



KLE Technological University
Creating Value
Leveraging Knowledge

School of Computer Science and Engineering

DBMS Course Project Report on Modular Kitchen Database Management System

Submitted by

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INTRODUCTION:

Our client, Dinakar Shetty owns the Sanjivini Home solutions, which is a shop that has modular kitchen items and also designs a full kitchen. They store the data of customers in an excel sheet or registers and the details of the products, accessories that are available in their shop is stored in paper. This way of storing the important data is risky. Any person can easily access this data, which is a sensitive information to the shop and can misuse it. As the information is stored in paper, it can be misplaced and lost very easily. Accessing the details of a particular customer, or date or the products that are currently available in the shop is very difficult task as the data is huge and a person has to go through each and every record to access the information needed. Hence, this way of storing the data is prone to more risk and is not very efficient. Our approach to solve this problem was to create a database for the shop in which they can store the customer data, the products and accessories that are available in their shop and they can also easily be able to generate bills and receipt without actually manually writing the data. To start off, the admin is provided with a page that has a user login page at the beginning. This is to not allow others to access the information available in the database. Once the admin has logged in, a homepage appears that gives the count of the customers that have purchased something today, the count of full kitchen and retail customers available and also a graph displaying the number of products sold. There is also a customer page, a products page, accessories page where you can add data, delete data and search data easily. The invoice generates a pdf which can be downloaded and given to the customer. All of this, is implemented using Django, in which the customer, products, accessories, designer are all taken as models and queries are written to add, delete and search records. Queries are also written to count the number of customers that have shopped on that particular day, the number of products sold, the number of full kitchen and retail customer, and the total number of orders, that are displayed at the homepage for easy and quick access of the admin. In this way, it is easier for the client to maintain the data, accessing the data and deleting the data. The security for the information of the shop is also increased, as to access the pages, a username and password has to be provided. This way, the data is not prone to getting lost that easily and maintaining is easier.

PROPOSAL PHASE:

Responsibilities: Mukti Bhansali - ER diagram, client visit, relation schema.

Manisha Belagal - ER diagram, writing and editing word document.

Mehar Anjum - ER diagram, collection of data from client.

Akashini Koppad -ER diagram, writing and editing word document.

Problem Description: The Sanjivini Home Solutions Shop stores the details of customers and services in a conventional paper work. This way of storing is a tedious and time-consuming job. The goal is to have a database management system that would reduce their work of retrieving and managing the data.

Requirements: 1. Admin can access product details.

2. Admin can add new product.
3. Admin can delete existing product.
4. Admin can modify existing product.
5. Admin can access customer details.
6. Admin can add new customer.
7. To generate bills and receipts.
8. Admin can search for a particular customer, product and accessories.

Design Questions to be answered

Question 1: From the problem description, identify the entities that need to be represented in the database, the attributes of each entity, the relationships between the entities, and the cardinality ratios of each relationship.

The entities involved are:

Customer, Order, Products, Accessories, FK products, Payment, Payment_ins, staff

The attributes of the entities are as follows,

Customer: cust_id, c_name(f_name, m_name, l_name), walk in date, site address(street, city, pincode), type, ph.no.

Order: orderid, p_hsn, p_modelname, p_mrp

Products: model_name, type, mrp, gst

Accessories: code, mrp, dealer price, dimensions, HSN, std pack, Name, gst

FK products: HSN code, product category, gst

Staff: s_id, ph.no, salary, designation, s_name(f_name, m_name, l_name), current status

Payment: pay_id, total amount, balance

Payment_ins: r_id, date, mode of payment, cheque/acc no, installment

The relationship between the entities:

Customer -orders - Products. (1 :N)

Order -has- Products. (M :N)

Order -has- Accessories. (M:N)

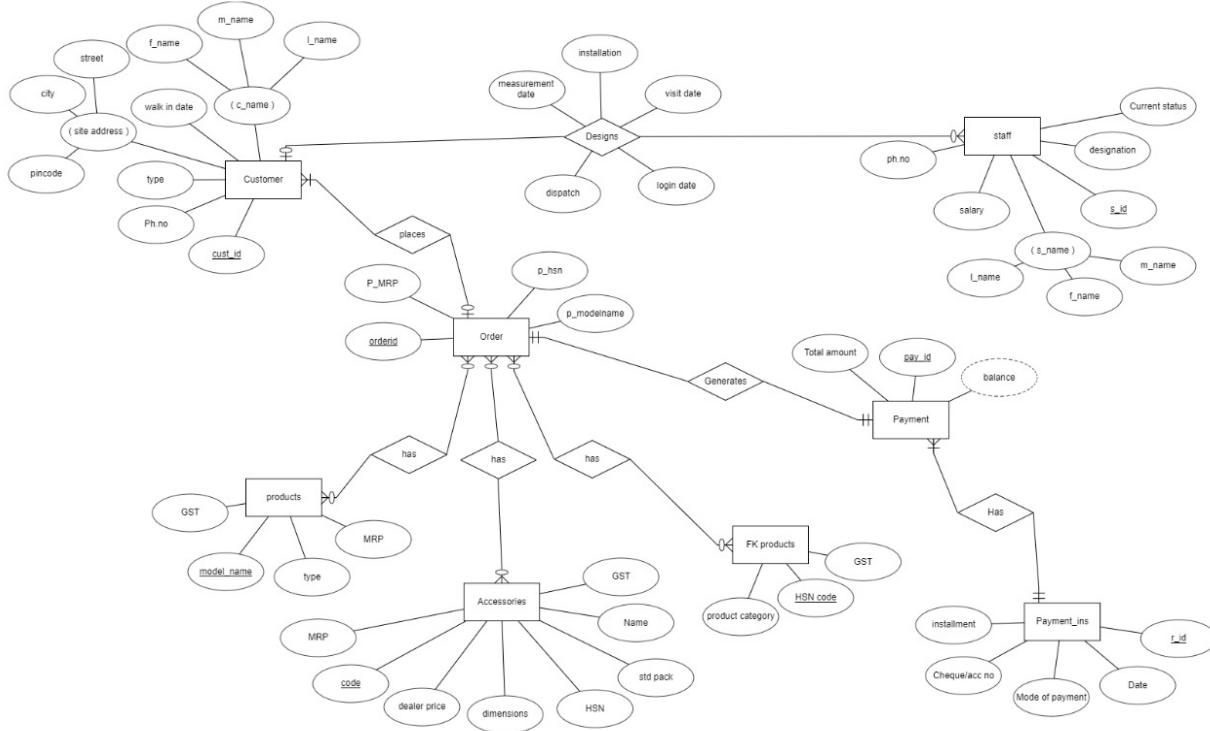
Order -has -FK products. (M:N)

Order-generates- payment. (1:1)

Payment -has- Payment_ins. (1:N)

