designer take sizes of the costumer to make the product that the costumer wants.	
Actors:	Designer.	
Related use cases:	Must be invoked by *Customer order.*	
Stakeholders:	Designer, Costumer.	
Preconditions:	The length of the costumer must be correct.	
Postconditions	Designer will view up costumer order that contain costumer length.	
Flow of activities	Actor	System
	1. Designer receive order. 2. Designer take length of the costumer. 3. Designer checks the measurements are correct or not.	1.1. System shows costumer order to designer. 2.1 System view order details that contain costumer length. 3.1 System accept order if measurements are correct. 3.2 System send back to costumer that measurements are incorrect.
Exception conditions:	1.1 costumer data are incomplete. 2.2 Costumer length is not accurate.	

4-

Use case name:	Take width.	
Scenario:	Designer take sizes of the costumer.	
Triggering event:	Designer wants to take sizes of the costumer.	
Brief description:	Designer take sizes of the costumer to make the product that the costumer wants.	
Actors:	Designer.	
Related use cases:	Must be invoked by *Customer order.*	
Stakeholders:	Designer, Costumer.	
Preconditions:	The width of the costumer must be correct.	
Postconditions	Designer will view up costumer order that contain costumer width.	
Flow of activities	Actor	System
	1. Designer receive order. 2. Designer take the width of the costumer. 3. Designer checks the measurements are correct or not.	1.1 System shows costumer order to designer. 2.1 System view order details that contain costumer width. 3.1 System accept order if measurements are correct. 3.2 System send back to costumer that measurements are incorrect.
Exception conditions:	1.1 costumer data are incomplete. 2.2 Costumer width is not accurate.	

5-

Use case name:	Take nick size	
Scenario:	Designer take sizes of the costumer.	
Triggering event:	Designer wants to take sizes of the costumer.	
Brief description:	Designer take sizes of the costumer to make the product that the costumer wants.	
Actors:	Designer.	
Related use cases:	Must be invoked by *Customer order.*	
Stakeholders:	Designer, Costumer.	
Preconditions:	The nick size of the costumer must be correct.	
Postconditions	Designer will view up costumer order that contain costumer nick size.	
Flow of activities	Actor	System
	1. Designer receive order. 2. Designer take the nick size of the costumer. 3. Designer checks the measurements are correct or not.	1.1 System shows costumer order to designer. 2.1 System view order details that contain costumer nick size. 3.1 System accept order if measurements are correct. 3.2 System send back to costumer that measurements are incorrect.
Exception conditions:	3.1. costumer data are incomplete. 2.2 Costumer nick size is not accurate.	

6-

Use case name:	Upload Image	
Scenario:	Uploading an image to make a look alike or a planned design to a make a design based on the image	
Triggering event:	Customer wants to order a design based on a image	
Brief description:	When a customer wants to make an order, he/she has a choice to upload an image to the designer to make design based on the image.	
Actors:	Customer	
Related use cases:	Must be invoked by *Make Order* to upload an image	
Stakeholders:	Customer, Designer	
Preconditions:	While making order for more information to the designer he could send an image	
Postconditions	Designer receive an image and start designing based on the image	
Flow of activities	Actor	System
	1. Customer make order 2. Customer upload image 3. Customer describe image to designer	1.1 order received and started a conversation between a customer and a designer 2.1 image received 2.2 image sent to designer 3.1 description received and sent to designer
Exception conditions:	1. image is not in appropriate extension	

7-

Use case name:	Cancel Order	
Scenario:	Cancel order after order is placed	
Triggering event:	Customer decided to cancel an order for some reason	
Brief description:	After Making an order, a customer decide to cancel the order and the system receive request and notify customer	
Actors:	Customer	
Related use cases:	Must be invoked by *Make Order* to cancel an order	
Stakeholders:	Customer, Designer	
Preconditions:	The order must be already placed	
Postconditions	The system notify customer that the order is cancelled Payment will return to customer	
Flow of activities	Actor	System
	1. After an order is exist customer request to cancel order	1.1 Request receive 1.2 Send confirmation to customer and designer 1.3 Check if there's a valid payment 1.4 Return payment to customer
Exception conditions:	1. If the order is finished and ready to be delivered	

8-

Use case name:	Receive order	
Scenario:	Designer will receive the order	
Triggering event:	A new order sent to a Designer	
Brief description:	Online customer makes an order, and the order will show up to the designer	
Actors:	Designer	
Related use cases:	Make order	
Stakeholders:	Customer, Designer	
Preconditions:	An order and a customer must be available	
Postconditions	An order must be saved into the system The Customer must have already sent the measurement	
Flow of activities	actor	System
	1.Designer will receive an order from the system 2.Designer will work on a deal with customer	1.1 The system will provide the designer with all the information for the order needed 1.2 The system will open a live chat between the customer and designer 2.1 The system would inform the customer if the order finished
Exception conditions:	1.Customer does not send the measurement	

9-

Use case name:	Payment Method	
Scenario:	Choosing payment method to pay bill to close the order	
Triggering event:	Customer choose one of several payment method to pay the order bill and close the order	
Brief description:	After opening and order and finish all order procedures, the customer is required to pay the bill, paying bill with several payment methods such as (Pay in Cash, Visa, MasterCard, Mada)	
Actors:	Customer	
Related use cases:	Must in be invoked with *Make Order, Pay bill, Close Order*	
Stakeholders:	Customer, Designer	
Preconditions:	A customer must create an order and make all order procedures	
Postconditions	After paying the bill, the designer closes the order	
Flow of activities	Actor	System
	1. Customer make order and finishes all order procedures 2. Customer chooses payment method and pay bill 3. Customer receives confirmation	1.1 System Confirm order 1.2 System prompts the customer to pay bill and send the customer all payment methods available 3.1 System receives payment and check payment is valid 3.2 Send confirmation to customer
Exception conditions:	1. Payment method isn't valid 2. Customer has no sufficient fund	

10-

Use case name:	Pay bill	
Scenario:	Pay bill for the order	
Triggering event:	After the work is done customer pay bill	
Brief description:	The Customer completes the purchase process by paying the bill	
Actors:	Customer	
Related use cases:	Make order, receive order	
Stakeholders:	Designer, Customer	
Preconditions:	Customer must complete his order . the designer must receive the order .	
Postconditions	The order will be sent to designer delivered The customer can rate the designer	
Flow of activities	Actor	System
	1. Customer wants to pay bill 2. Customer selects the payment method	1.1. The system will send all payment method available 2.1 the system confirm 2.2 system check if payment method is valid or not 2.3 if valid system will send the details of bill to customer. else return to 1.1
Exception conditions:	1. Order has not been completed 2. The credit card is not valid	

