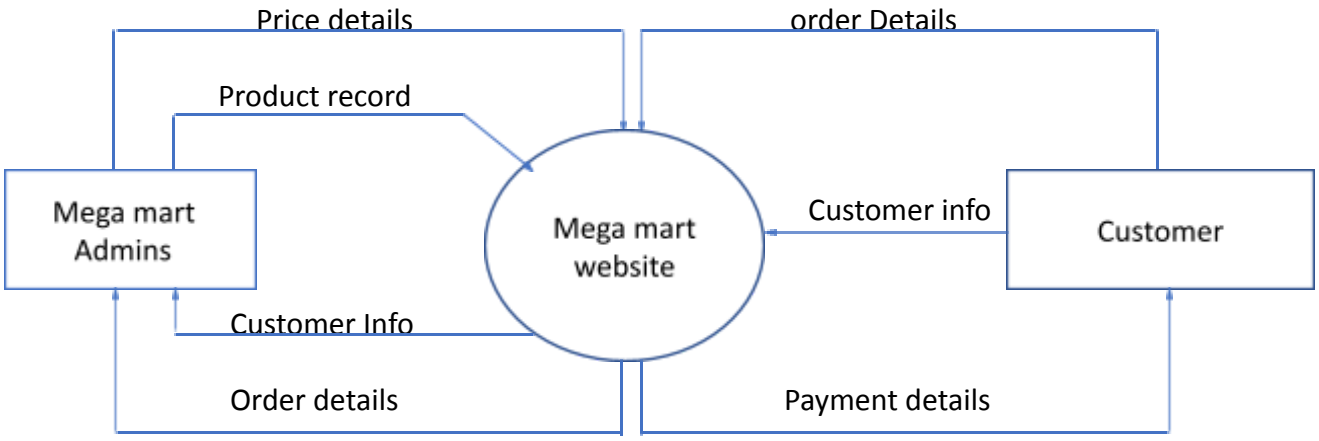
