Farmer’s Era - FARMERA

An online farmer’s market

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What are we trying to do?

1. **Whose problem are we trying to solve?**
   - Small scale farmers/producers
   - People who prefer fresh farm food

2. **Solution : Connect them**

3. **Requirement Analysis :**
   - **Producers :** options for secondary goods(like gur, ghee etc.), seasonal products, simple UI/UX
   - **Consumers :** clear return/refund policies, working helpline number, clearly mentioned quality standards and food quality certificates, Info page of farm/producer

4. Model Choice : **Waterfall model**(requirements are clear and time bound project)

Final Requirements

Producer

- Functionalities :

1. Login
2. Listing products
3. Farm detail page
4. Past sales record

- View :

1. A few customer details
2. Delivery executive’s details
3. Product page

Consumer

- Functionalities :

1. Login
2. Searching products
3. Payment and checkout
4. Writing reviews

- View :

1. Farmer’s detail page
2. Past purchases
3. Delivery executive’s details

Delivery executive

- Functionalities :

1. Login
2. Pick-up and drop locations
3. Package details
4. Maps

- View :

1. Farm detail page
2. Record of past deliveries

Advantages and Disadvantages

Advantages(USP):

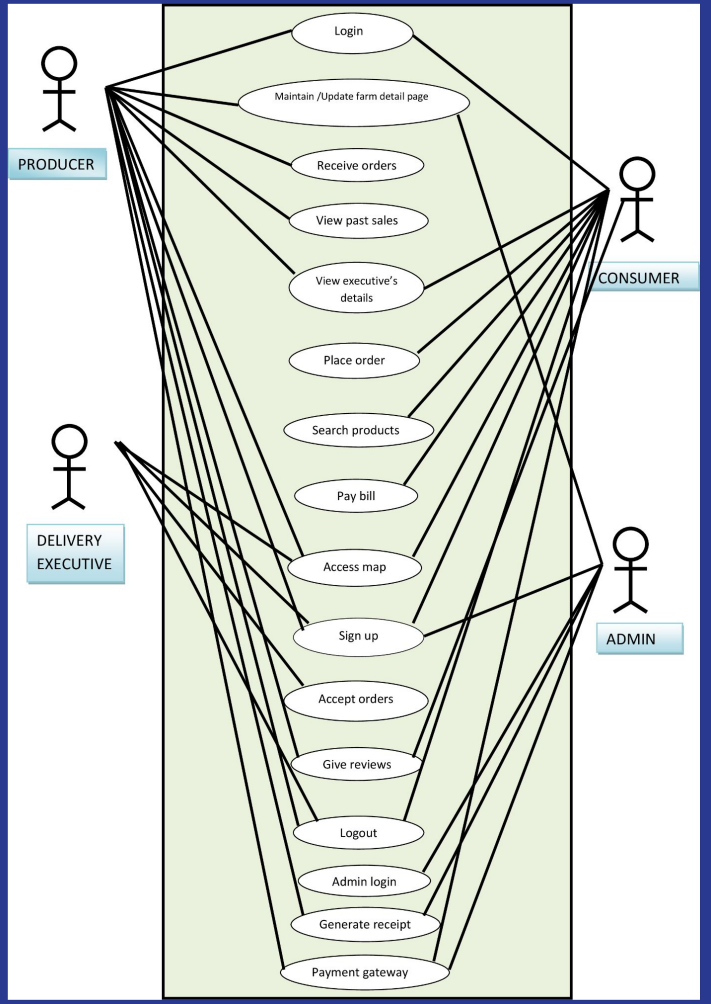
1. Focuses on small scale producers
2. Live updates and reviews of farms
3. Wide variety of goods(seasonality taken into consideration)
4. Verification of farmers and their products : Quality certificates, identity proof etc.
5. Sales analysis and sales data management for farmers
6. Fresh products delivered because of fast delivery from nearby farms

Disadvantages :

1. Delivery limitations : Due to economic constraints we cannot guarantee long and large scale delivery facilities
2. Storage limitations : Due to lack of storage facilities we cannot ensure the regularity in the stocks
3. Immediate commits cannot be made in the software, since we are using the waterfall model.

Use case diagram

A use case diagram is used to represent the dynamic behavior of a system. It encapsulates the system's functionality by incorporating use cases, actors, and their relationships. It models the tasks, services, and functions required by a system/subsystem of an application. It depicts the high-level functionality of a system and also tells how the user handles a system.



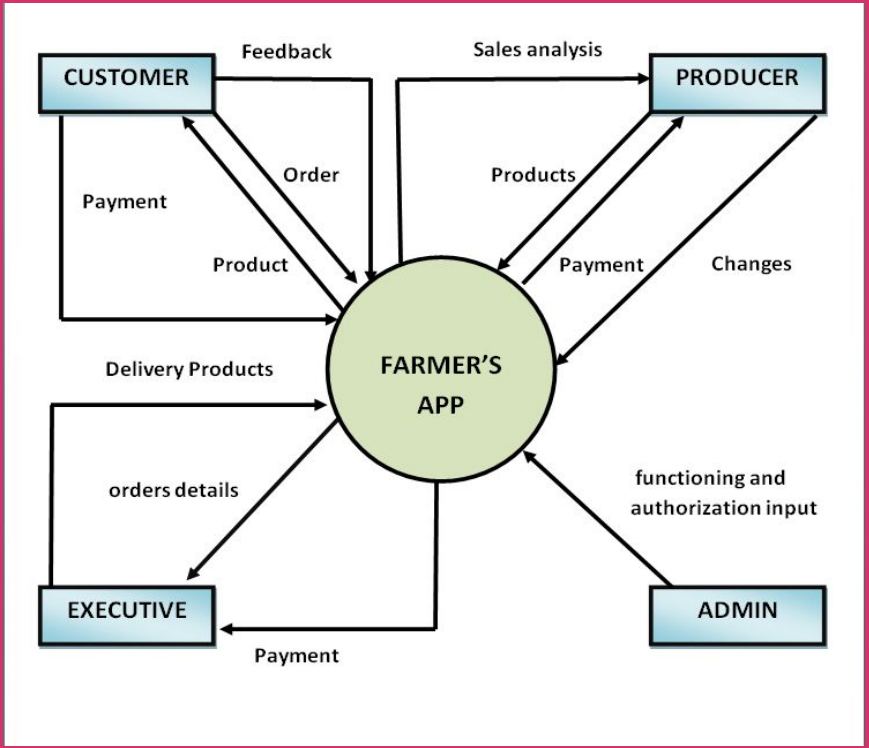
Purpose of Use Case diagram

1. It gathers the system's needs.
2. It depicts the external view of the system.
3. It recognizes the internal as well as external factors that influence the system.
4. It represents the interaction between the actors.