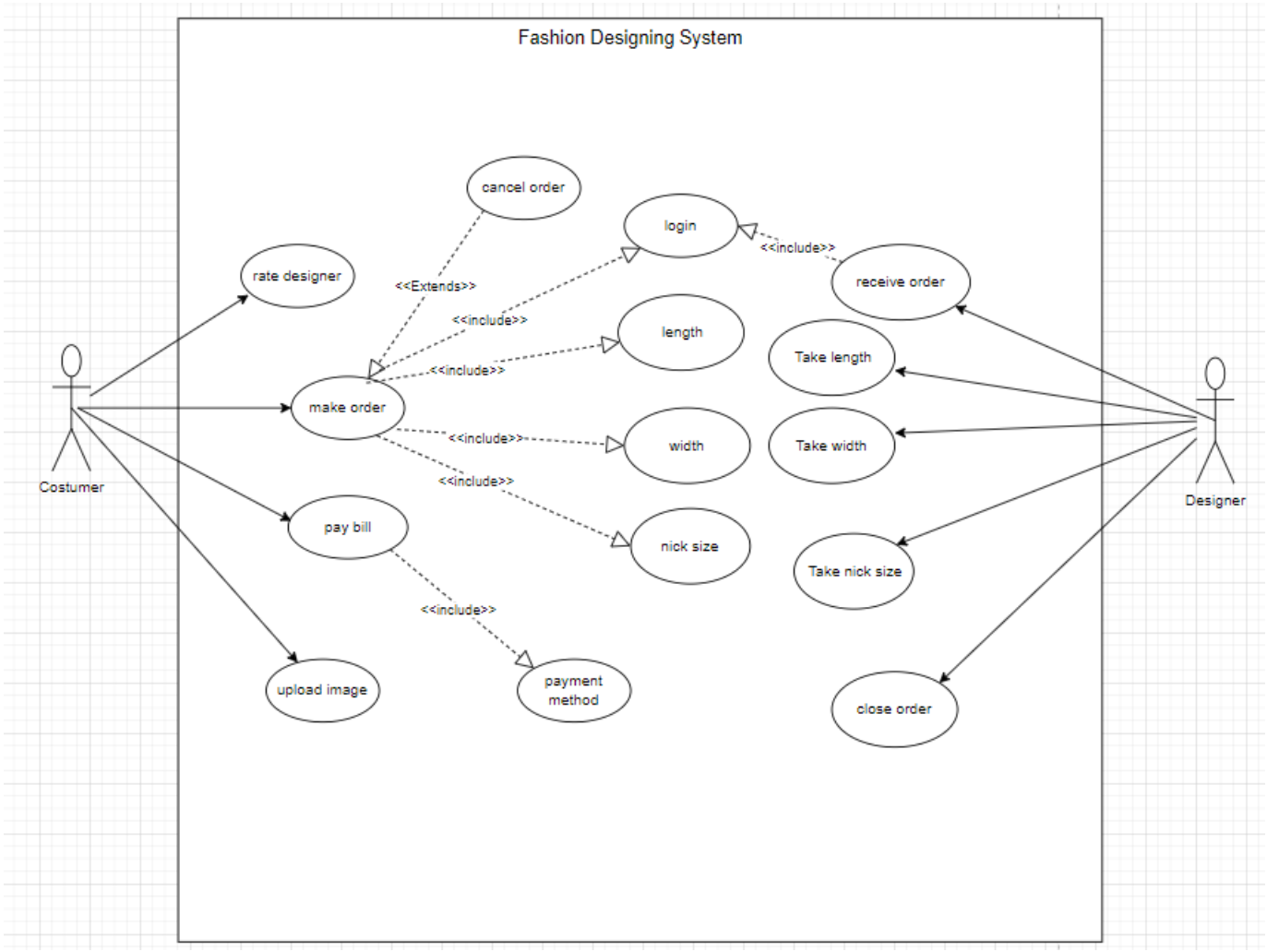
11-

Use case name:	Rate designer	
Scenario:	The Customer rate the designer after complete his order	
Triggering event:	Customer wants to rate the designer who made the order	
Brief description:	after finishing the order the Customer can help other Customer with adding his rating about the designer	
Actors:	Customer	
Related use cases:	Make order, receive order, pay bill, close order	
Stakeholders:	Designer, Customer	
Preconditions:	The Customer must pay The order must be delivered to the Customer	
Postconditions	the rating will show in the designer profile	
Flow of activities	Actor	System
	1.Customer desired to add rating to the designer	1.1. Request received 1.2. rating is added
Exception conditions:	1.Payment has not been completed 2.Delivery has not been completed	

12-

Use case name:	Close order	
Scenario:	A designer will close an order	
Triggering event:	A designer finishes the order and wants to close it	
Brief description:	A designer receives an order from a customer, after finishing the order the designer wants to close it	
Actors:	Designer	
Related use cases:	Make order, Receive order	
Stakeholders:	Designer, Customer	
Preconditions:	An order must be finished to close it	
Postconditions	The order must be delivered to the Customer The Customer must pay	
Flow of activities	Actor	System
	1. The designer finishes the order and ready to close the order 2.The designer will give the product to the driver	1.1 The System will inform the customer that the order is finished 1.2 The system will make the customer pay either bank transaction/Cash to get the product 2.1 The system will show that the product is on his way to the customer
Exception conditions:	1.Product isn't finished yet 2.payment is not completed	