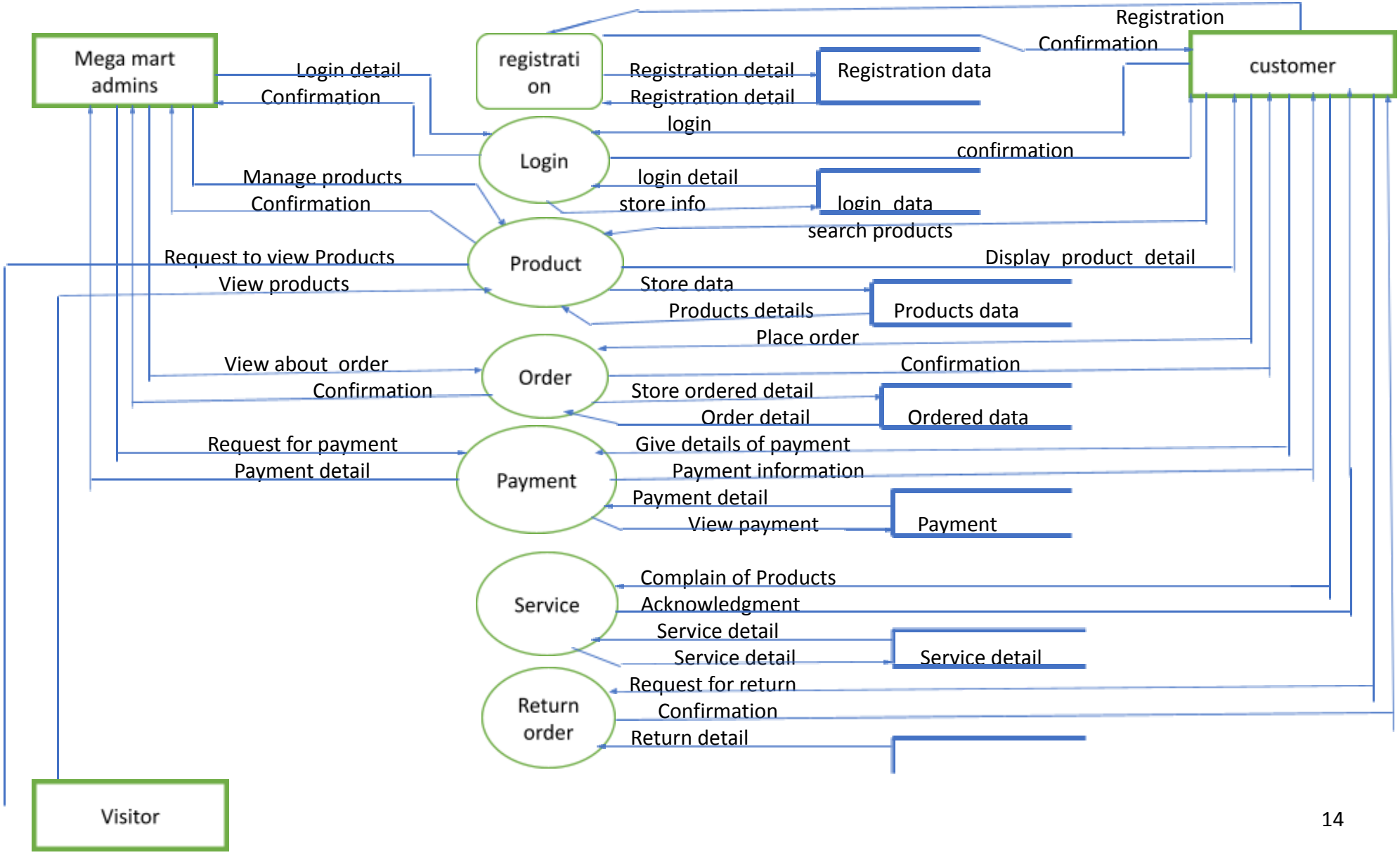
CHAPTER - 3