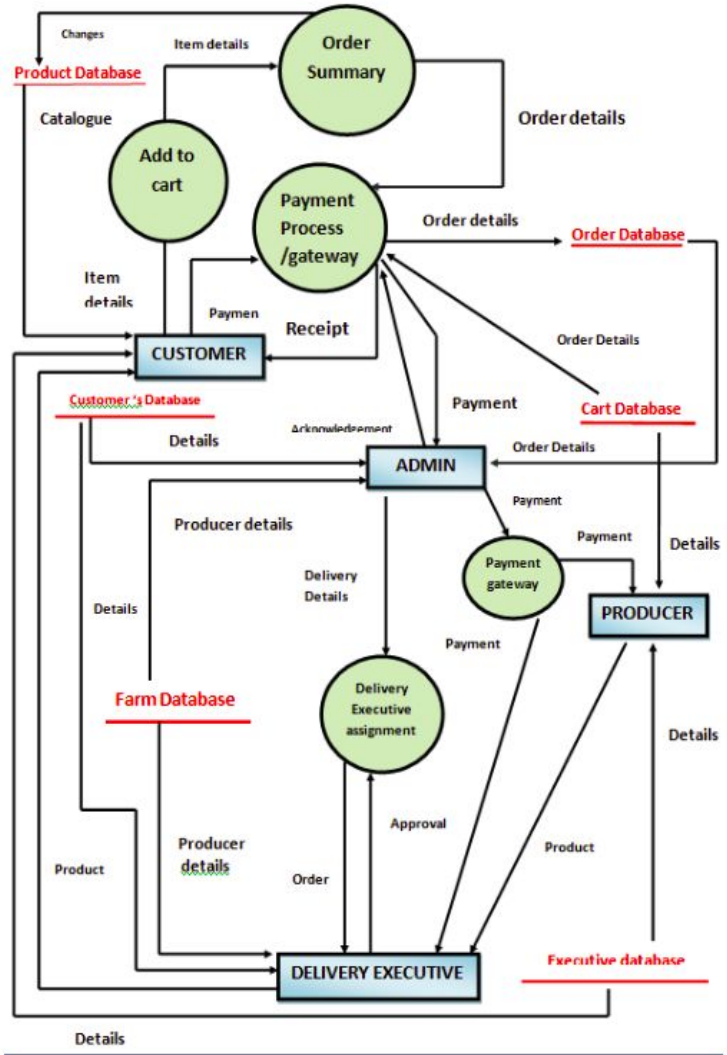
What is DFD ?

DFD is the abbreviation for **Data Flow Diagram**. The flow of data of a system or a process is represented by DFD. It also gives insight into the inputs and outputs of each entity and the process itself. DFD does not have control flow and no loops or decision rules are present.

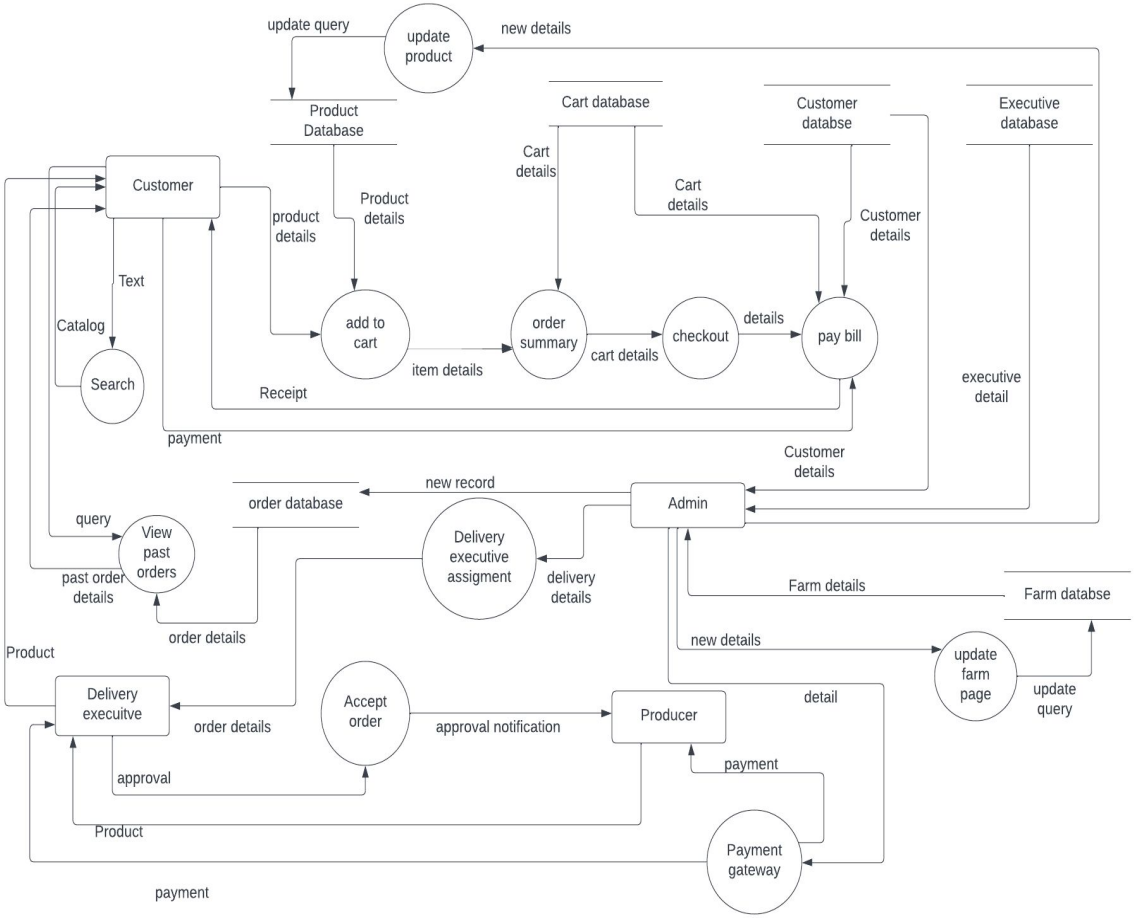
Level -0 DFD


CUSTOMER
Feedback
Sales analysis
PRODUCER
Order
Payment
Products
Product
Payment
Changes
FARMER'S APP
Delivery Products
orders details
functioning and authorization input
EXECUTIVE
ADMIN
Payment

Level -1 DFD


Changes
Item details
Order Summary
Product Database
Catalogue
Order details
Add to cart
Payment Process /gateway
Order details
Order Database
Item details
Paymen
Receipt
CUSTOMER
Order Details
Customer's Database
Payment
Cart Database
Details
Acknowledgement
Order Details
ADMIN
Payment
Producer details
Payment
Details
Payment gateway
Delivery Details
Details
PRODUCER
Payment
Farm Database
Delivery Executive assignment
Details
Approval
Producer details
Product
Order
Product
Executive database
DELIVERY EXECUTIVE
Details