3- Use case draw



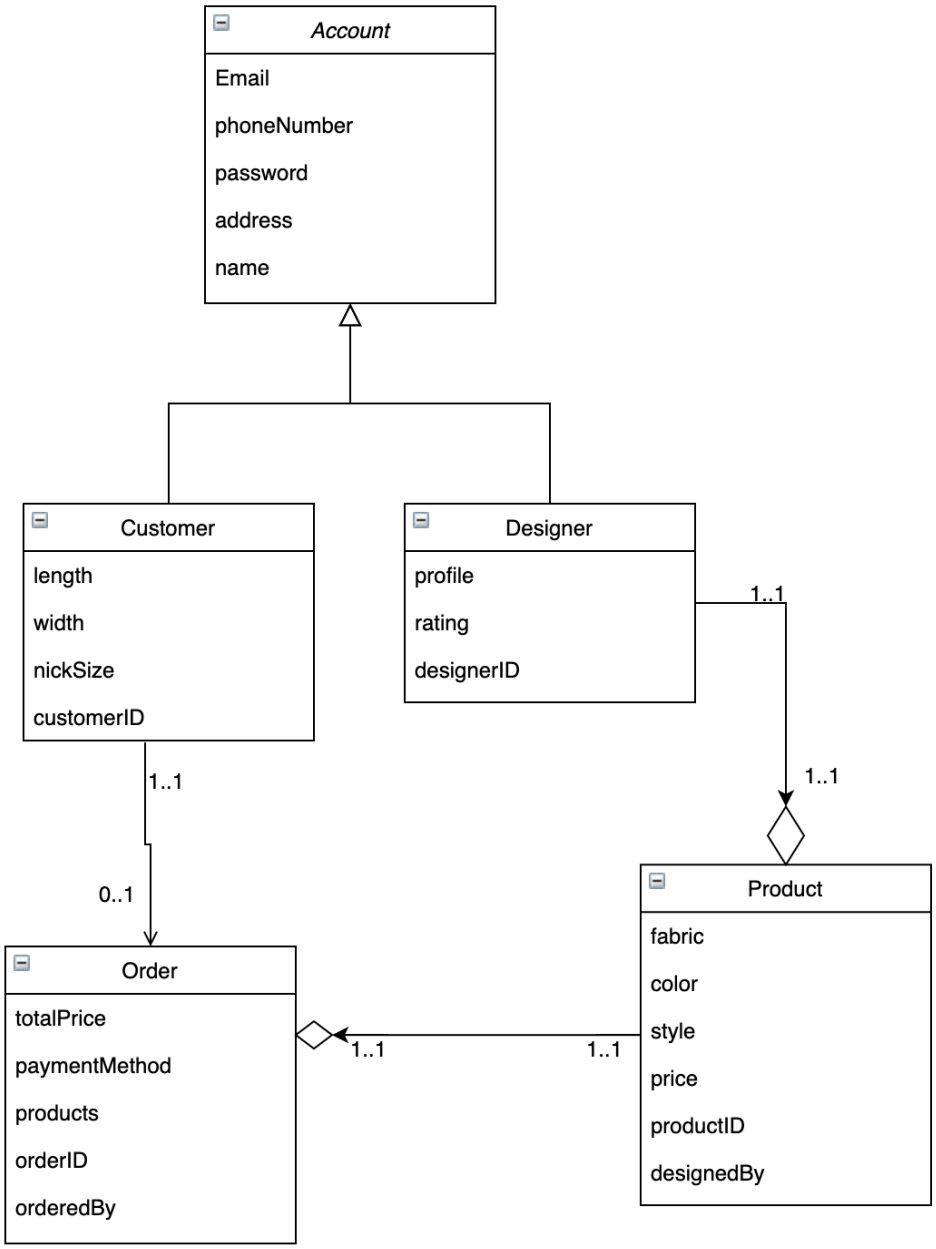
Chapter 2

Domain Modeling

1- Identified nouns

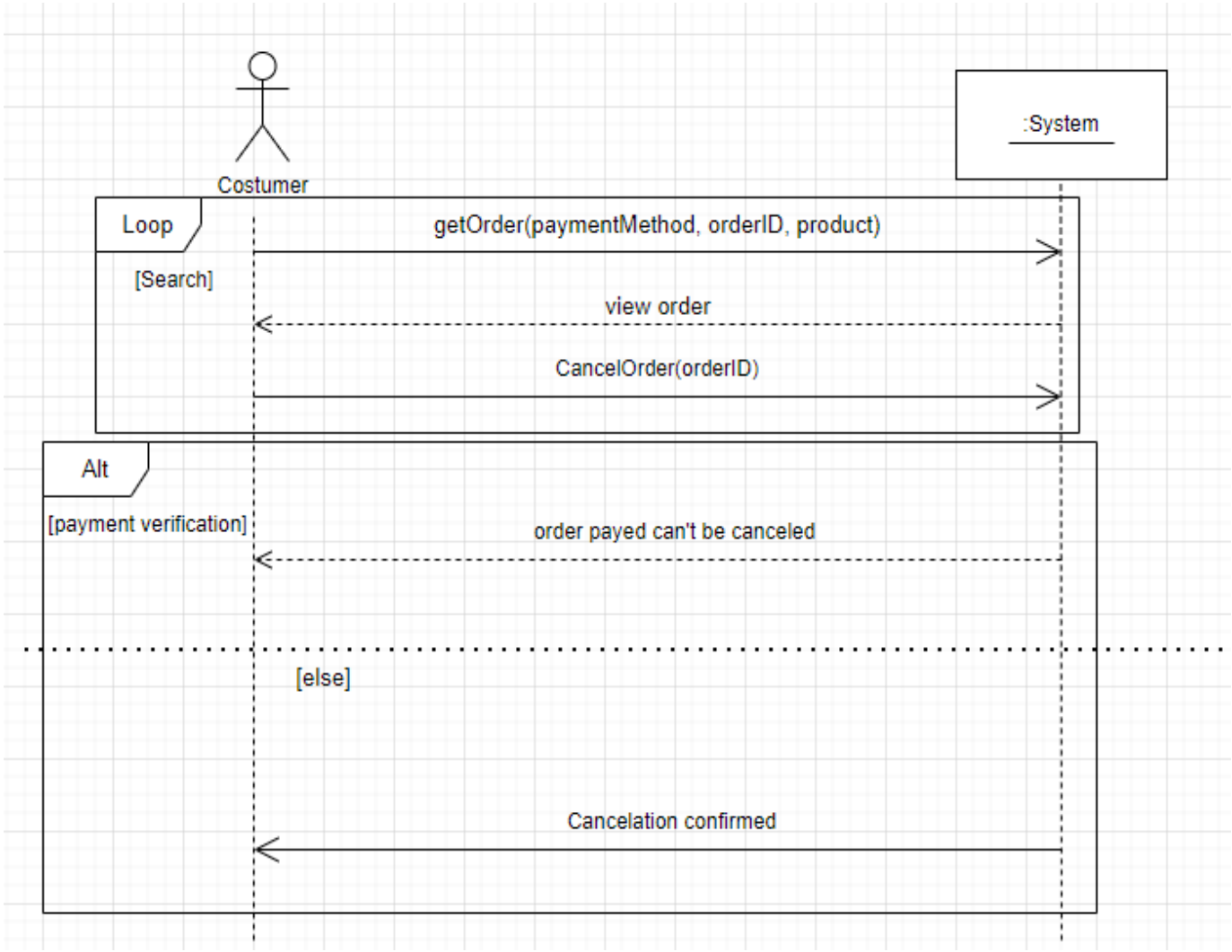
- Designer
- Customer
- Customer account
- Designer account
- Color
- Fabric
- Length
- Width
- Payment
- Payment method
- Order
- Language
- Style
- Rating
- Image
- Offers
- Confirmation
- Cancelling
- Communication
- Location
- Design
- Category
- Nick size
- Comment
- Price