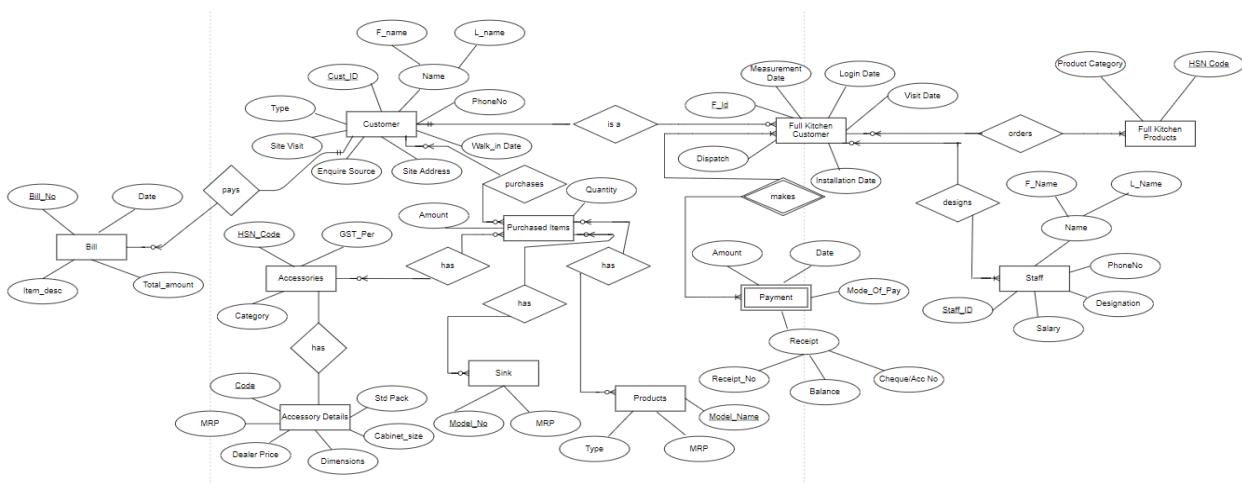
Staff -designs- Customer. (1 :N)

Question 2: Draw an Entity-Relationship Diagram illustrating the information you have identified in Question 1.

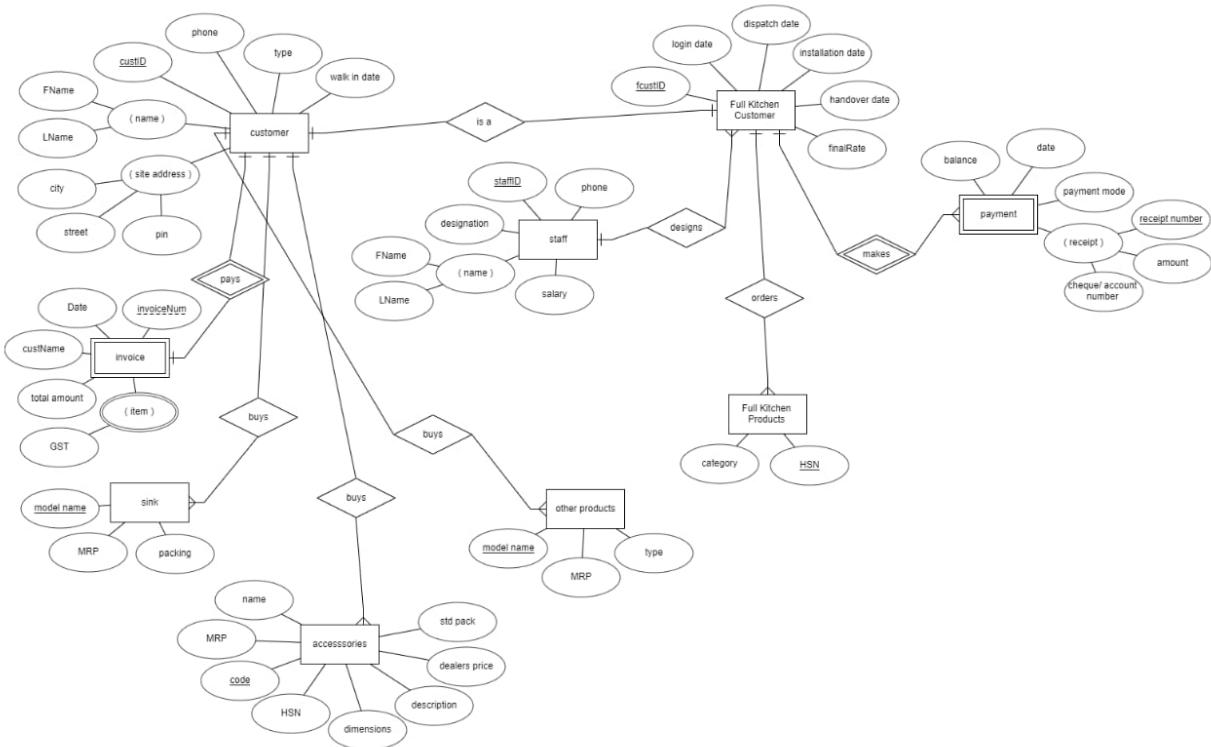


Question 3: Draw alternate Entity-Relationship Diagram illustrating the information you have identified in Question 1 that you think are most likely to occur.

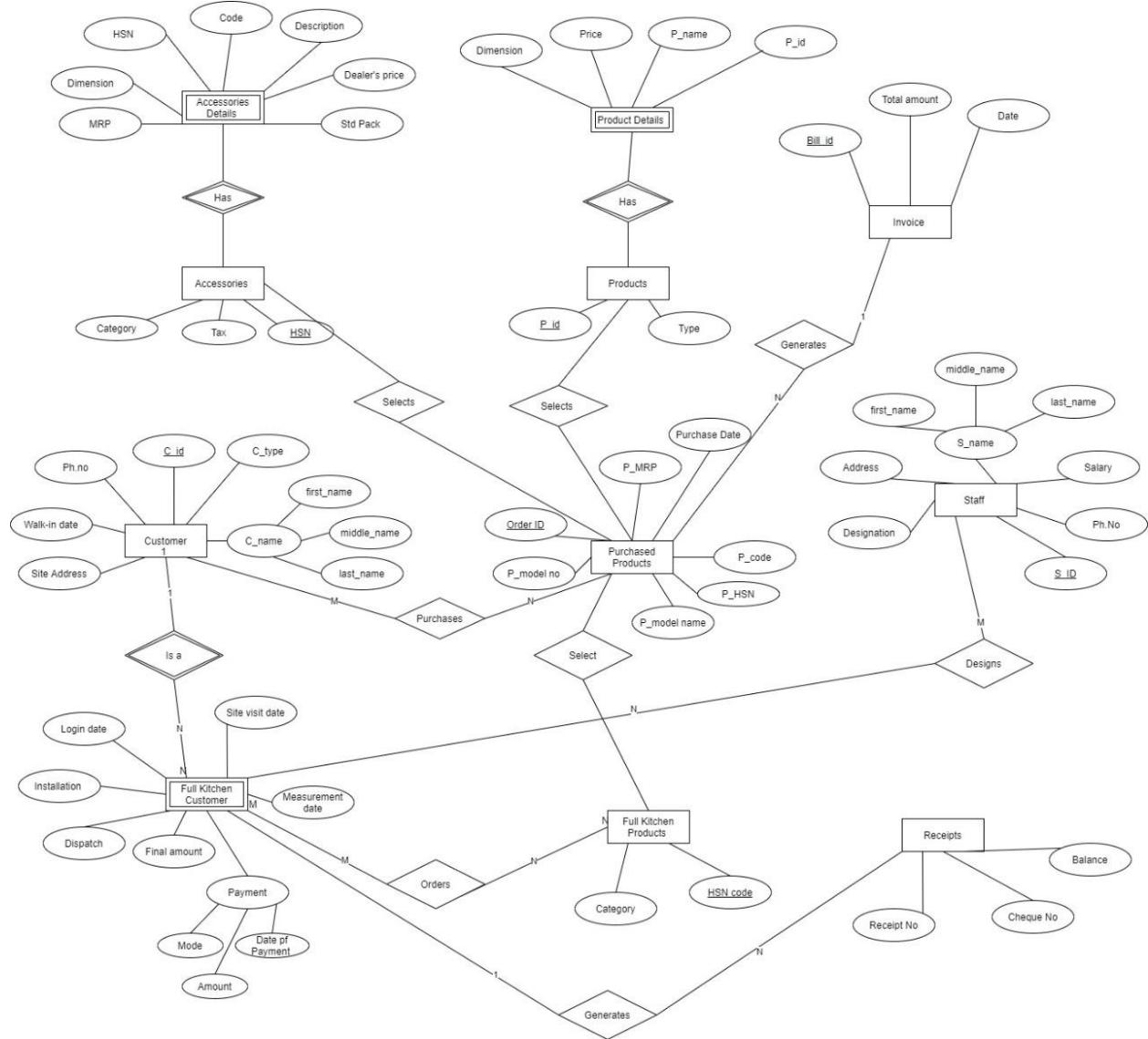
First Alternative:



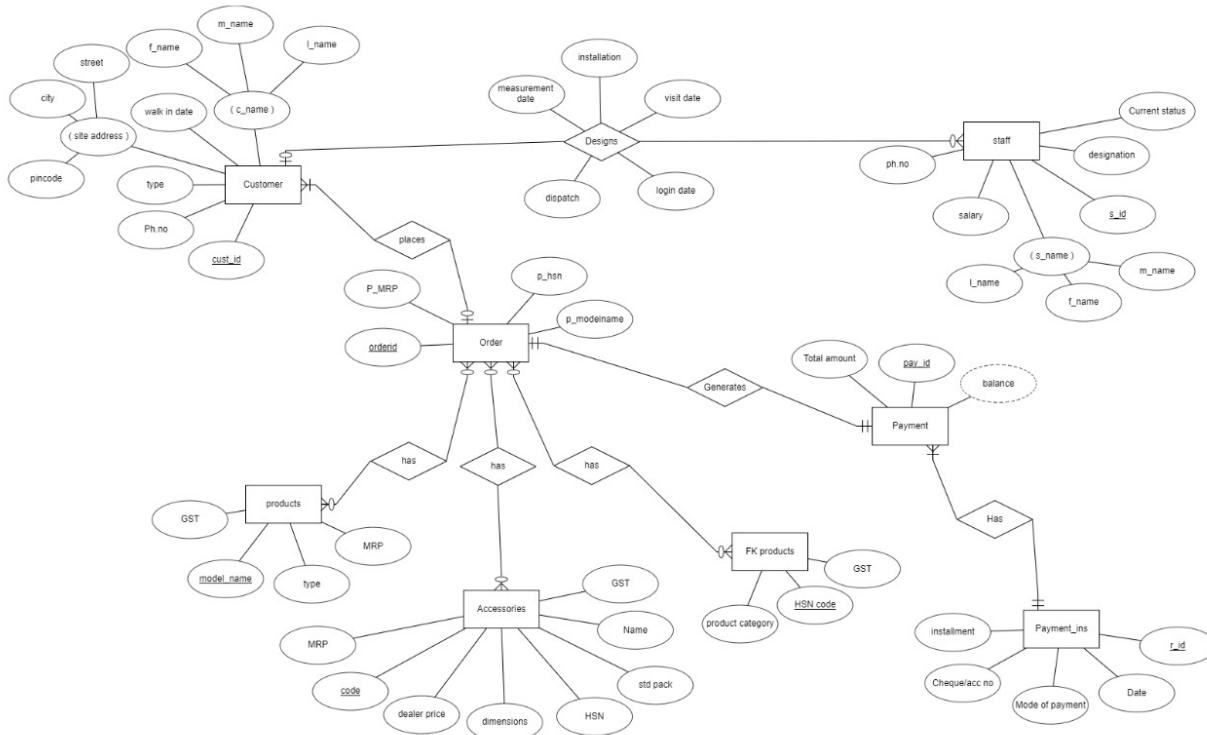
Second alternative:



Third Alternative:

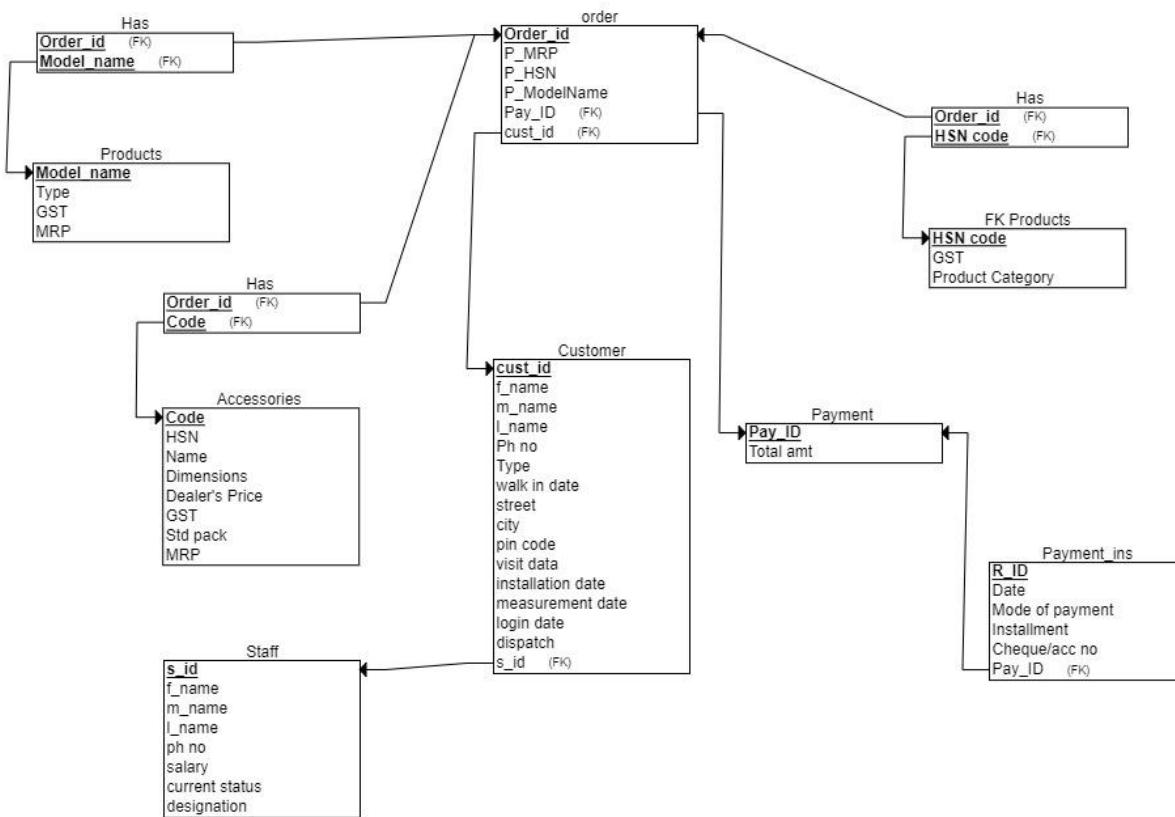


Question 4: Choose the **optimal** Entity-Relationship Diagram from the designs provided above and justify why you think this is an optimal solution for your identified problem specification.



The ER diagram takes into consideration all the attributes which are required to design the database. The entities are also grouped efficiently. The relationships between the various entities are also legitimate.