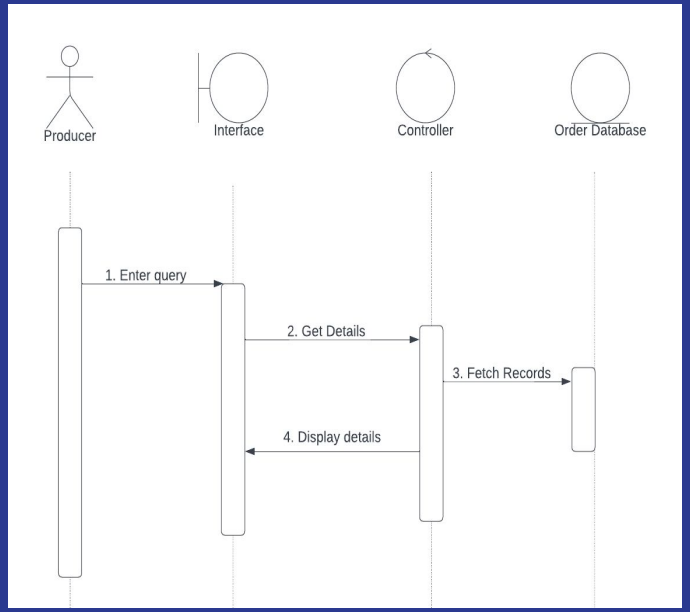
Level -2 DFD


update query
update product
new details
Product Database
Cart database
Customer databse
Executive database
Customer
Cart details
Cart details
Customer details
product details
Product details
Text
Catalog
add to cart
order summary
checkout
details
pay bill
Search
item details
cart details
Receipt
executive detail
payment
Customer details
new record
order database
Admin
query
View past orders
Delivery executive assigment
delivery details
past order details
Farm details
Farm databse
order details
new details
Product
update farm page
update query
Delivery executive
order details
Accept order
approval notification
Producer
detail
approval
payment
Product
Payment gateway
payment

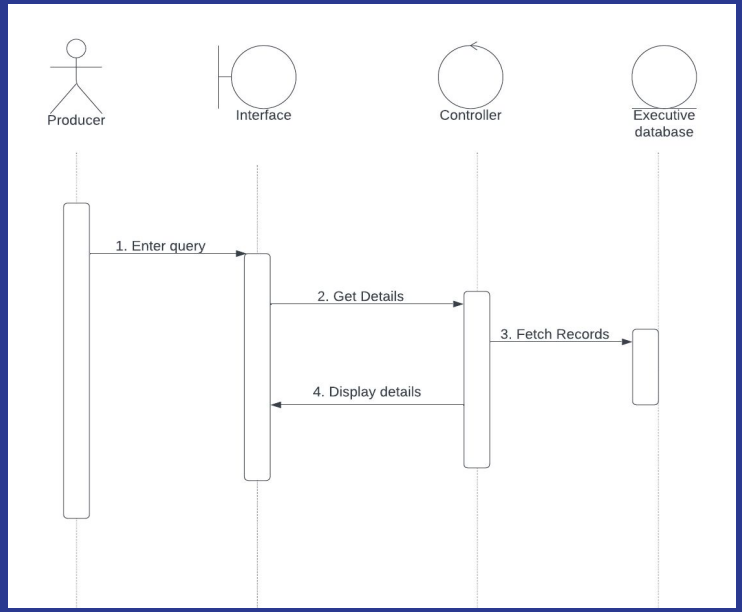
What is Sequence Diagram?

A sequence diagram simply depicts interaction between objects in a sequential order i.e. the order in which these interactions take place. We can also use the terms event diagrams or event scenarios to refer to a sequence diagram. Sequence diagrams describe how and in what order the objects in a system function. These diagrams are widely used by businessmen and software developers to document and understand requirements for new and existing systems.

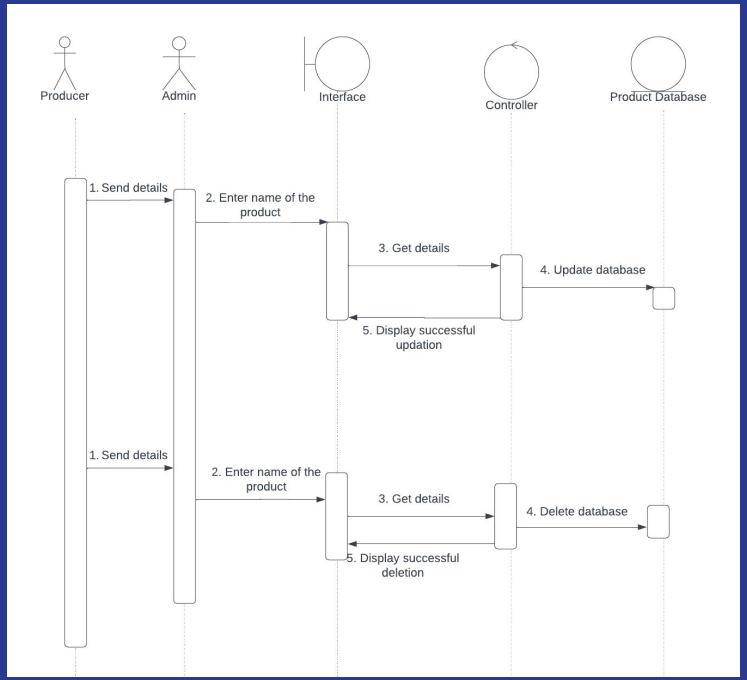
Sequence diagram for view past sales



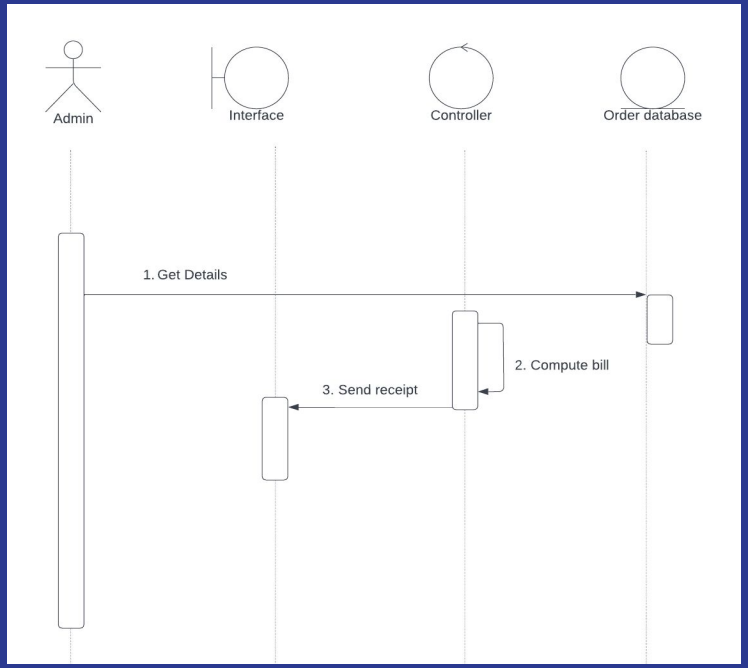
Sequence diagram for view executive detail



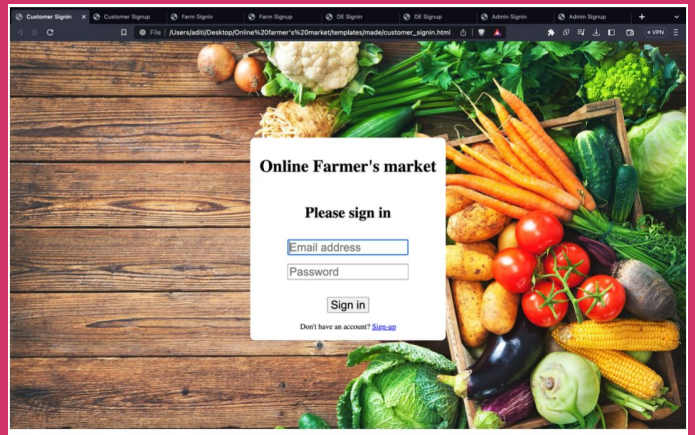
Sequence diagram for update farm detail page