2- Domain Class Diagram

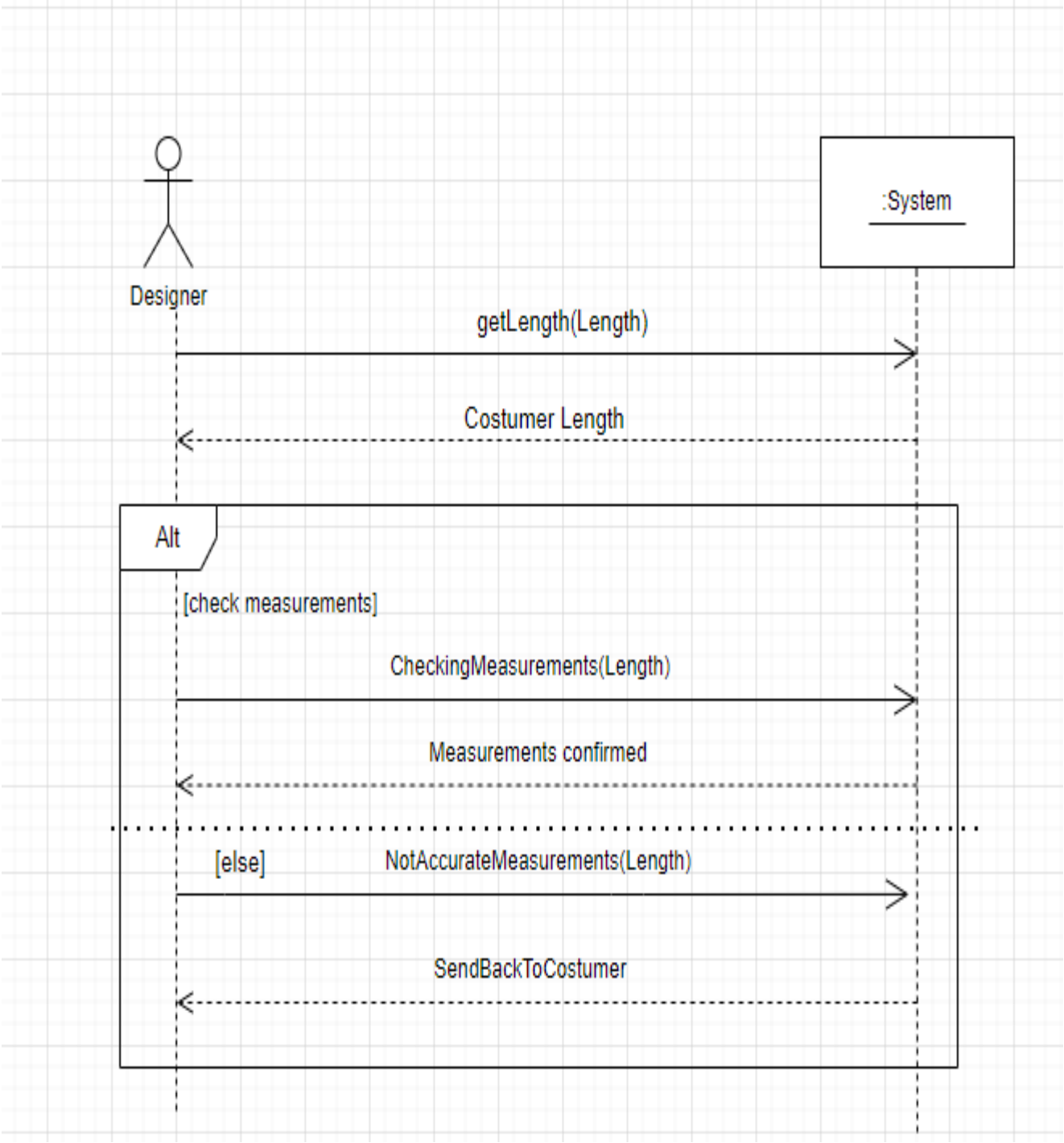


System Sequence Diagrams

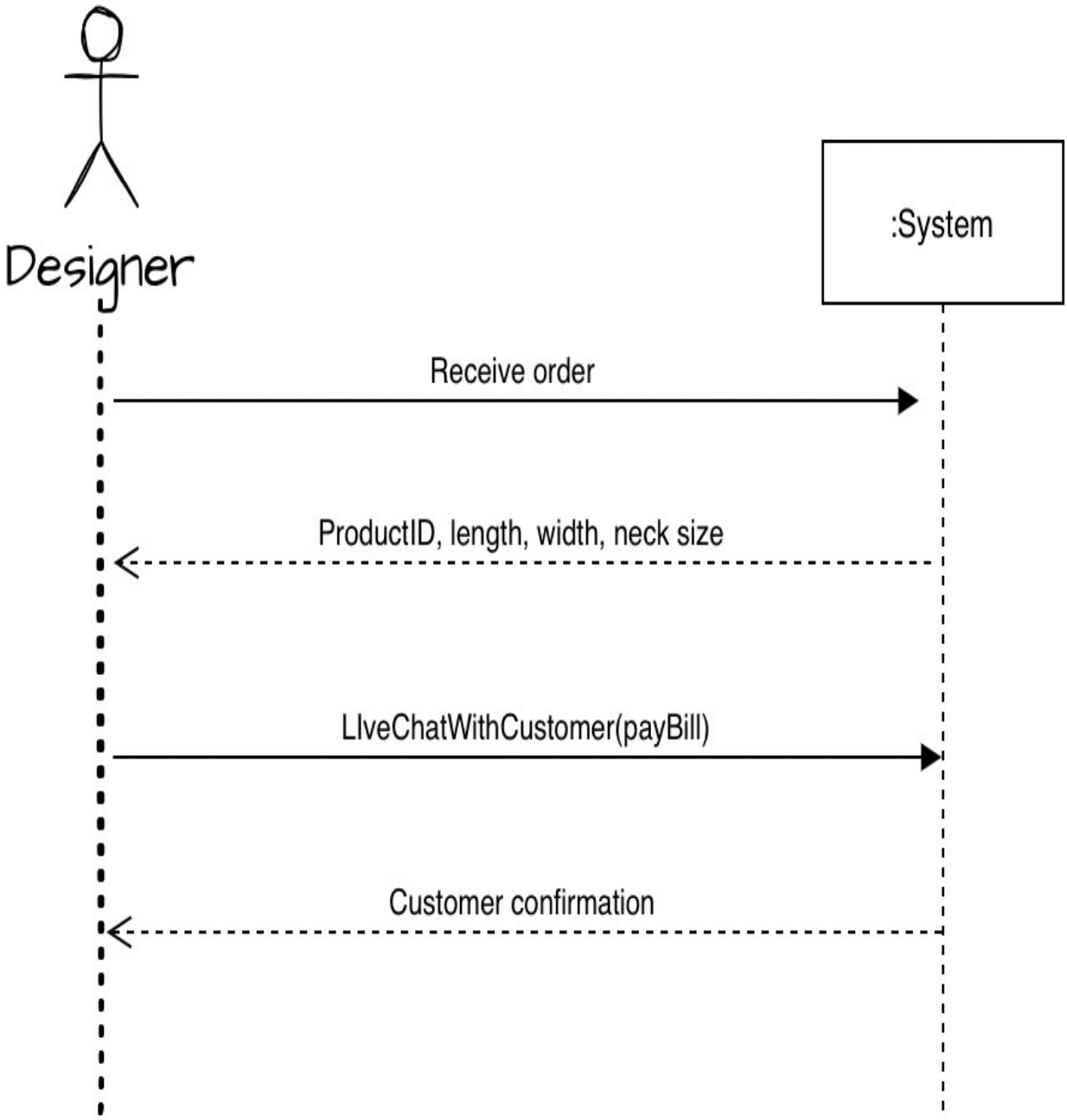
1- Cancel order



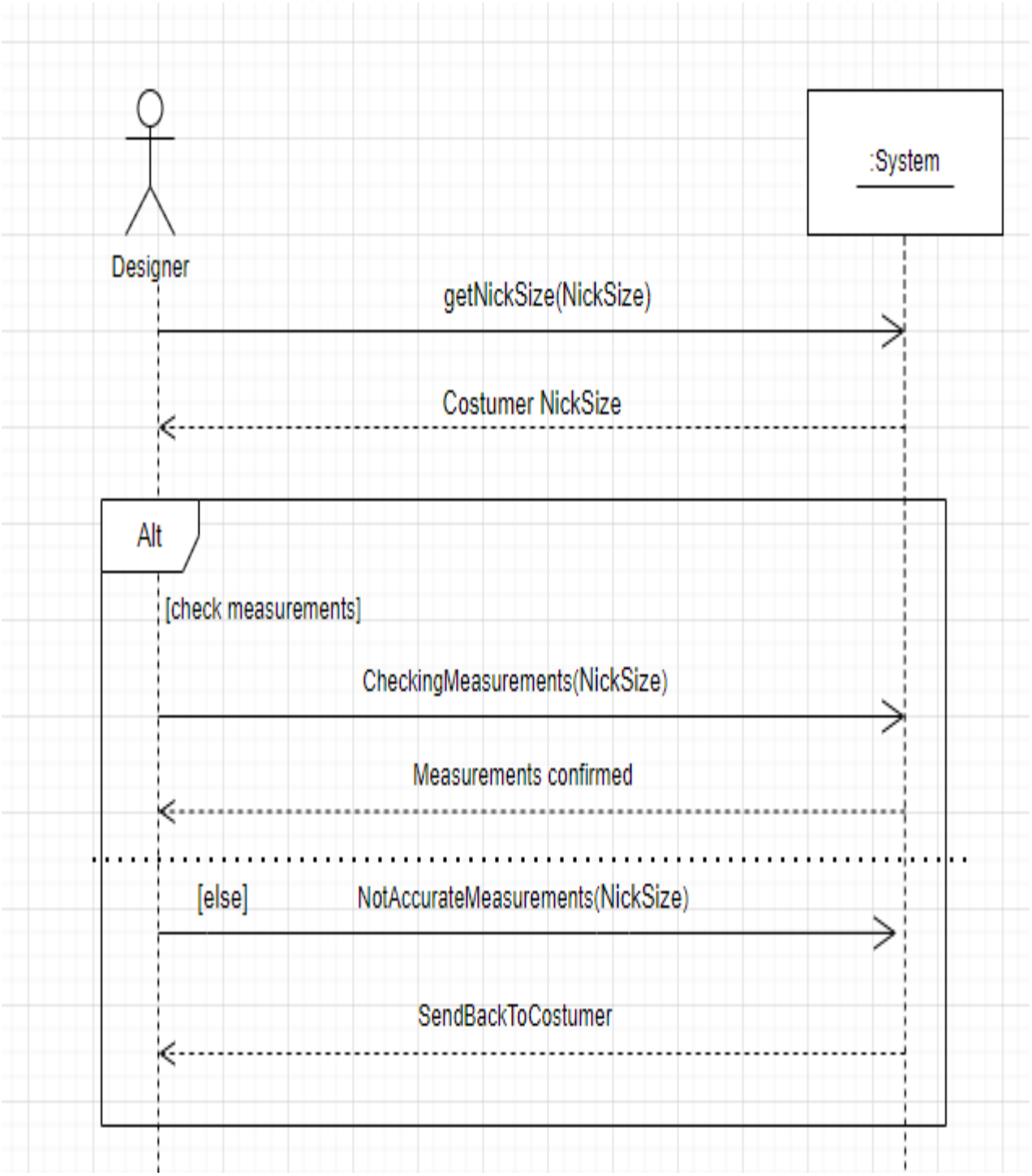
2- Take Length



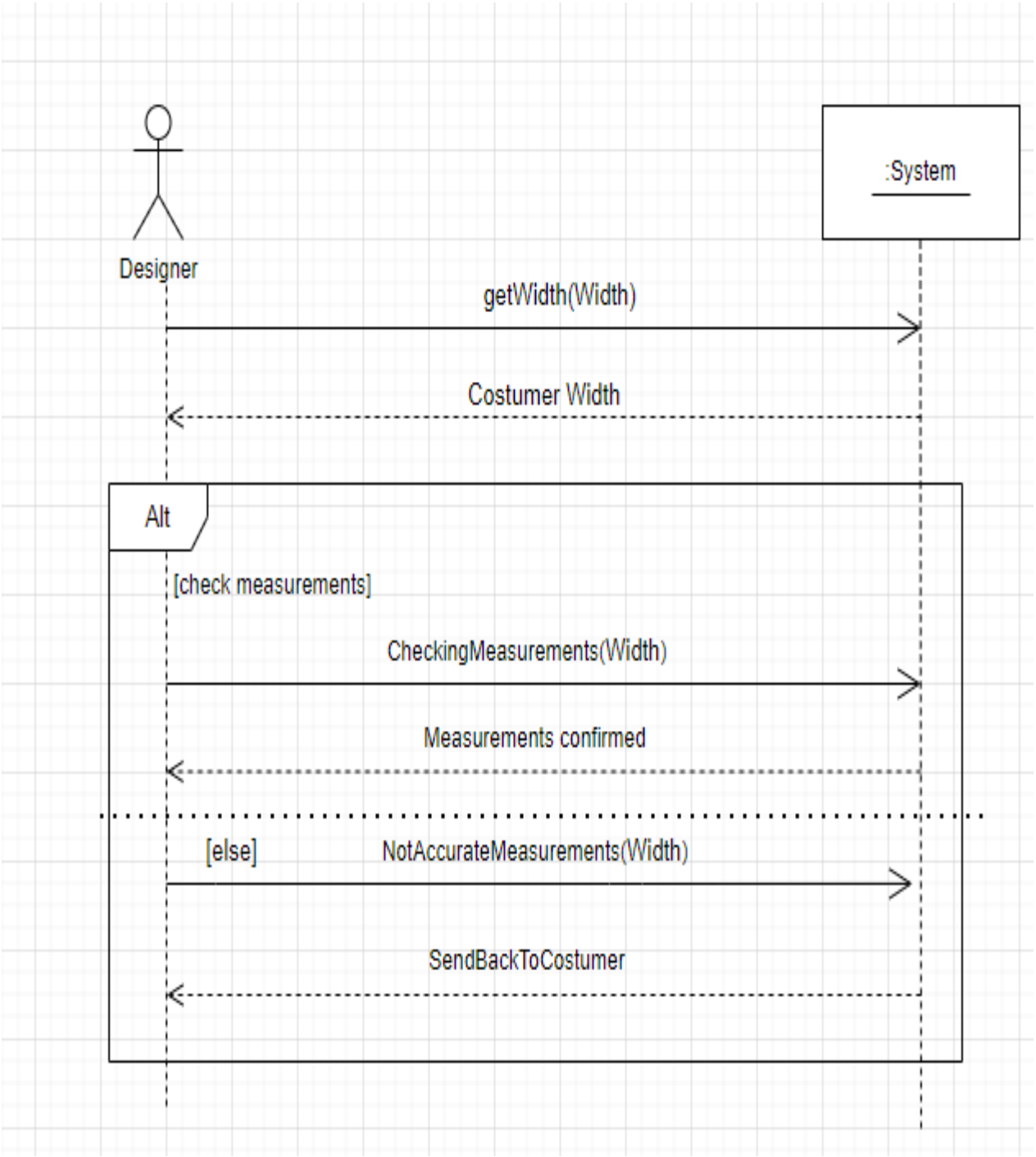
3- Receive order