Question 6: Draw an ER to Relation Mapping illustrating the information you have identified in Question 4.



Question 7: Draw a Data Dictionary illustrating the information you have identified in Question 6.

Object (Entity)	Name (Attribute)	Type (Data type)	Description	Primary Key	Foreign Key
Customer	cust_id	Number(5)	Unique Identification number for the customer	Yes	No
Customer	f_name	Varchar2(10)	First name of the customer	No	No
Customer	m_name	Varchar2(10)	Middle name of the	No	No

			customer		
Customer	l_name	Varchar2(10)	Last name of the customer	No	No
Customer	Ph_no	Number(10)	Phone number of the customer	No	No
Customer	Walk in date	Date	Date when the customer goes to the shop	No	No
Customer	type	Varchar2(10)	Retail customer or Full-kitchen customer	No	No
Customer	street	Varchar2(20)	Site address of the customer	No	No
Customer	city	Varchar2(10)	City of the customer	No	No
Customer	pincode	Number(6)	Pincode of the customer	No	No
Customer	measurement Date	Date	Date when the kitchen measurements are taken	No	No
Customer	login Date	Date		No	No
Customer	visit Date	Date	Date when site was visited	No	No
Customer	Installation date	Date	Date when installation was made	No	No
Customer	dispatch	Varchar2(3)	To know if the product is	No	No

			dispatched or not		
Customer	s_id	Number(5)	Unique Identification of Staff	No	Yes
FK products	HSN code	Number(5)	HSN Code of Full Kitchen Products	Yes	No
FK products	product category	Varchar2(10)	Category to which the product belongs	No	No
FK products	gst	Number(2)	GST of the FK product	No	No
Staff	s_id	Number(5)	Unique Identification of Staff	Yes	No
Staff	f_name	Varchar2(10)	First Name of the staff	No	No
Staff	l_name	Varchar2(10)	Last Name of the Staff	No	No
Staff	ph.no	Number(10)	Phone number of the staff	No	No
Staff	designation	Varchar2(10)	Job Designation of the staff	No	No
Staff	salary	Number(6)	Salary of the staff	No	No
Staff	current status	Varchar2(2)	If the staff is still working in the shop or not	No	No

Payment	p_id	Number(5)	Unique Identification of Payment	Yes	No
Payment	Total amount	Number(10)	Total amount to be paid	No	No
Payment_ins	R_id	Number(5)	Unique receipt ID	Yes	No
Payment_ins	Date	Date	Date of Payment	No	No
Payment_ins	Mode of payment	Varchar2(10)	Mode of Payment done by Customer	No	No
Payment_ins	installment	Number(4)	Installment made by the customer	No	No
Payment_ins	pay_id	Number(5)	Unique Identification of Payment	No	Yes
Payment_ins	check/accNo	Number(10)	Check/Acc Number of Customer	No	No
Order	order_id	Number(5)	Unique identification number for order	Yes	No
Order	p_modelname	Varchar2(10)	Name of the product model	Yes	No
Order	p_mrp	Number(4)	Price of the product model	No	No
Order	p_hsn	Number(5)	HSN Code of Products	No	No

Order	p_id	Number(5)	Unique Identification number for the customer	No	Yes
Order	cust_id	Number(5)	Unique Identification number for order	No	Yes
Accessories	code	Number(10)	Unique Identification of Accessories	Yes	No
Accessories	Name	Varchar2(10)	Name of the Accessory	No	No
Accessories	MRP	Number(4)	Price of the Accessory	No	No
Accessories	dealer price	Number(5)	Price set by the dealer	No	No
Accessories	dimensions	Number(10)	Dimensions of the accessory	No	No
Accessories	std pack	Varchar2(10)	Standard pack of the accessory	No	No
Accessories	gst	Number(2)	Gst set for the accessory	No	Yes
Products	Modelname	Varchar2(10)	Unique model name of the product	Yes	No
Products	mrp	Number(10)	Price of the product purchased	No	No
Products	type	Varchar2(10)	Type of the product	No	No

Product	gst	Number(2)	GST of the product	No	No
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DESIGN PHASE

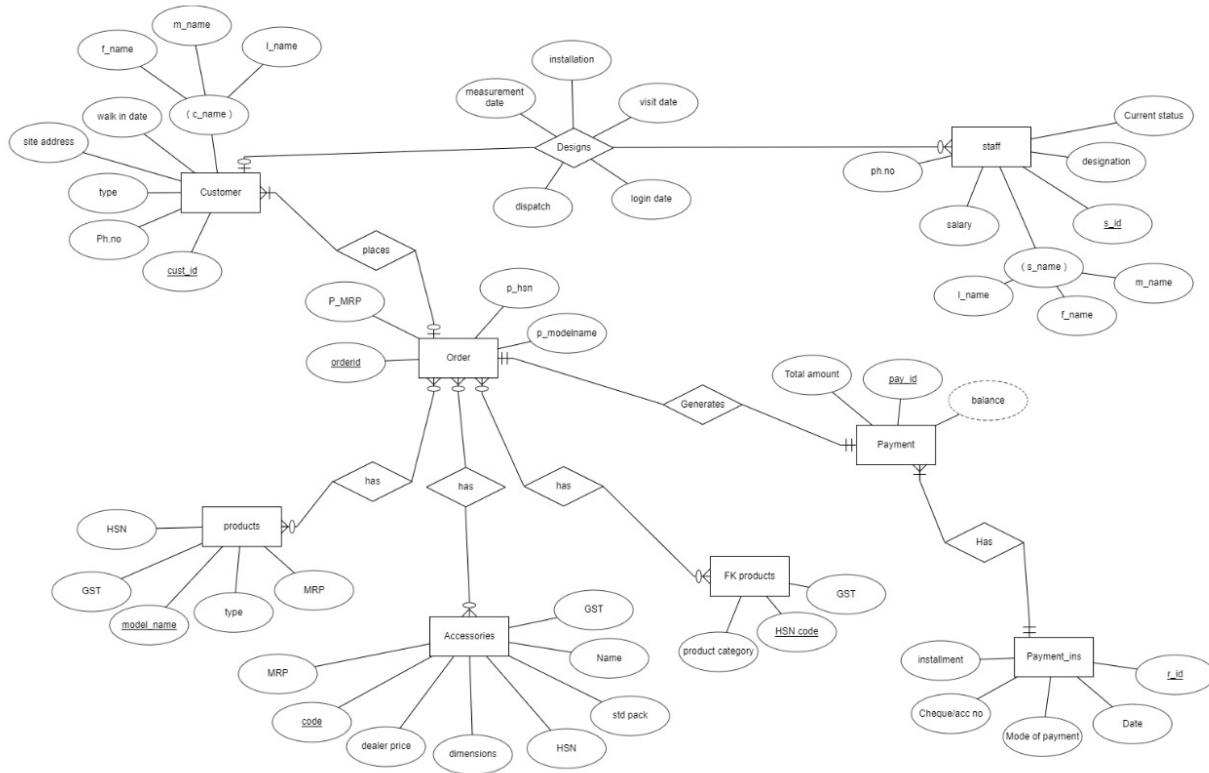
Responsibilities: Mukti Bhansali – Designing User Interface

Manisha Belagal – Normalisation.