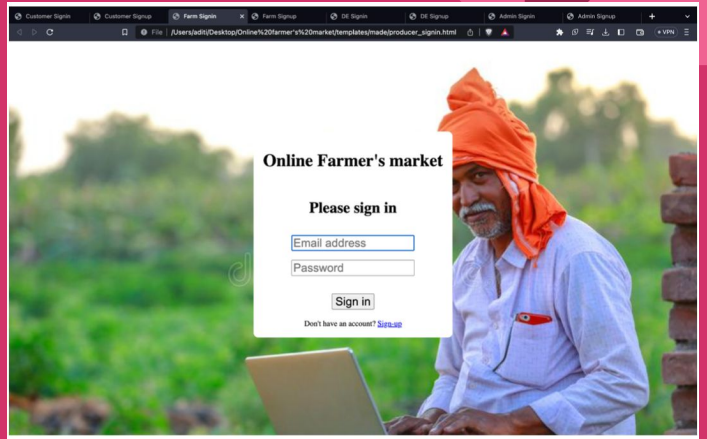


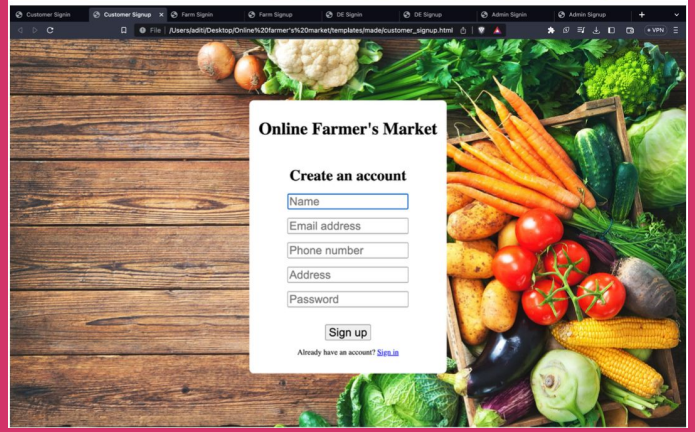
Sequence diagram for generate receipt

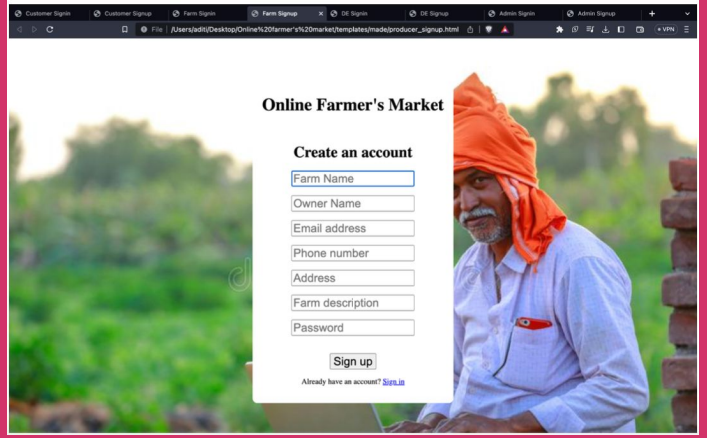


ScreenShots









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