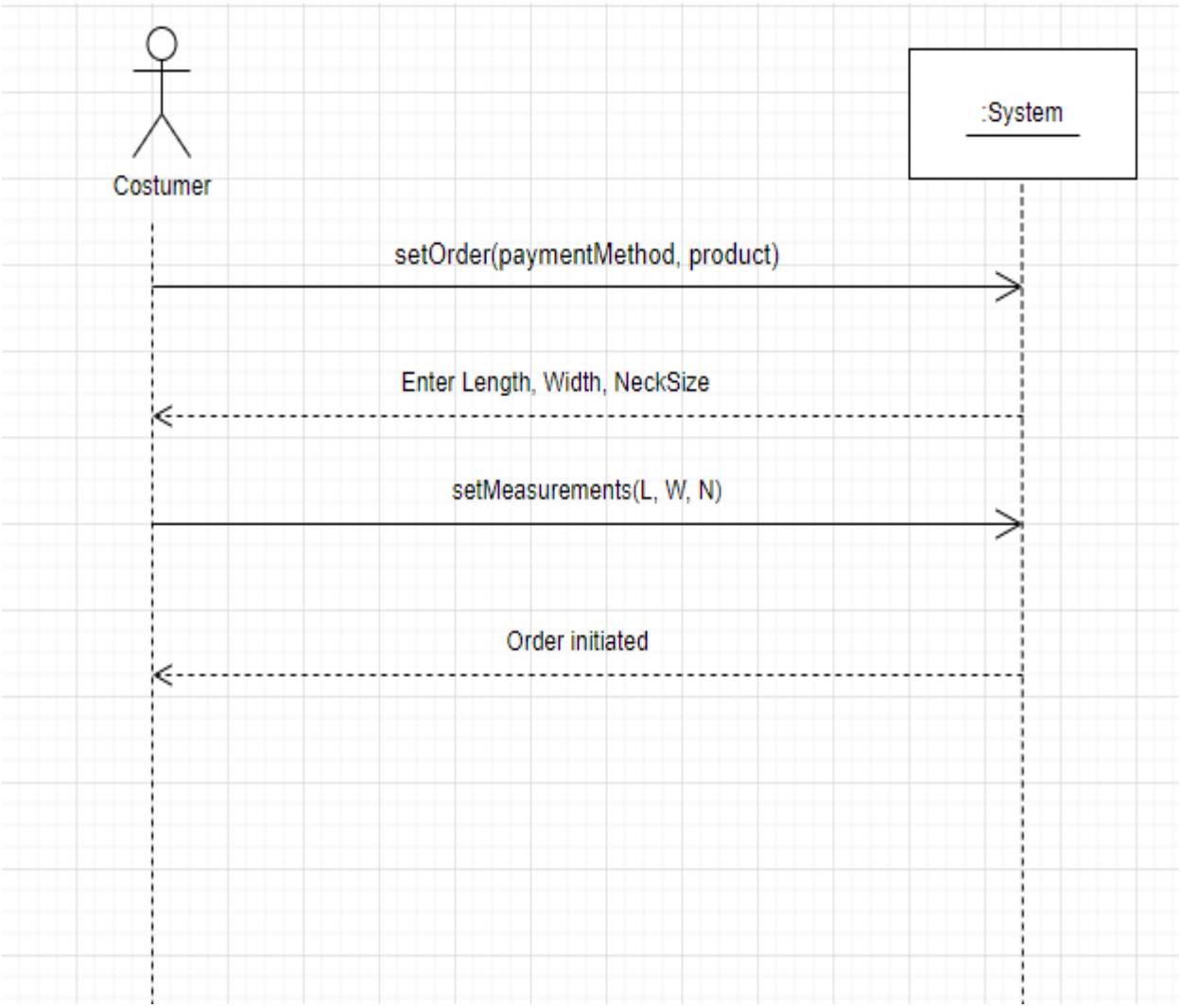
4- Take Neck Size



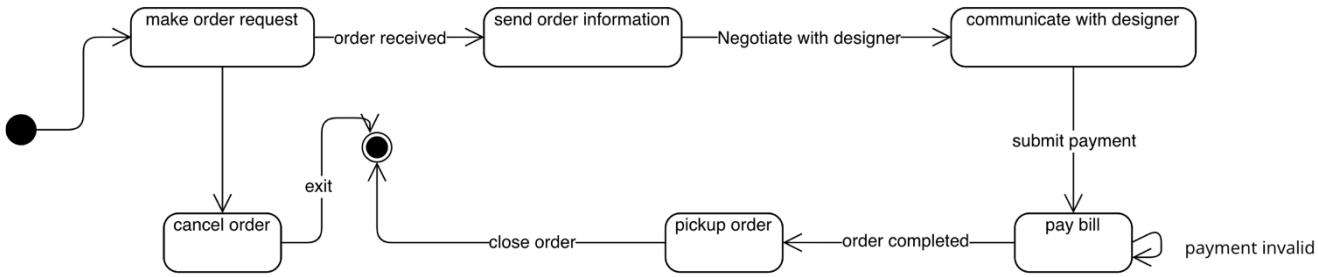
5- Take Width


Designer
:System
getWidth(Width)
Costumer Width
Alt
[check measurements]
CheckingMeasurements(Width)
Measurements confirmed
[else]
NotAccurateMeasurements(Width)
SendBackToCostumer