REQUIREMENT ANALYSIS AND MODELING

3.1 Data flow diagram level 0



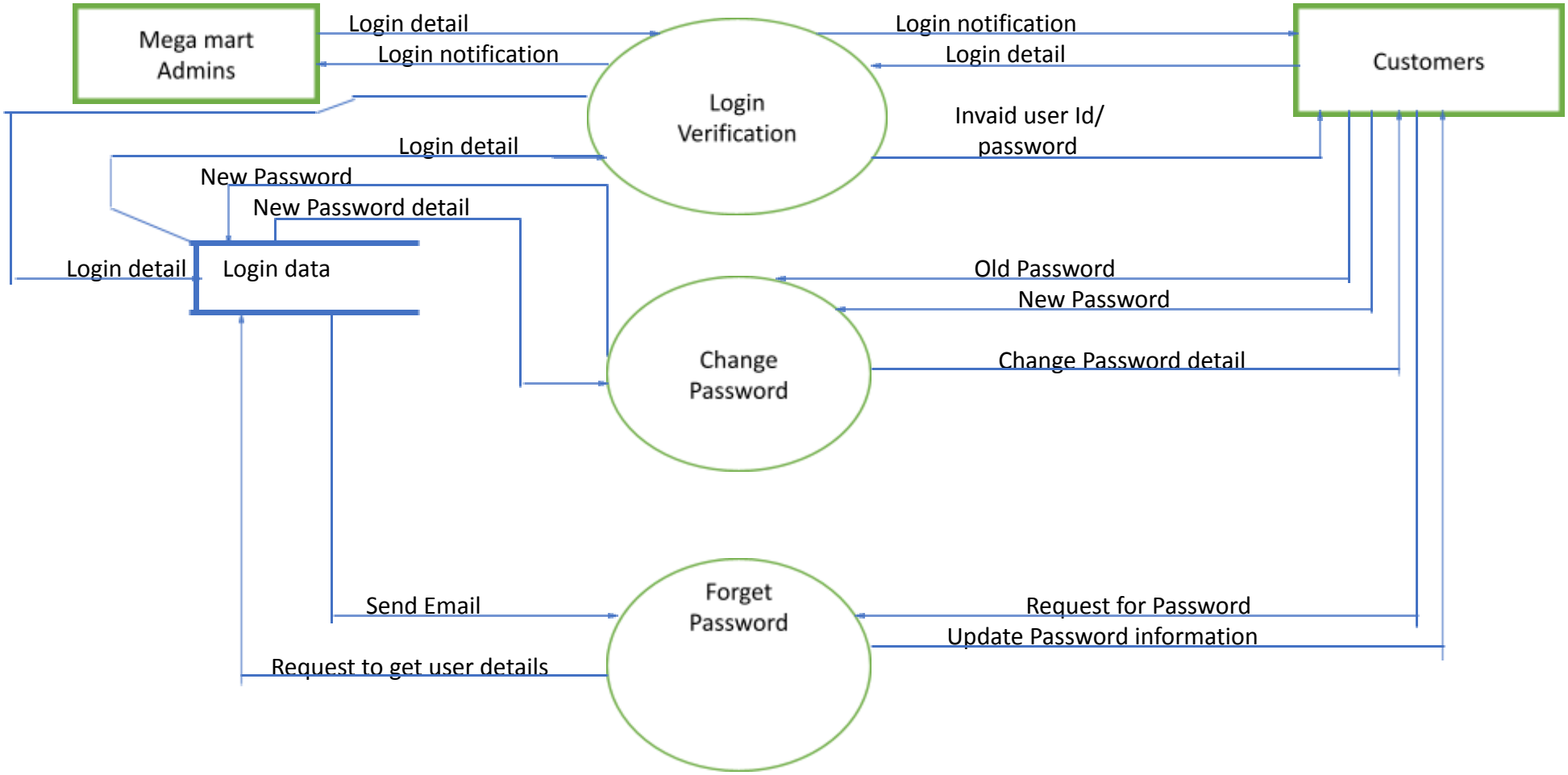
3.2 Data flow diagram level 1