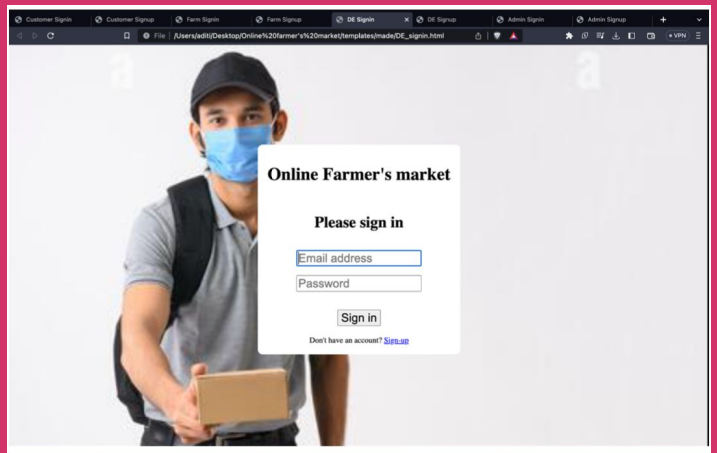
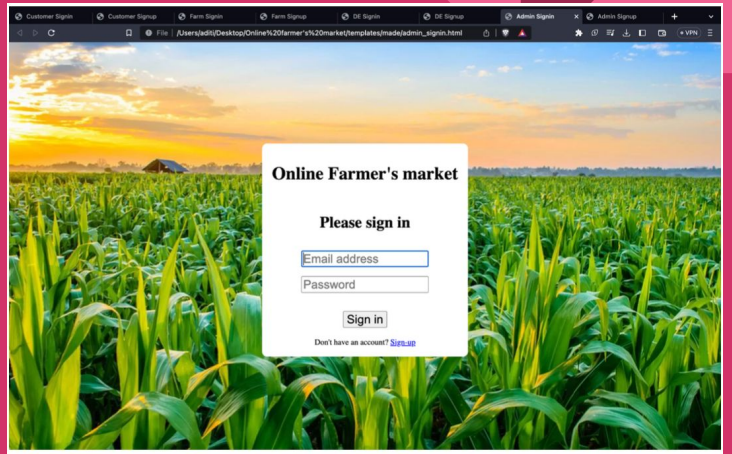
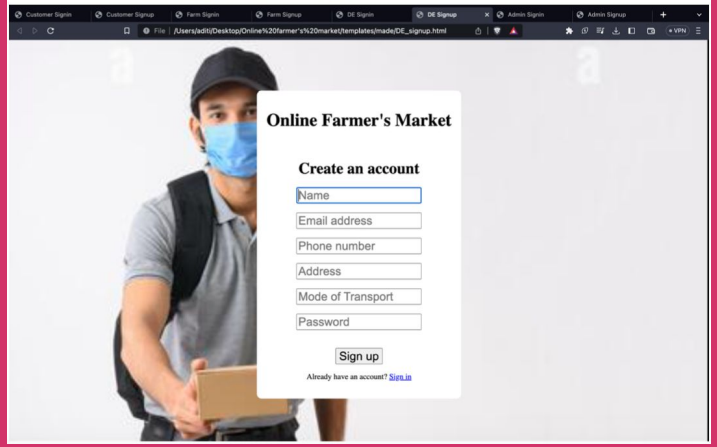
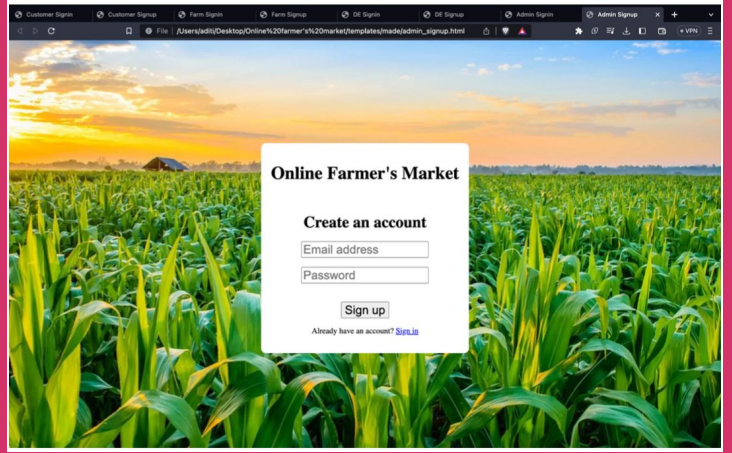
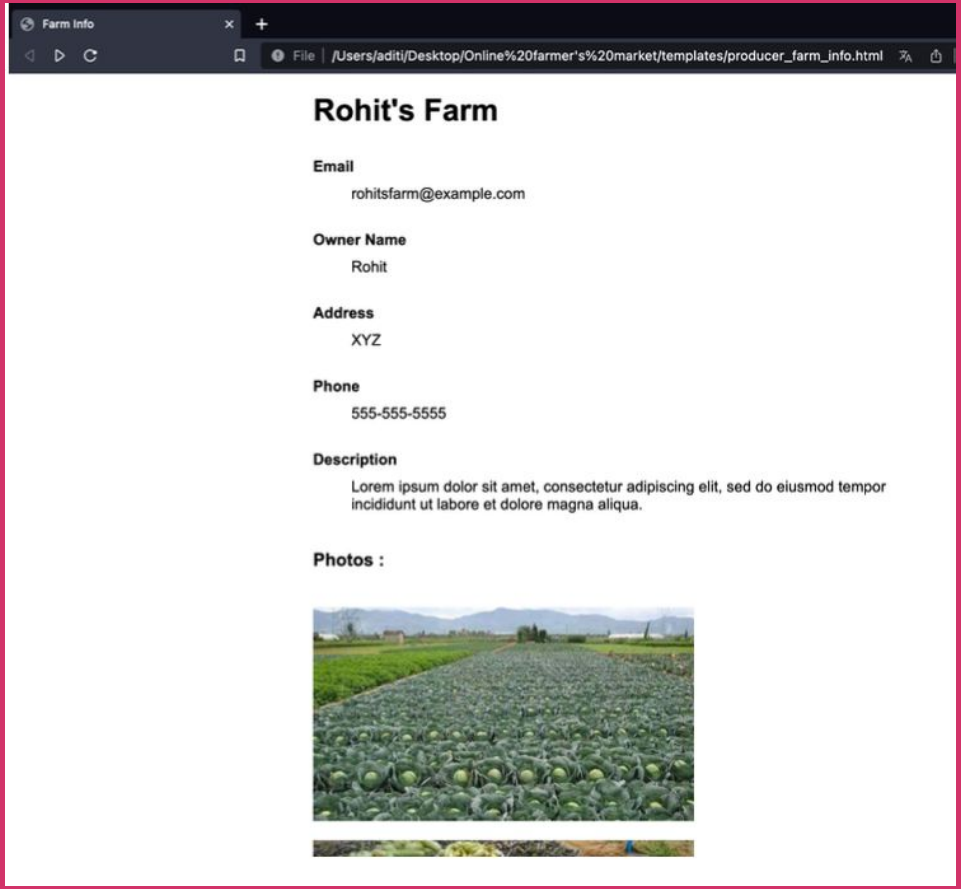