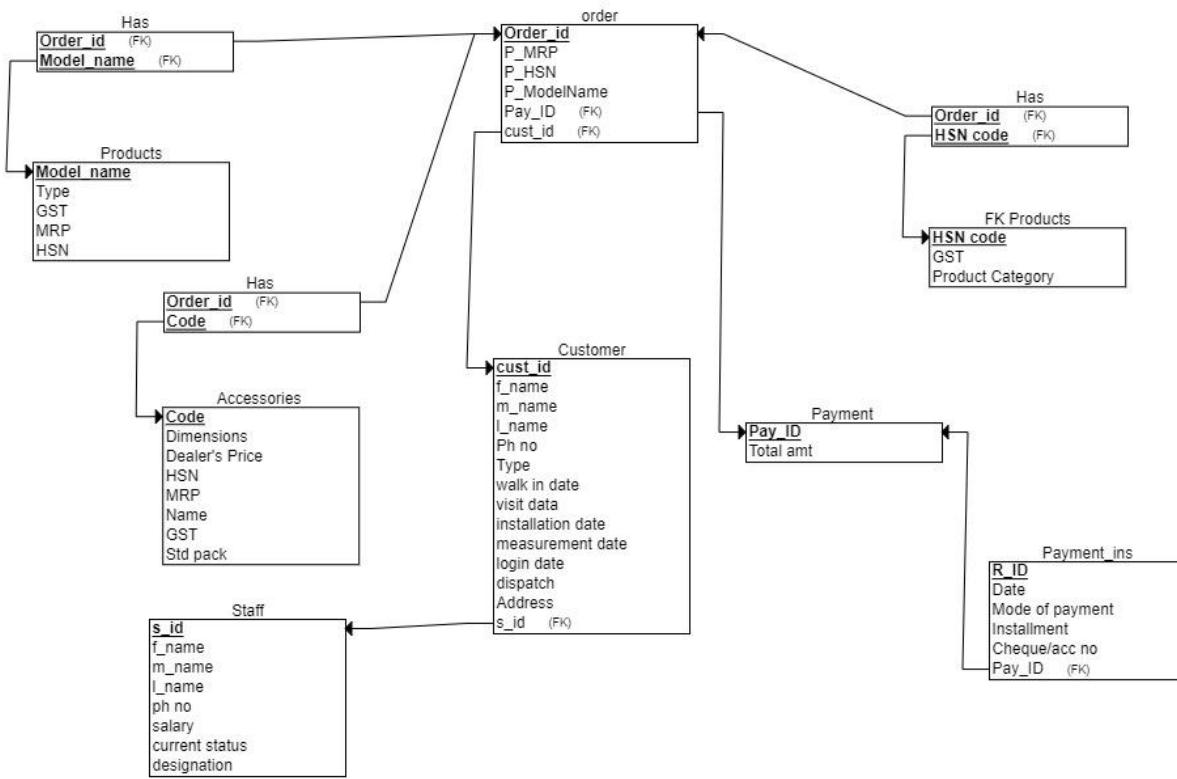
Mehar Anjum – Normalisation.

Akashini Koppad – Normalisation.

ER Design:



ER to Relation Mapping:



Data Dictionary:

Object (Entity)	Name (Attribute)	Type (Data type)	Description	Primary Key	Foreign Key
Customer	cust_id	Number(5)	Unique Identification number for the customer	Yes	No
Customer	f_name	Varchar2(10)	First name of the customer	No	No
Customer	m_name	Varchar2(10)	Middle name of the customer	No	No
Customer	l_name	Varchar2(10)	Last name of the customer	No	No

Customer	ph_no	Number(10)	Phone number of the customer	No	No
Customer	walk in date	Date	Date when the customer goes to the shop	No	No
Customer	type	Varchar2(10)	Retail customer or Full-kitchen customer	No	No
Customer	address	Varchar2(20)	Address of the customer	No	No
Customer	measurement date	Date	Date when the kitchen measurements are taken	No	No
Customer	login date	Date		No	No
Customer	visit date	Date	Date when site was visited	No	No
Customer	installation date	Date	Date when installation was made	No	No
Customer	dispatch	Varchar2(3)	To know if the product is dispatched or not	No	No
Customer	s_id	Number(5)	Unique Identification of Staff	No	Yes
FK products	HSN code	Number(5)	HSN Code of Full Kitchen Products	Yes	No

FK products	product category	Varchar2(10)	Category to which the product belongs	No	No
FK products	gst	Number(2)	GST of the FK product	No	No
Staff	s_id	Number(5)	Unique Identification of Staff	Yes	No
Staff	f_name	Varchar2(10)	First Name of the staff	No	No
Staff	l_name	Varchar2(10)	Last Name of the Staff	No	No
Staff	ph.no	Number(10)	Phone number of the staff	No	No
Staff	designation	Varchar2(10)	Job Designation of the staff	No	No
Staff	salary	Number(6)	Salary of the staff	No	No
Staff	current status	Varchar2(2)	If the staff is still working in the shop or not	No	No
Payment	p_id	Number(5)	Unique Identification of Payment	Yes	No
Payment	total amount	Number(10)	Total amount to be paid	No	No
Payment_ins	r_id	Number(5)	Unique receipt ID	Yes	No

Payment_ins	date	Date	Date of Payment	No	No
Payment_ins	mode of payment	Varchar2(10)	Mode of Payment done by Customer	No	No
Payment_ins	installment	Number(4)	Installment made by the customer	No	No
Payment_ins	pay_id	Number(5)	Unique Identification of Payment	No	Yes
Payment_ins	check/accNo	Number(10)	Check/Acc Number of Customer	No	No
Order	order_id	Number(5)	Unique identification number for order	Yes	No
Order	p_modelname	Varchar2(10)	Name of the product model	Yes	No
Order	p_mrp	Number(4)	Price of the product model	No	No
Order	p_hsn	Number(5)	HSN Code of Products	No	No
Order	p_id	Number(5)	Unique Identification number for the customer	No	Yes
Order	cust_id	Number(5)	Unique Identification number for order	No	Yes

Accessories	code	Number(10)	Unique Identification of Accessories	Yes	No
Accessories	name	Varchar2(10)	Name of the Accessory	No	No
Accessories	MRP	Number(4)	Price of the Accessory	No	No
Accessories	dealer price	Number(5)	Price set by the dealer	No	No
Accessories	dimensions	Number(10)	Dimensions of the accessory	No	No
Accessories	std pack	Varchar2(10)	Standard pack of the accessory	No	No
Accessories	gst	Number(2)	Gst set for the accessory	No	Yes
Products	modelname	Varchar2(10)	Unique model name of the product	Yes	No
Products	mrp	Number(10)	Price of the product purchased	No	No
Products	hsn	Number(5)	HSN Code of Products	No	No
Products	type	Varchar2(10)	Type of the product	No	No
Product	gst	Number(2)	GST of the product	No	No

Question 1: Normalization:

Normalized Solution 1:

The relation Customer has the following FD

$\text{cust_id} \rightarrow \text{f_name, m_name, l_name, ph_no, walk in date, address}$

$\text{type} \rightarrow \text{visit date, measurement date, login date, dispatch, installment date}$

$\{\text{cust_id, type}\} \rightarrow \text{s_id}$

The relation is found to be in 1NF, 2NF but not in 3NF as there are no transitive dependencies.

The relation Order, was found to not be in 1NF due to multiple values of products ordered by the customers.

To solve this, the relation was split to two tables, one containing the order_id, cust_id and pay_id , and the other having details of ordered products by each customer.