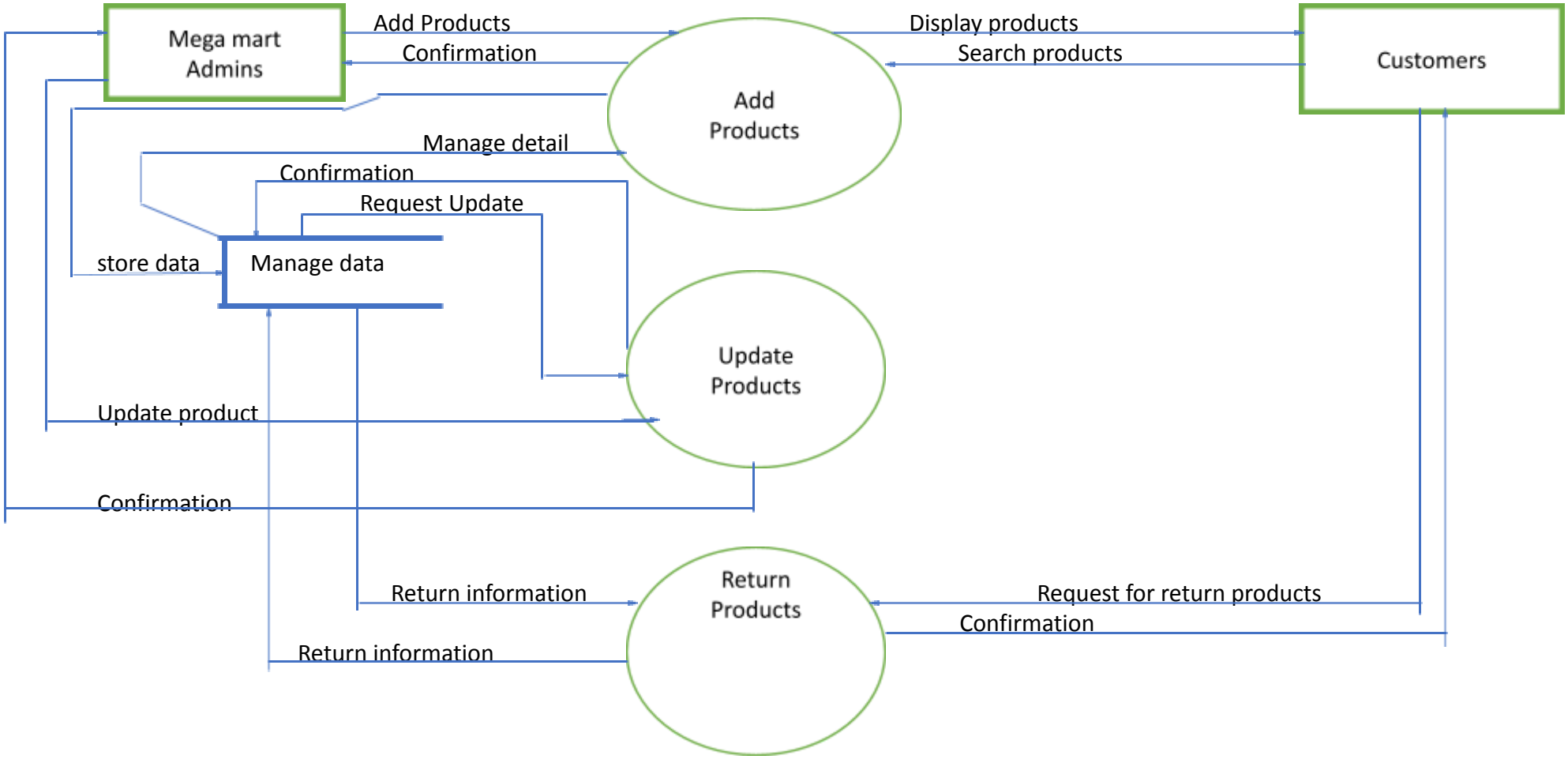
Return info Return

3.3 Data flow diagram level 2

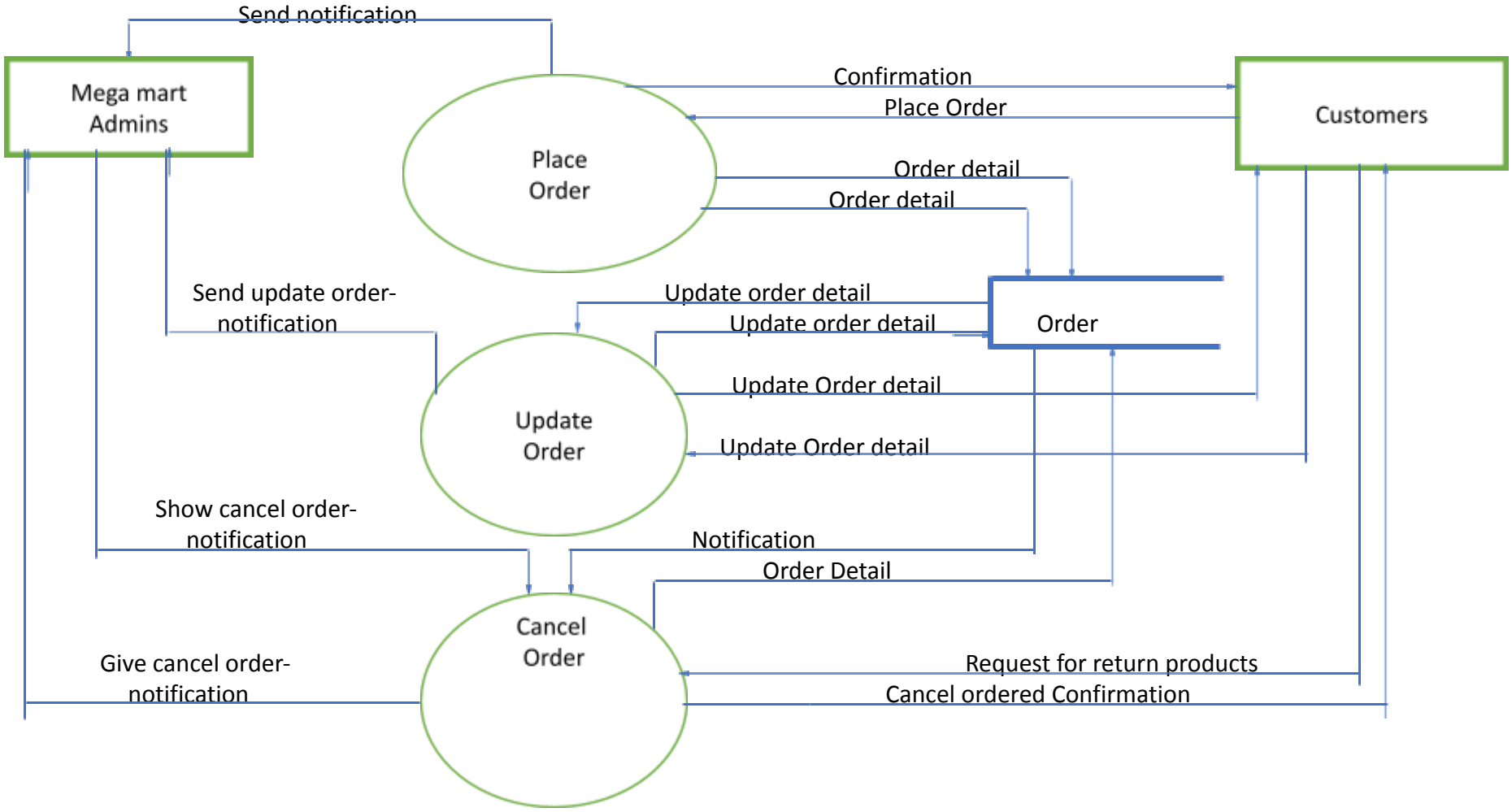
a. Login



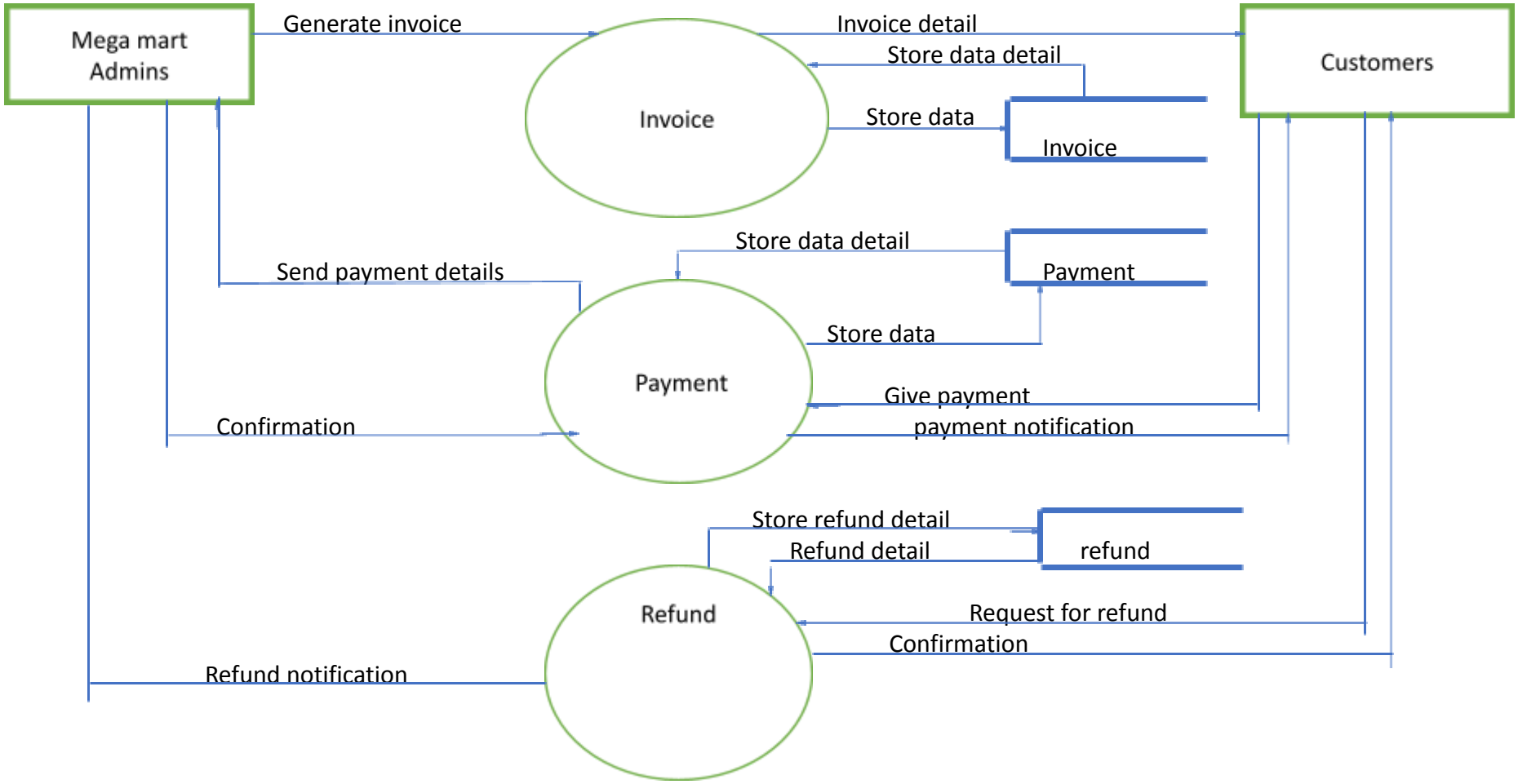
b. Product


Mega mart Admins
Add Products
Confirmation
Add Products
Display products
Search products
Customers
Manage detail
Confirmation
Request Update
store data
Manage data
Update Products
Update product
Confirmation
Return information
Return Products
Request for return products
Confirmation
Return information