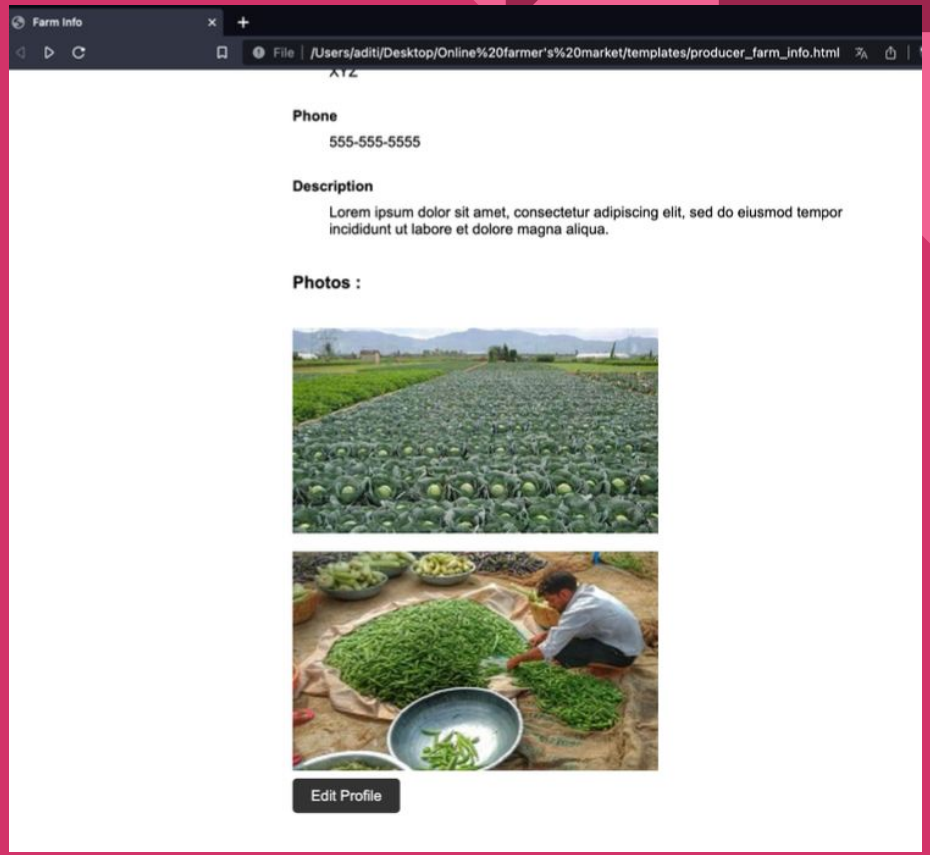




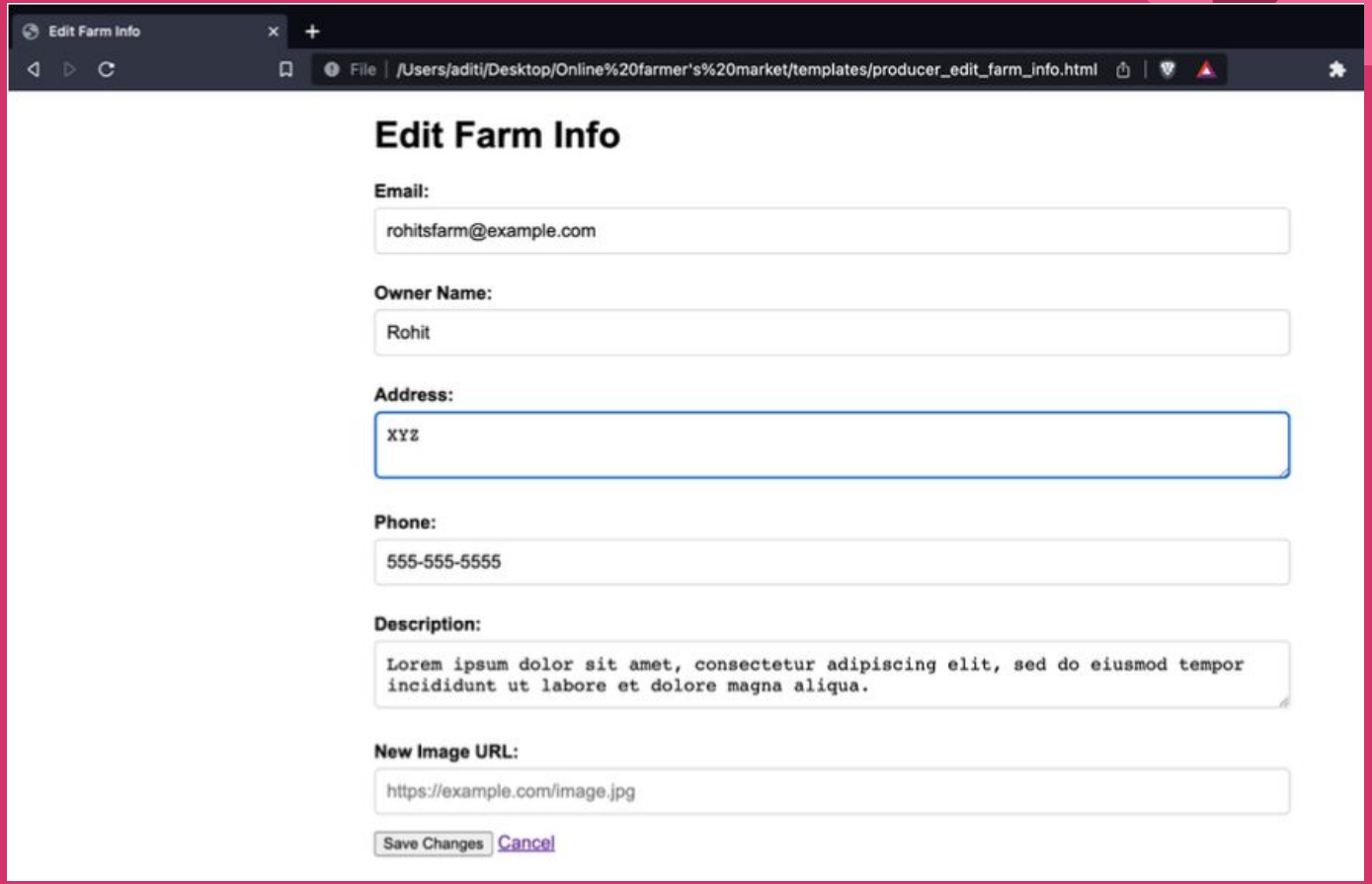


ScreenShots(Farm Page)

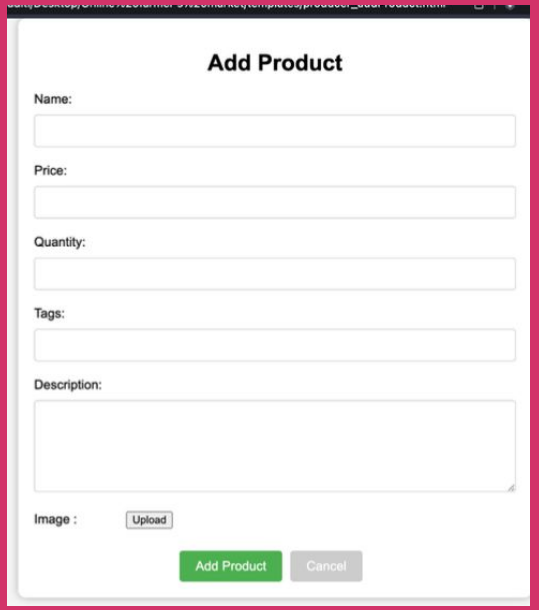


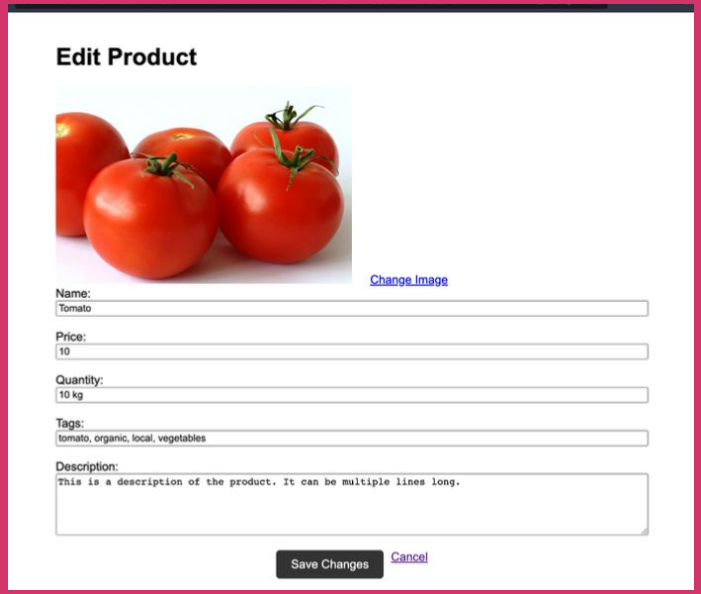


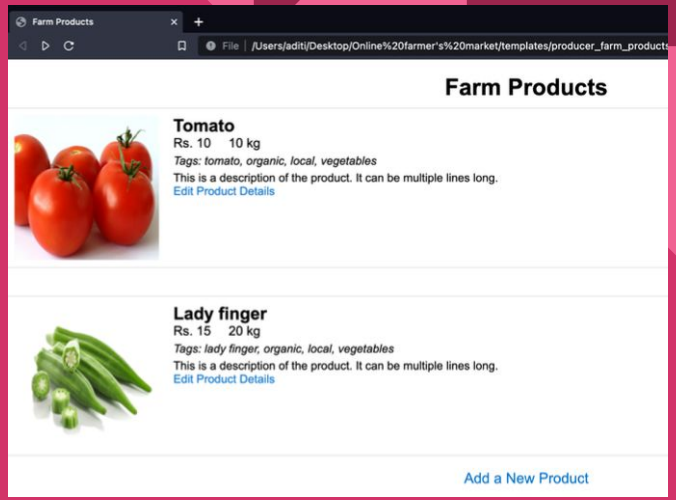
ScreenShots(Farm Page)