For the relation Order, $\text{order_id} \rightarrow \text{pay_id, cust_id}$

For the relation Order_details, $\{\text{order_id, p_hsn, p_modelname, p_mrp}\} \rightarrow \{\text{order_id, p_hsn, p_modelname, p_mrp}\}$

The relations Order and Order_details are separately found to be in 1NF and 2NF. There is no transitive dependency in any relations, hence they are not in 3NF.

The relation, Products was found to be in 1NF, 2NF but not in 3NF as transitive dependencies were discovered.

$\text{model_name} \rightarrow \text{mrp, type, gst, hsn}$

$\text{type} \rightarrow \text{gst, hsn}$

The decomposition led to two relations

For Products relation, $\text{model_name} \rightarrow \text{mrp, type}$

For Products_details relation, $\text{type} \rightarrow \text{gst, hsn}$

The two relations were separately found to be in 1NF, 2NF, 3NF and BCNF.

The relation, Accessories was found to be in 1NF, 2NF but not in 3NF as transitive dependencies were discovered.

$\text{code} \rightarrow \text{hsn, name, gst, dimensions, std pack, mrp, dealer's price}$

$\text{hsn} \rightarrow \text{name, gst}$

The decomposition led to two relations

For Accessories relation, code->hsn, dimensions, std pack, mrp, dealer's price

For Acc_category relation, hsn -> name, gst

The two relations were separately found to be in 1NF, 2NF, 3NF and BCNF.

The relation, Staff was found to be in 1NF, 2NF but not in 3NF as there are no transitive dependencies.

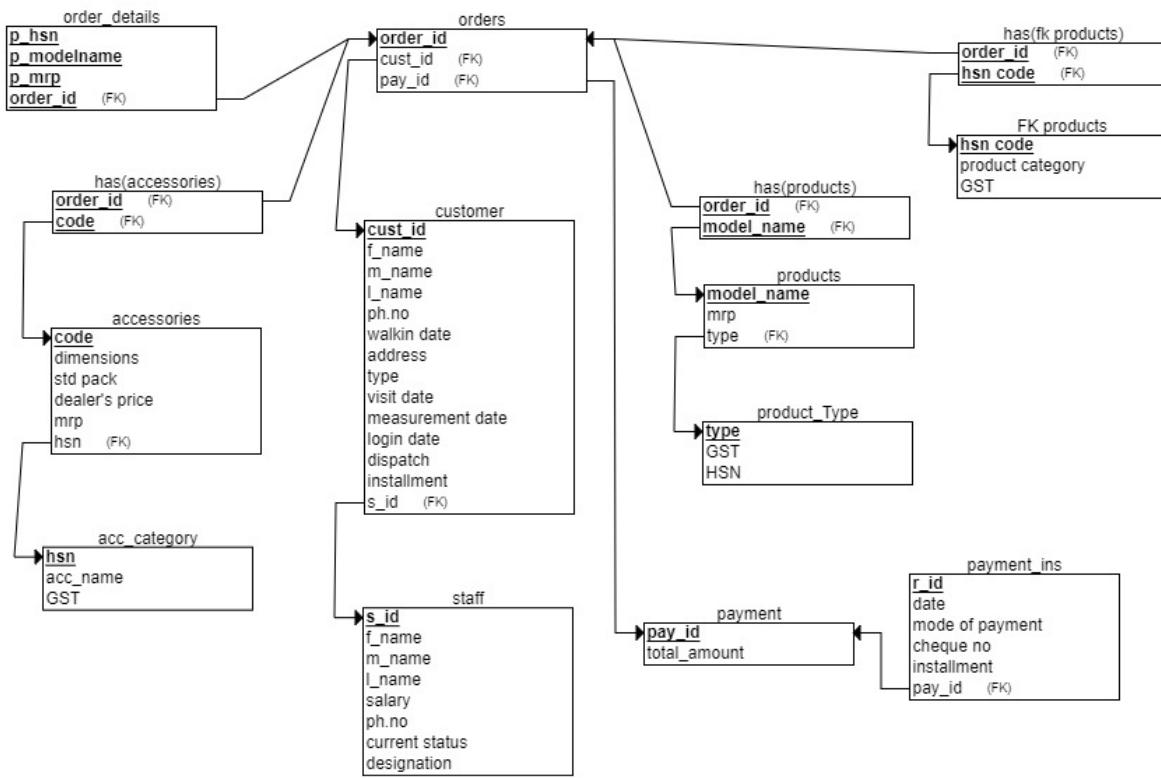
s_id -> f_name, m_name, l_name, salary, ph no, current status, designation

The relation, Payment was found to be in 1NF, 2NF but not in 3NF as there are no transitive dependencies.

pay_id -> total amount

The relation, Payment_ins was found to be in 1NF, 2NF but not in 3NF as there are no transitive dependencies.

r_id -> installment, date, mode of payment, cheque/acc no, pay_id



Normalized Solution 2:

The relation customer was found to be in 1NF but not in 2NF.

$\{ \text{cust_id}, \text{type} \} \rightarrow \text{f_name, m_name, l_name, ph_no, walk-in date, address, s_id, visit date, installment date, measurement date, login date, dispatch}$.

$\text{cust_id} \rightarrow \text{f_name, m_name, l_name, ph_no, walk-in date, address}$

If type is removed, cust_id alone can determine few attributes. Hence no Full FD.

After decompositions, we have two relations.

For Customer relation, $\{ \text{cust_id}, \text{type} \} \rightarrow \text{f_name, m_name, l_name, ph_no, walk-in date, address}$

For Full Kitchen Customer relation, $\{ \text{cust_id}, \text{type}, \text{s_id} \} \rightarrow \text{visit date, installation date, measurement date, login date, dispatch}$.

These two relations are separately found to be in 2NF.

There is no transitive dependency, hence the relations are not in 3NF.

The relation Order, was found to not be in 1NF due to multiple values of products ordered by the customers.

To solve this, the relation was split to two tables, one containing the order_id, cust_id and pay_id, and the other having details of ordered products by each customer.

For the relation Order, $\text{order_id} \rightarrow \text{pay_id}, \text{cust_id}$

For the relation Order_details, $\{\text{order_id}, \text{p_hsn}, \text{p_modelname}, \text{p_mrp}\} \rightarrow \{\text{order_id}, \text{p_hsn}, \text{p_modelname}, \text{p_mrp}\}$

The relations Order and Order_details are separately found to be in 1NF and 2NF. There is no transitive dependency in any relations, hence they are not in 3NF.

The relation, Products was found to be in 1NF, 2NF but not in 3NF as transitive dependencies were discovered.

$\text{model_name} \rightarrow \text{mrp, type, gst, hsn}$

$\text{type} \rightarrow \text{gst, hsn}$

The decomposition led to two relations

For Products relation, $\text{model_name} \rightarrow \text{mrp, type}$

For Products_details relation, $\text{type} \rightarrow \text{gst, hsn}$

The two relations were separately found to be in 1NF, 2NF, 3NF and BCNF.

The relation, Accessories was found to be in 1NF, 2NF but not in 3NF as transitive dependencies were discovered.

$\text{code} \rightarrow \text{hsn, name, gst, dimensions, std pack, mrp, dealer's price}$

$\text{hsn} \rightarrow \text{name, gst}$

The decomposition led to two relations

For Accessories relation, $\text{code} \rightarrow \text{hsn, dimensions, std pack, mrp, dealer's price}$

For Acc_category relation, $\text{hsn} \rightarrow \text{name, gst}$

The two relations were separately found to be in 1NF, 2NF, 3NF and BCNF.