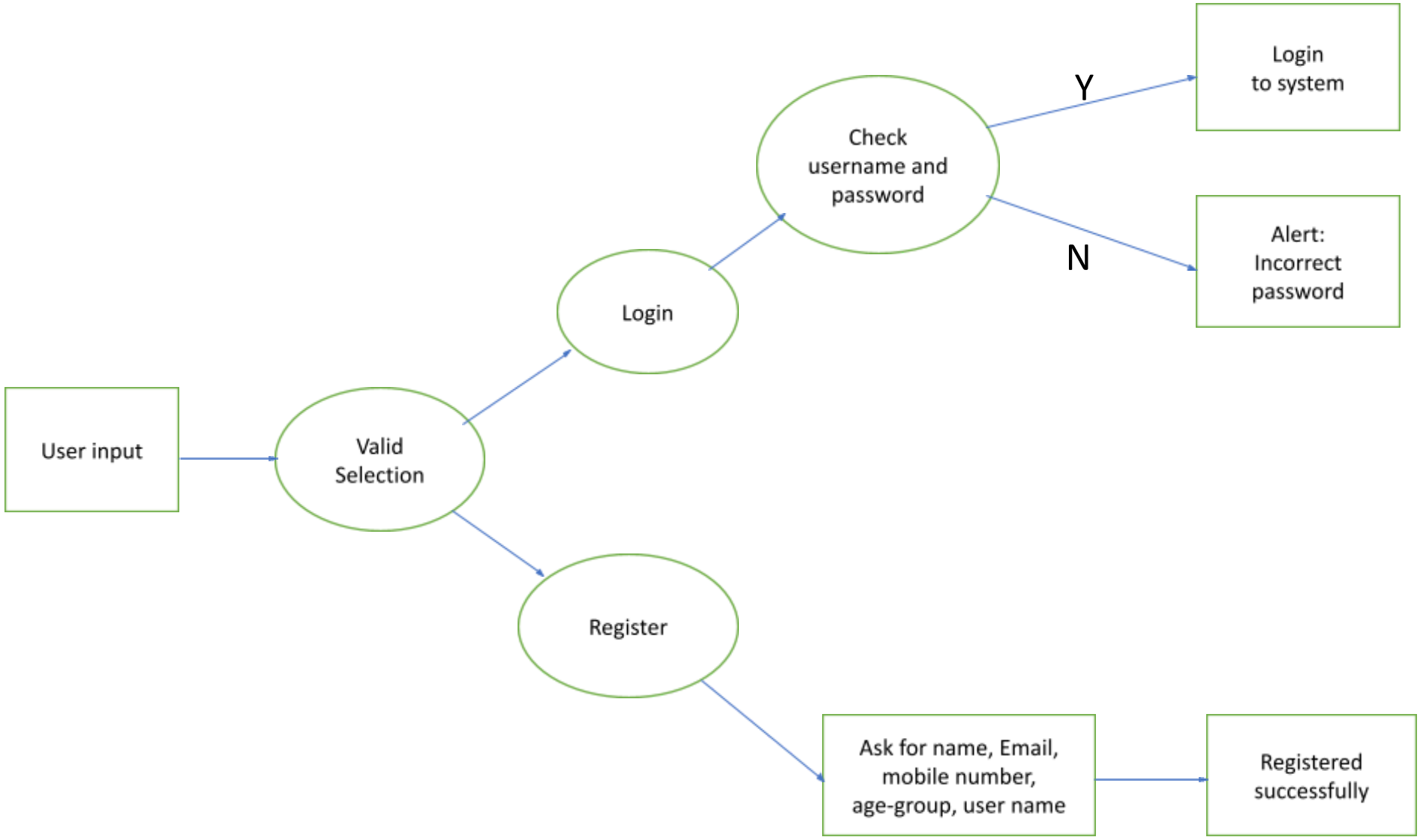
c. Order


Send notification
Mega mart Admins
Place Order
Confirmation
Place Order
Customers
Order detail
Order detail
Send update order-notification
Update order detail
Update order detail
Order
Update Order
Update Order detail
Update Order detail
Show cancel order-notification
Notification
Order Detail
Cancel Order
Give cancel order-notification
Request for return products
Cancel ordered Confirmation