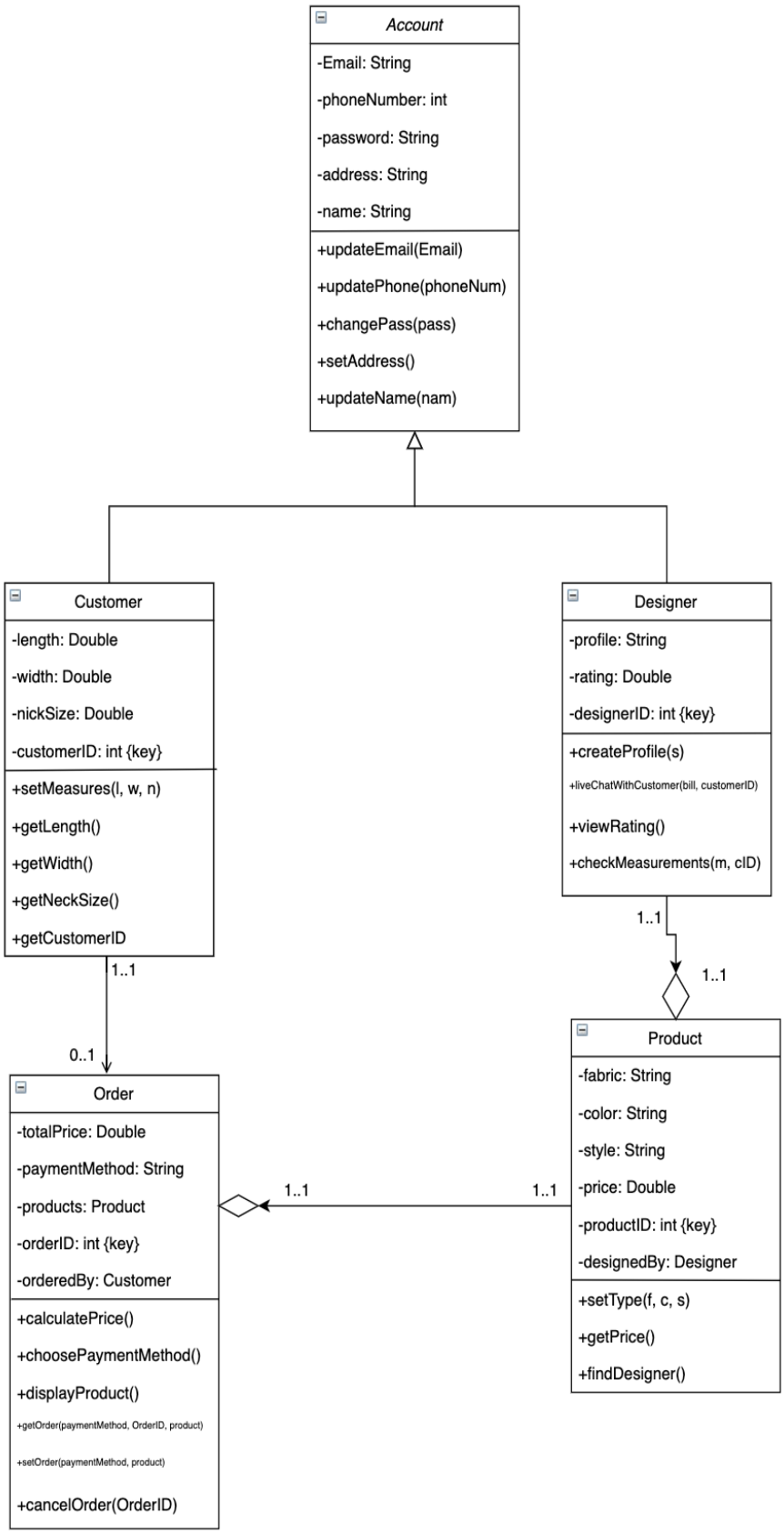
6- Make order


Costumer
:System
setOrder(paymentMethod, product)
Enter Length, Width, NeckSize
setMeasurements(L, W, N)
Order initiated