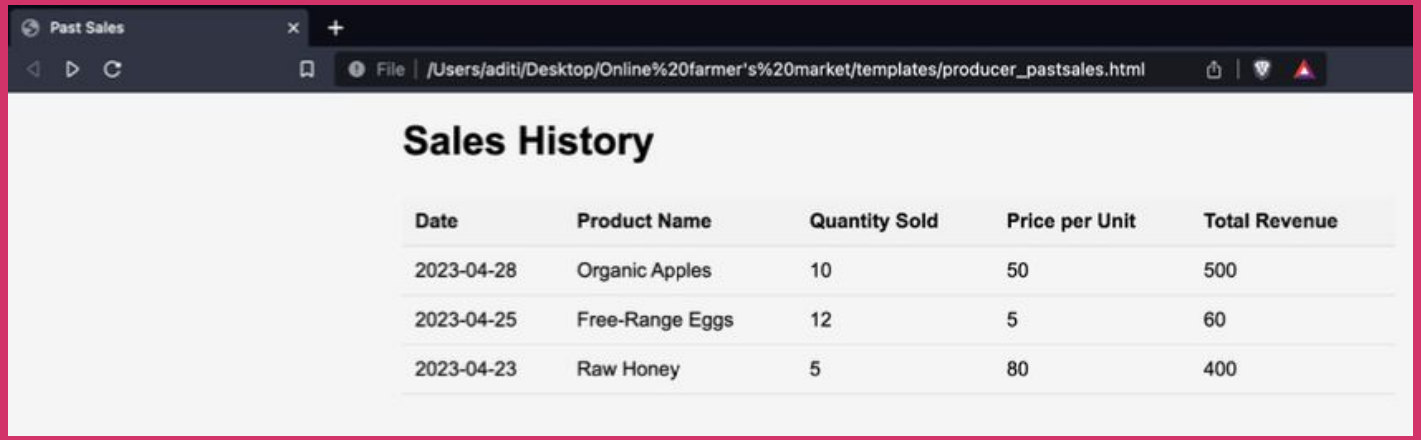
ScreenShots(Products)



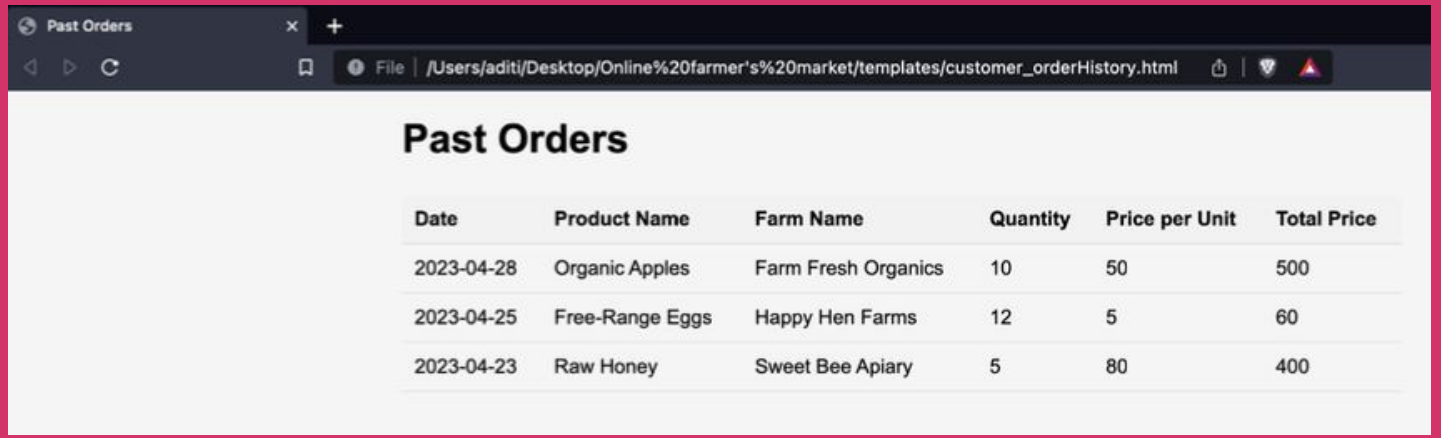




ScreenShots(History)

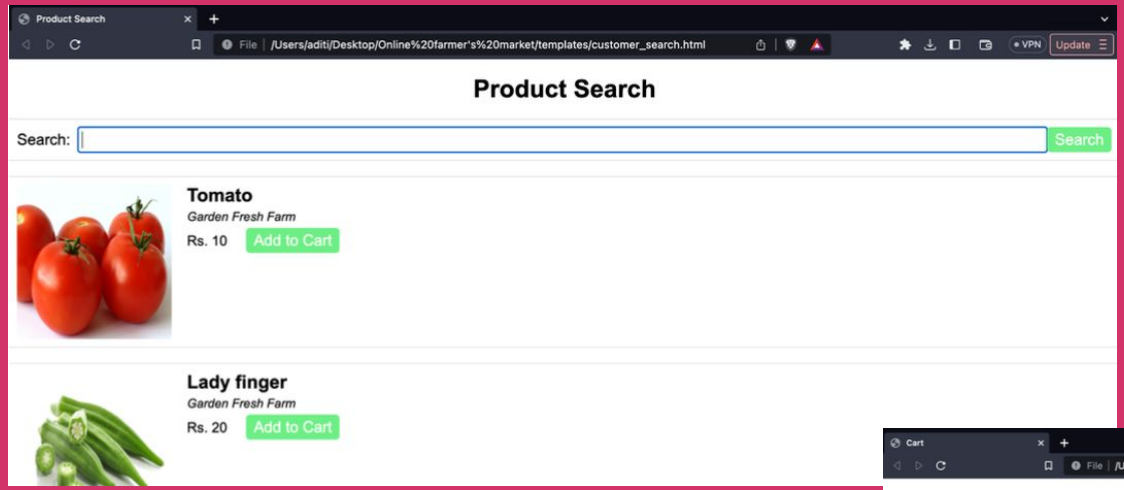


Producer



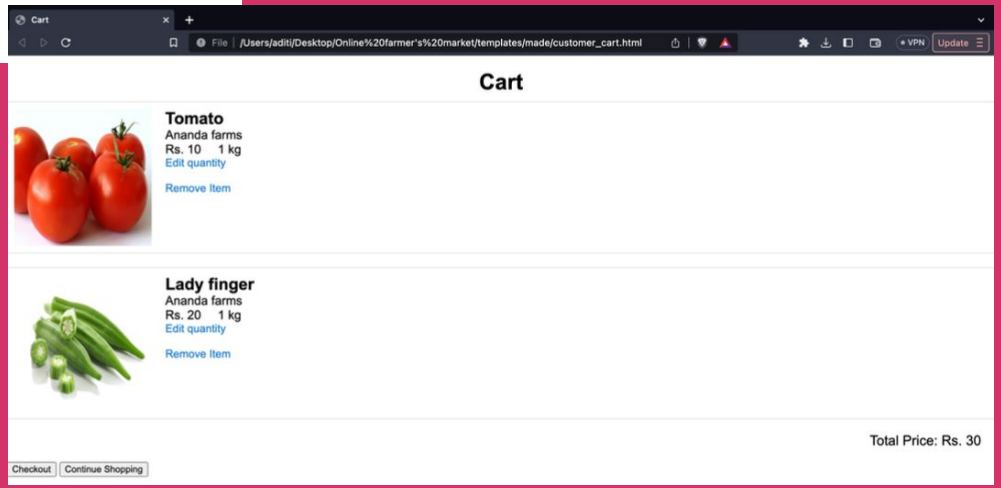
Customer

ScreenShots(Customer)