The relation, Staff was found to be in 1NF, 2NF but not in 3NF as there are no transitive dependencies.

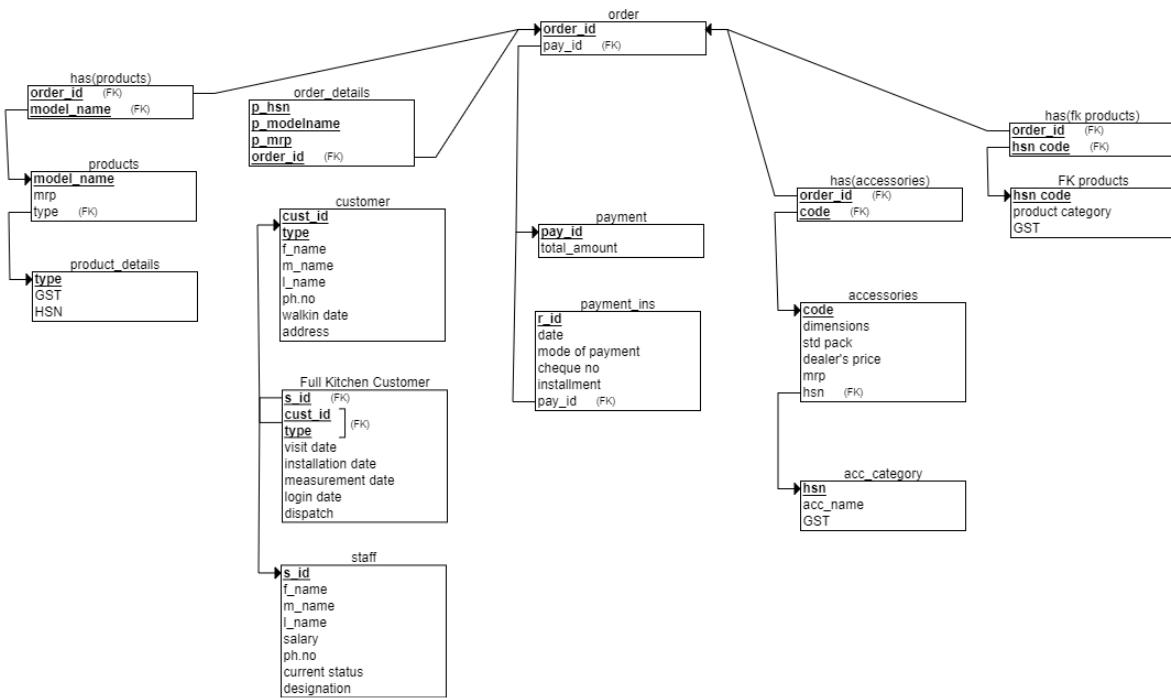
$\text{s_id} \rightarrow \text{f_name, m_name, l_name, salary, ph no, current status, designation}$

The relation, Payment was found to be in 1NF, 2NF but not in 3NF as there are no transitive dependencies.

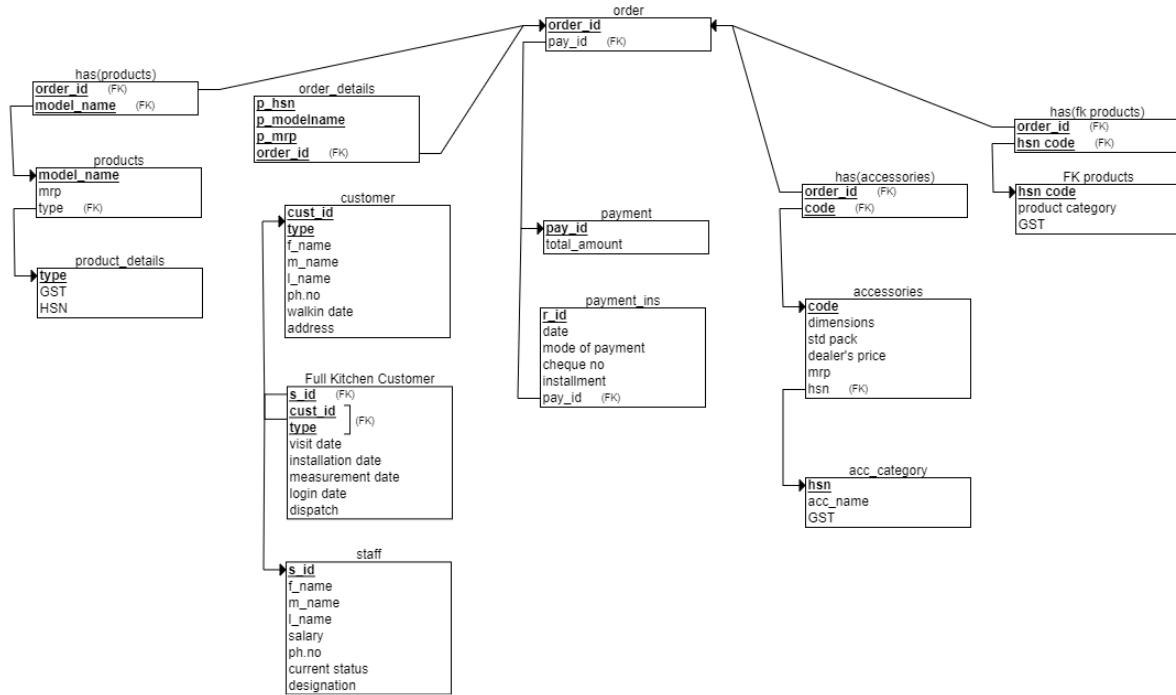
pay_id -> total amount

The relation, Payment_ins was found to be in 1NF, 2NF but not in 3NF as there are no transitive dependencies.