State Diagram

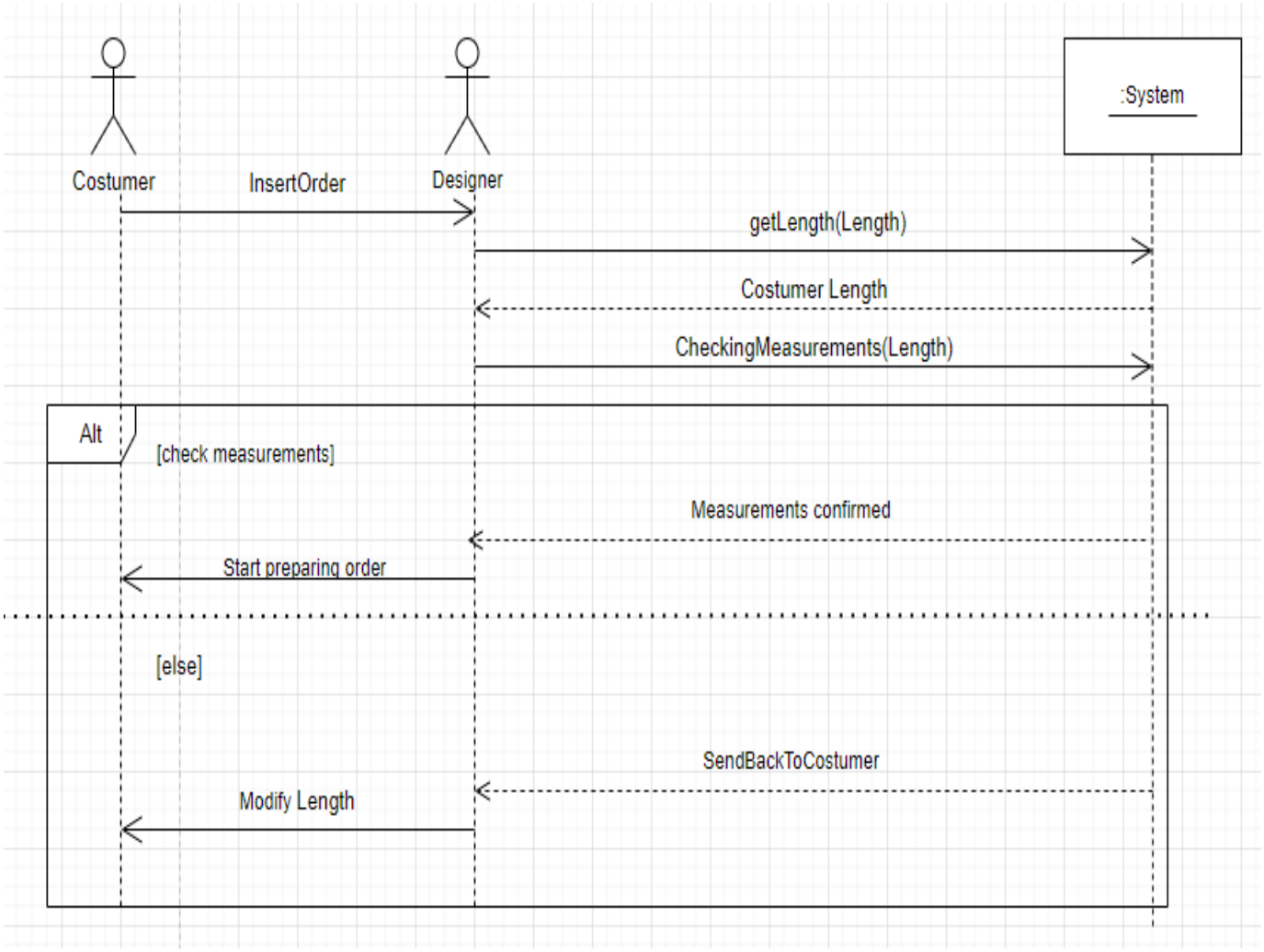


Design Class Diagram

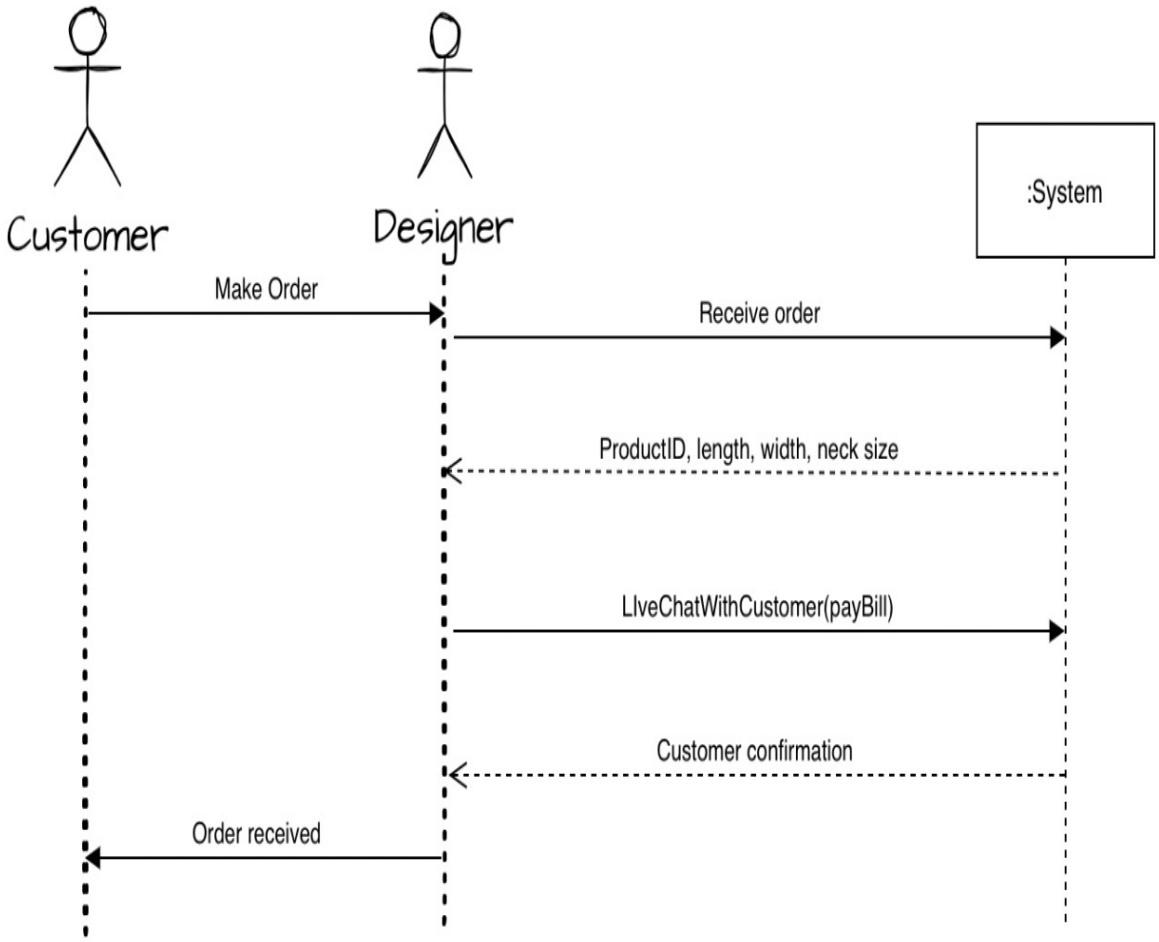


Sequence Diagrams

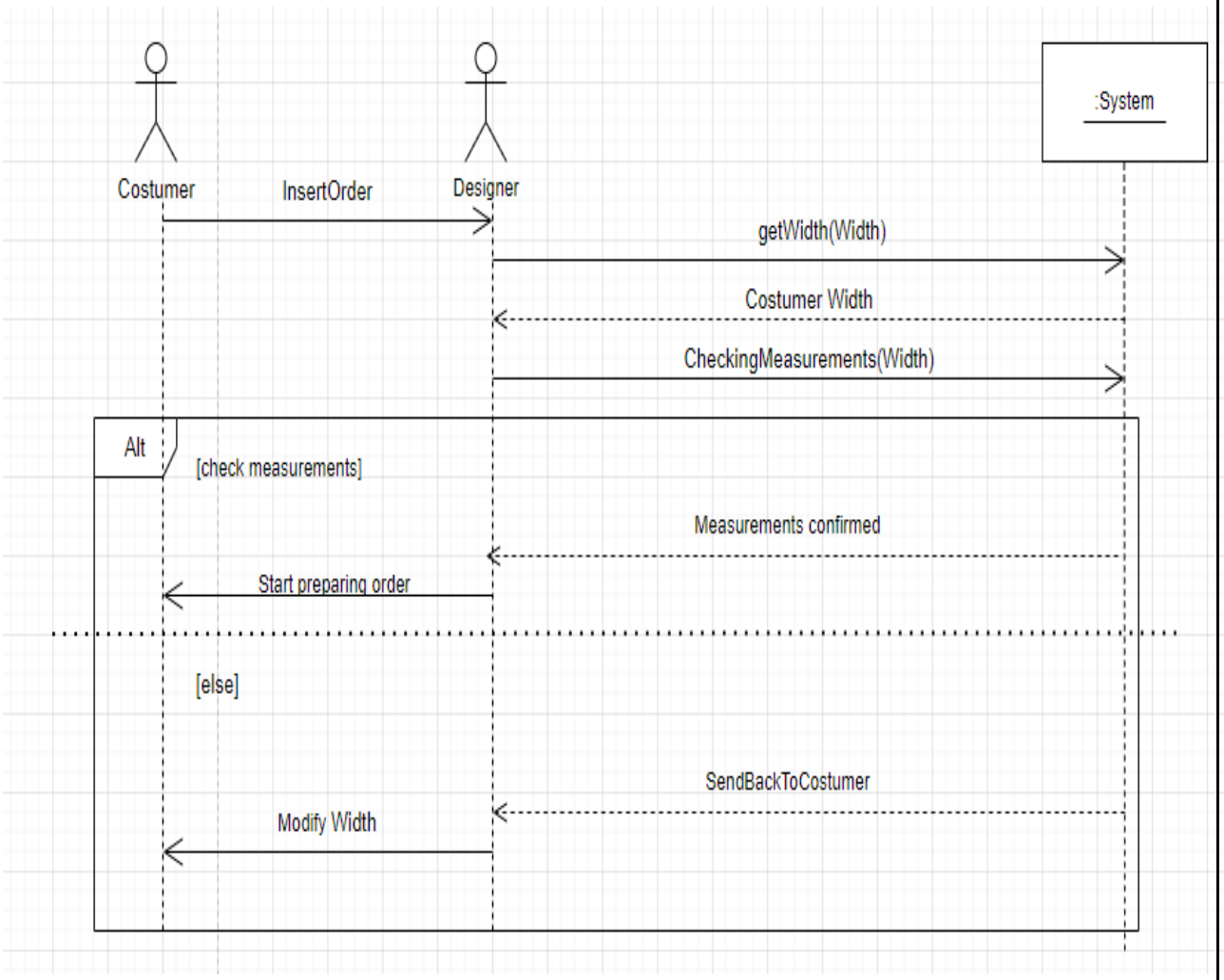
1- Take Length



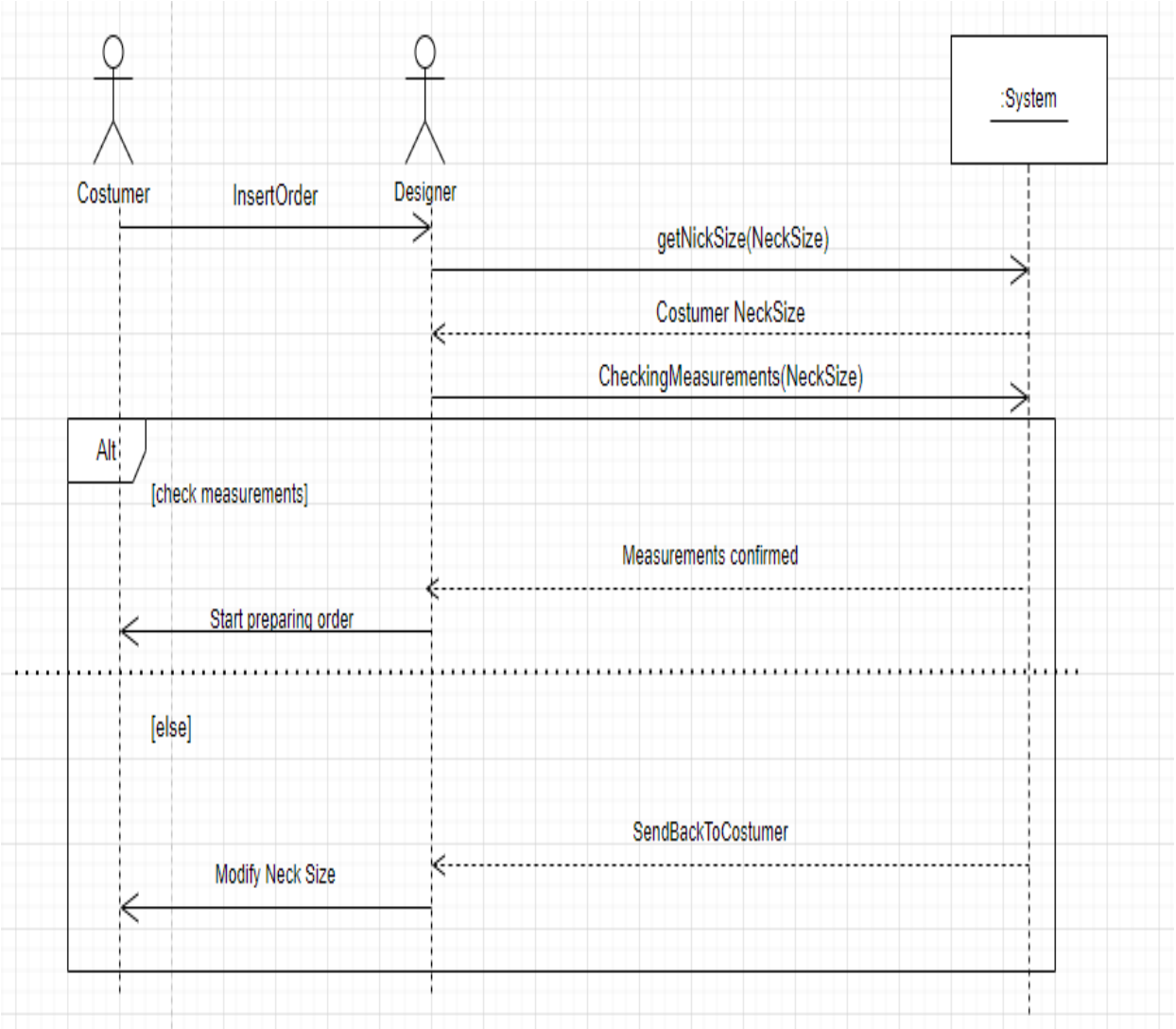
2- Receive order



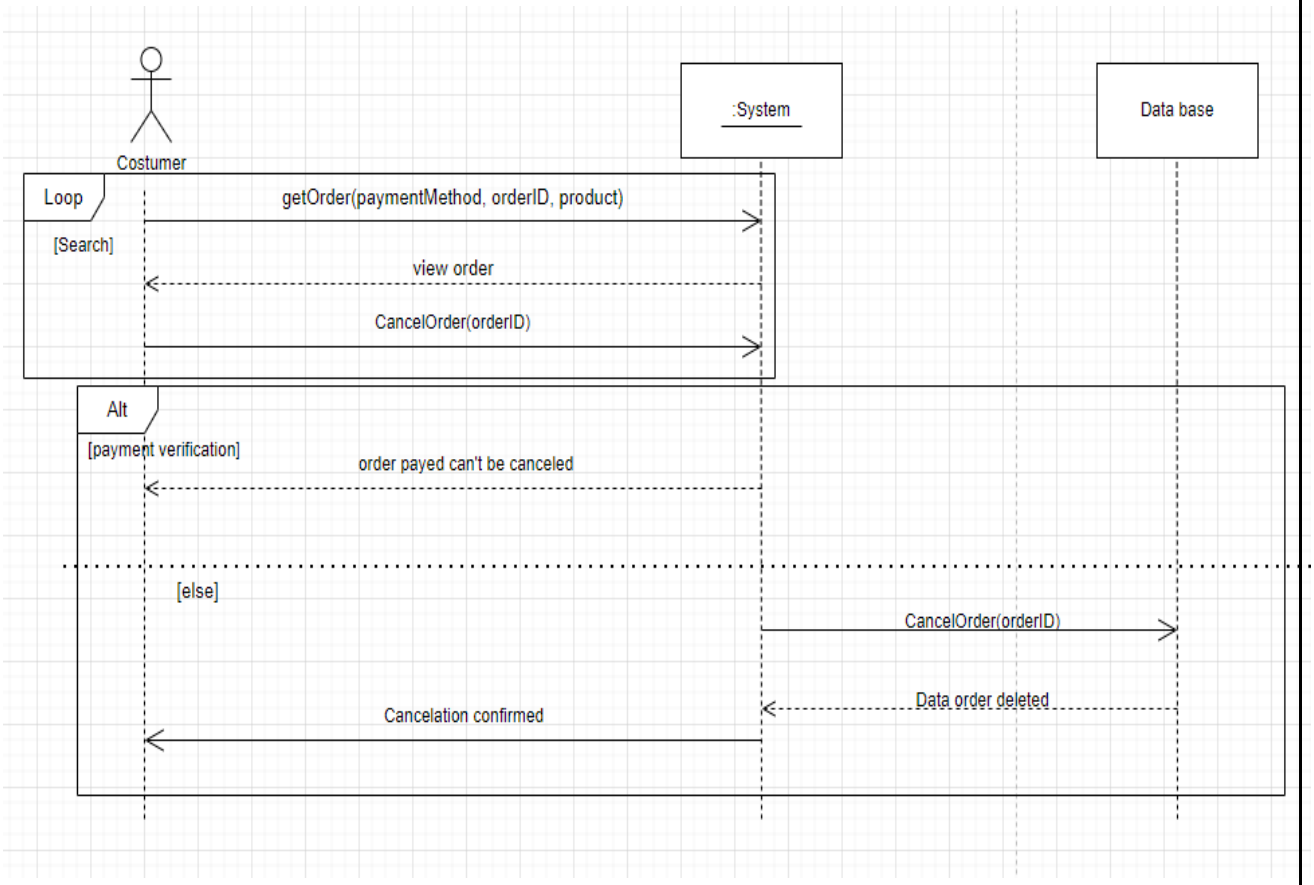
3- Take width


Costumer
InsertOrder
Designer
:System
getWidth(Width)
Costumer Width
CheckingMeasurements(Width)
Alt