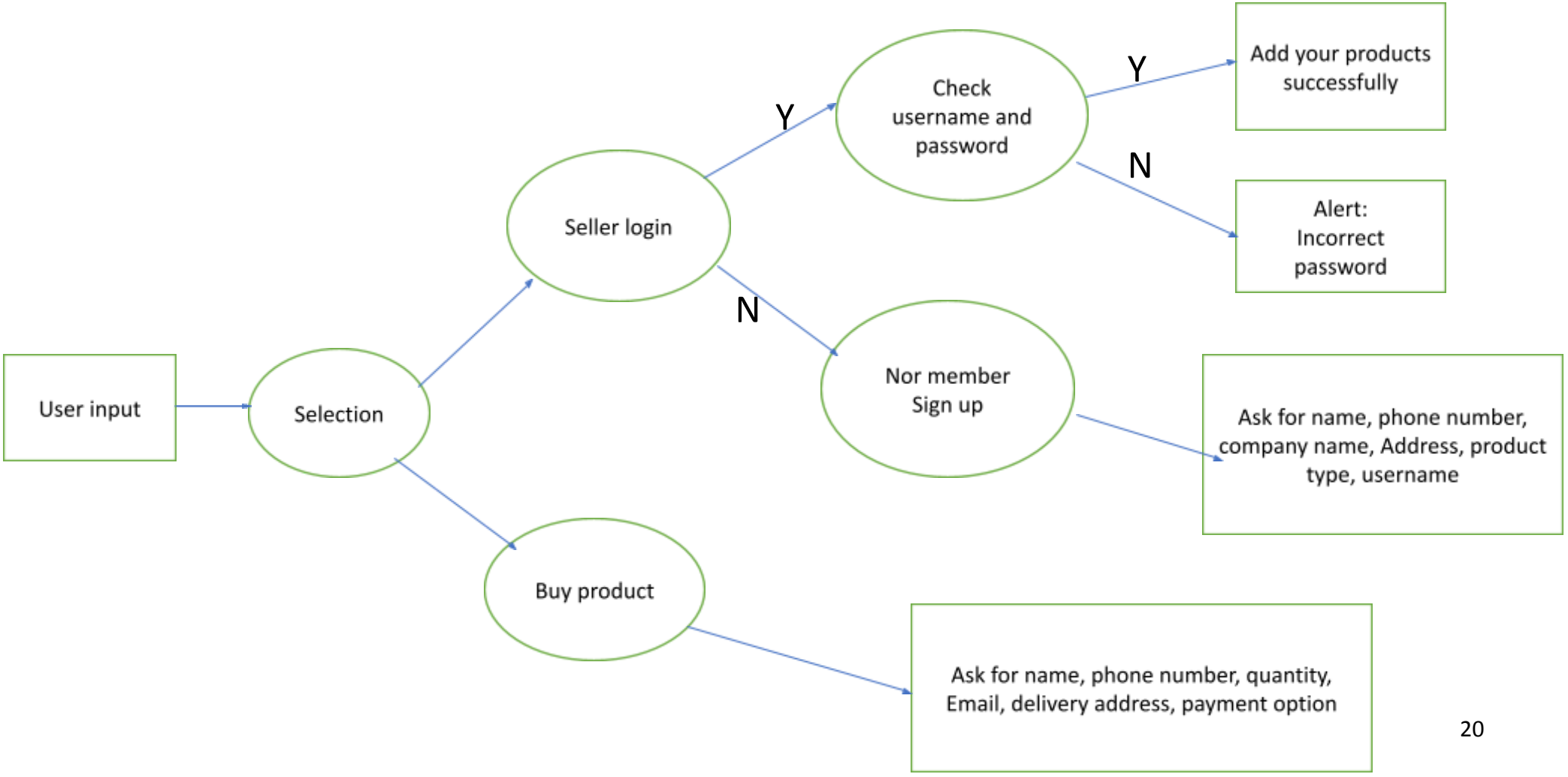
d. Payment


Mega mart Admins
Generate invoice
Invoice
Invoice detail
Store data detail
Store data
Invoice
Customers
Store data detail
Payment
Send payment details
Payment
Store data
Give payment
Confirmation
payment notification
Store refund detail
Refund detail
refund
Refund
Request for refund
Confirmation
Refund notification

3.4 A decision tree for Login page



3.5 A decision tree for Product page



3.6 A decision table for Login page

conditions	Rule 1	Rule 2	Rule 3
Username(T/F)	F	T	F
Password(T/F)	F	F	T
Output(E/H)	E	E	E

Legend:

- T – Correct username/password
- F – Wrong username/password
- E – Error message is displayed

Interpretation:

- Case 1 – Username and password both were wrong. The user is shown an error message.
- Case 2 – Username was correct, but the password was wrong. The user is shown an error message.
- Case 3 – Username was wrong, but the password was correct. The user is shown an error message.

- Case 4 – Username and password both were correct, and the user navigated to homepage

3.7 Decision table for Product page

	Rules			
Conditions	**1**	**2**	**3**	**4**
C1. New customer	**Y**			
C2. Previous monthly transaction > 1000Birr		**Y**	**Y**	**N**
C3. Transaction >500 Birr		**N**	**Y**	
Actions	**1**	**2**	**3**	**4**
A1. Accept “Pay in advance ”	X	X	X	X
A2. Accept “Pay upon delivery ”		X		
A3. Accept “Pay upon delivery ”with 15% prior deposit			X	