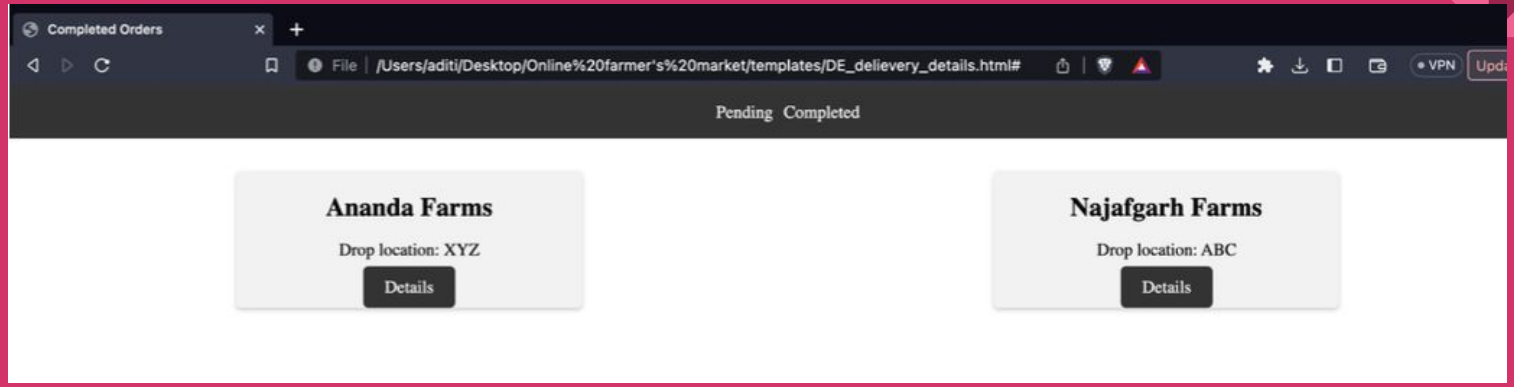


Search Products

Add to cart

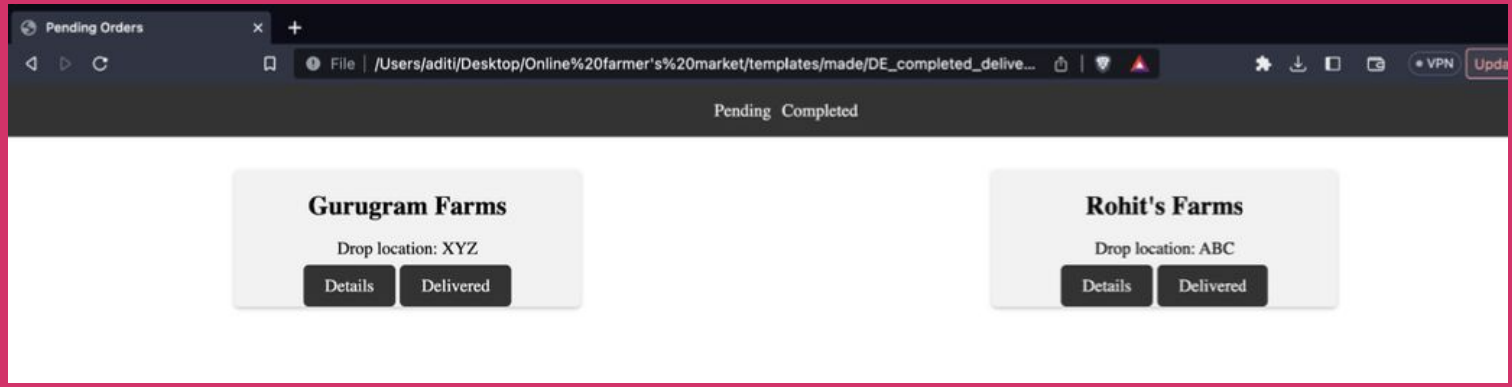


ScreenShots(Delivery Executive)

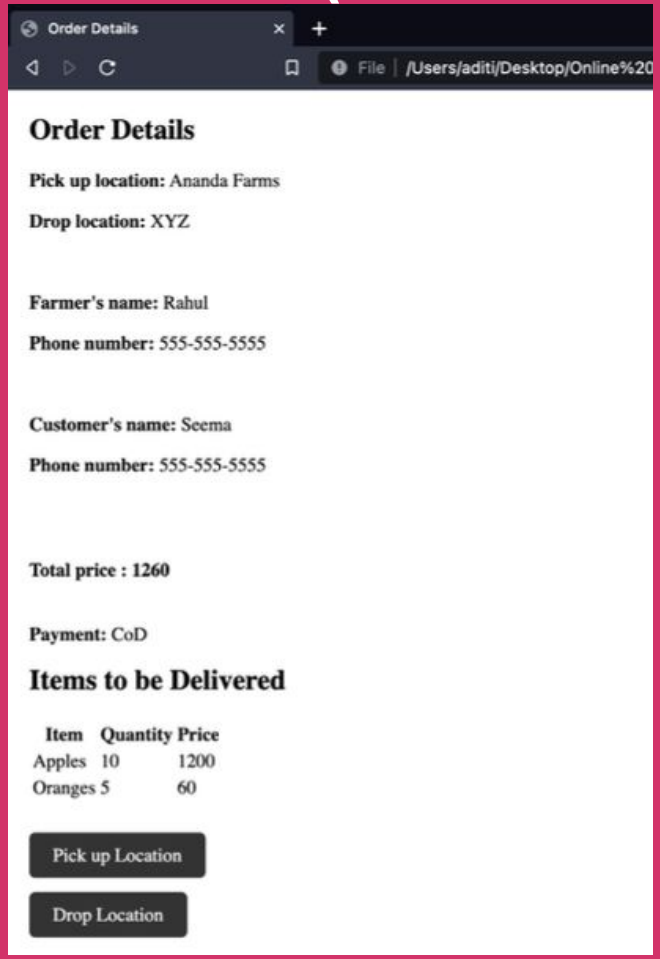


Completed orders

Pending orders



ScreenShots(DE order details)



Databases

Admin database

- adm_id:Pri key, int type
- adm_email
- adm_password

Customer database

- cid : Primary key, int type
- cemail
- cpassword
- cname
- caddress
- cphone

Farm database

- fid : Pri key, int type
- femail
- fpassword
- fname
- ownername
- faddress
- fphone
- fdescription

DE database

- did : Pri key,int type
- demail
- dpassword
- dname
- daddress
- dphone

order database

- ord_id : Pri key, int type
- cart_id
- cid
- pid
- fid
- did
- payment_id
- status
- order_date
- delivery_date
- quantity
- payment_mode
- total_price

product database

- pid : Primary key, int type
- fid
- pname
- pprice
- pquantity
- ptags
- pdescription

cart database

- cart_id : Primary key, int type
- cid
- pid
- fid
- quantity
- total_price
- status

Function Point Analysis

Function Type	Estimated count	Weight Factor			Function Type Total
		Simple	Average	Complex	
EI	27	3	4	6	108
EO	18	4	5	7	90
EQ	20	3	4	6	80
ILF	12	7	10	15	120
EIF	3	5	7	10	21

1. External Input (EI)
2. External Output (EO)
3. External Inquiries (EQ)
4. Internal Logical File (ILF)
5. External Interface File (EIF)

Total Unadjusted Function Point Count =

108+90+80+120+21 = 419

Calculating Function Point Count

AFP = UFP * CAF

AFP = 419*1.1

AFP = 460.9

Thank you