[check measurements]
Measurements confirmed
Start preparing order
[else]
SendBackToCostumer
Modify Width

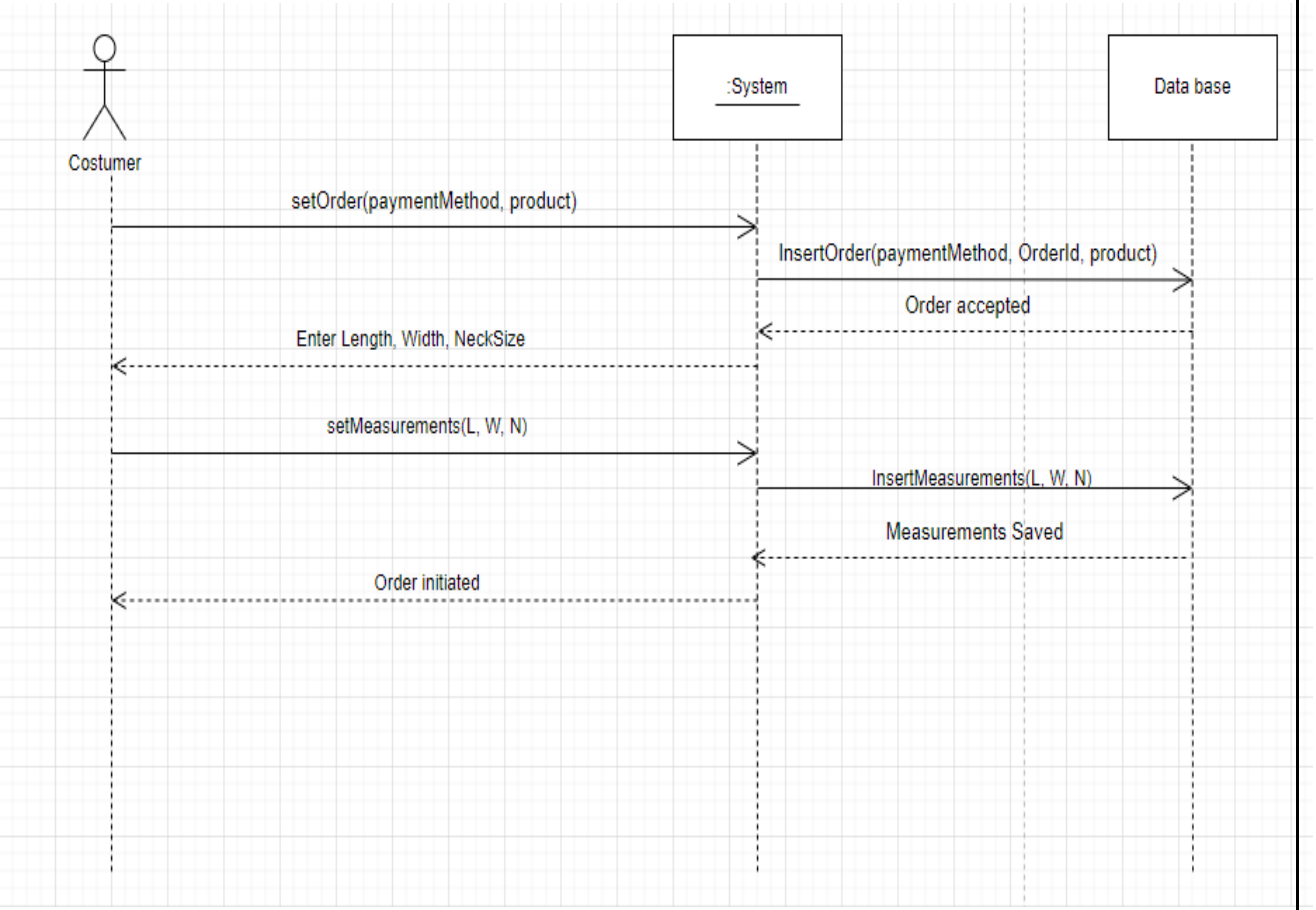
4- Take Neck Size



5- Cancel order



6- Make order


Costumer
:System
Data base
setOrder(paymentMethod, product)
InsertOrder(paymentMethod, OrderId, product)
Order accepted
Enter Length, Width, NeckSize
setMeasurements(L, W, N)
InsertMeasurements(L, W, N)
Measurements Saved
Order initiated