r_id -> installment, date, mode of payment, cheque/no, pay_id

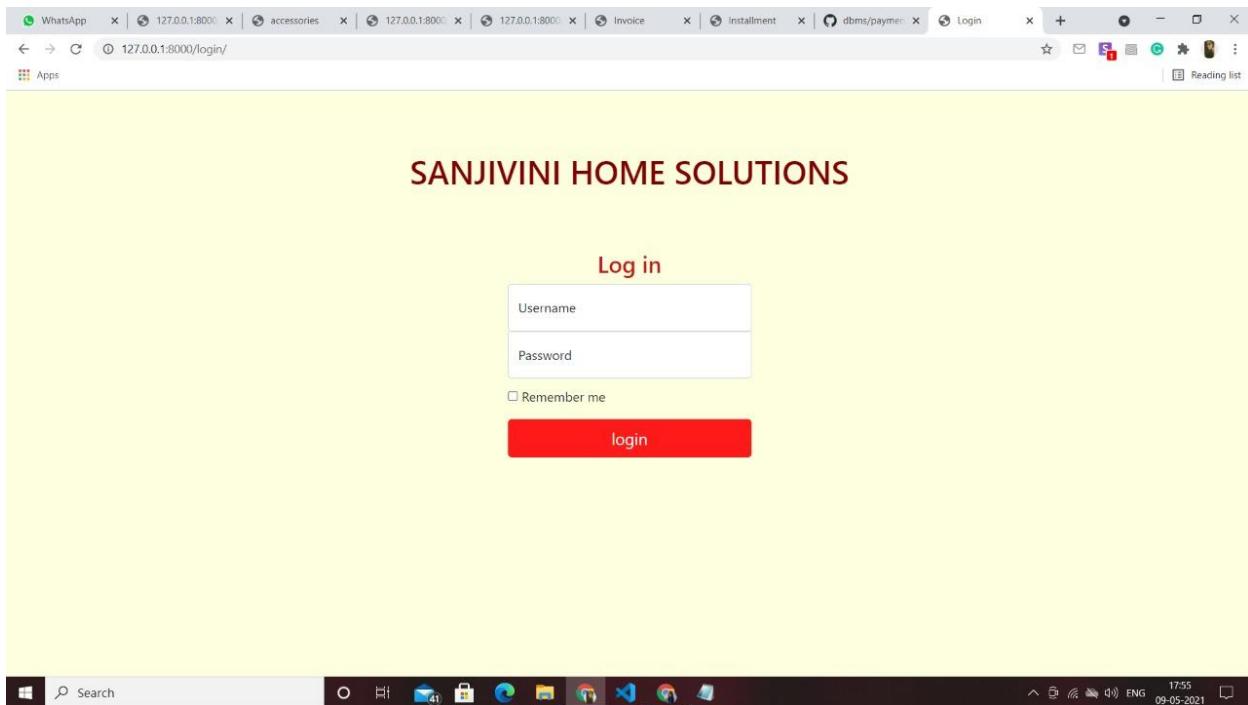


Question 2: The optimal schema chosen is the second normalized solution, as the redundant data in the customers table is removed by making a separate table for the attributes for Full Kitchen Customers only.

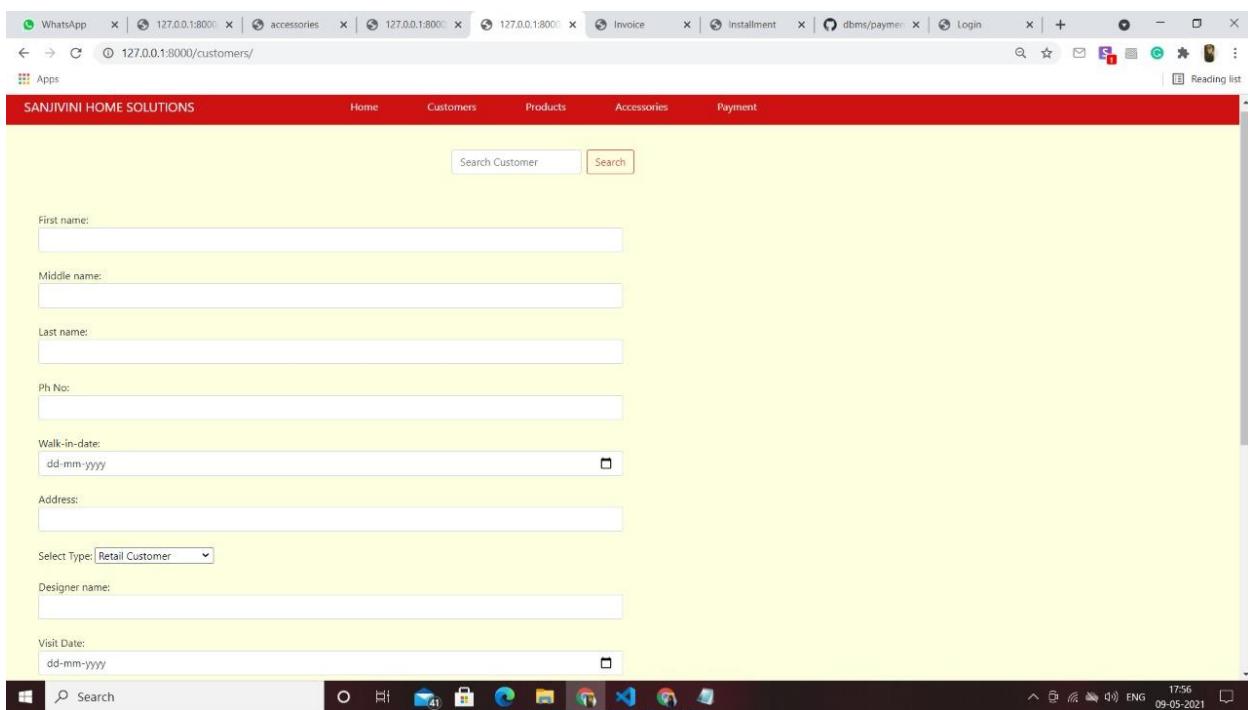


Question 3: User Interface (UI) design

Login Page:



Customer Page:



CUSTOMERS

Name	Phone	Walk-in-date	Address	Type	Designer	Visit Date	Measurement date	Login date	Dispatch date	Edit

Products Page:

CHIMNEYS

Name	Dealer's Price	MRP	Edit	Delete

Accessories Page:

The screenshot shows a web browser window with multiple tabs open. The active tab is 'accessories' at '127.0.0.1:8000'. The page title is 'SANJIVINI HOME SOLUTIONS'. The main content area contains several input fields for product details: 'Product Code', 'Dealer's Price', 'Product MRP', 'Std Pack', and 'Dimension'. Below these is a dropdown menu for 'Select Product Category' with 'Tuff Accessories' selected. A red 'Add Product' button is located at the bottom left. At the bottom of the page, there is a table titled 'CATEGORY:1' with columns for 'Code', 'Dealer's Price', 'MRP', 'Std pack', 'Dimensions', 'Edit', and 'Delete'. The Windows taskbar at the bottom shows various pinned icons and the date/time as 09-05-2021.

Payment Page:

The screenshot shows a web browser window with multiple tabs open. The active tab is 'payment' at '127.0.0.1:8000'. The page title is 'SANJIVINI HOME SOLUTIONS'. The main content area features a table with four columns: 'Customer name', 'Total Amount', 'Installment', and 'Invoice'. Under 'Customer name', it says 'Name 1'. Under 'Total Amount', it says 'Rs xxx'. Under 'Installment', there is a red button labeled 'Installment'. Under 'Invoice', there is a red button labeled 'Generate Invoice'. A red box highlights the 'Installment' button. The Windows taskbar at the bottom shows various pinned icons and the date/time as 09-05-2021.

Payment Installment Page:

INSTALLMENT

Payment Amount:

Date:

Mode Of Payment:

Cheque/acc Number:

Save

Payment	Amount	Date	Mode of payment	Cheque/acc no	Balance	Receipt
payment 1	xxx	xxx	xxx	xxx	xxx	Generate Receipt

Invoice Page:

Sanjivini Home Solutions
Dealers in: Asian Paints, Sleek Modular kitchen and wardrobe esses bath fittings.
Shop #2, Ground floor, Vijaydurga complex, near Hanuman temple, line bazar, Dharwad - 580001
Phone: 0835-2447728
Cell: 9880447728
GSTIN: 29AOOPST223R1ZS
INVOICE _____
TO: _____ dd-mm-yyyy

SL NO	Description	HSN	GST	Qty	Rate	Amount
Add Item						

Subtotal : Rs. _____
GST VALUE: _____
CGST: _____
SGST: _____
Discount : _____
Grand Total : Rs. _____

Subject to Dharwad Jurisdiction.
Interest at 24% will be charged on all bills not paid within one month.
THANK YOU!

Print Invoice

Receipt Page:

The screenshot shows a receipt page titled "SANJIVINI HOME SOLUTIONS". The page includes fields for "NO:" and "Date: dd-mm-yyyy". It also has sections for "Received with thanks from" and "the sum of", followed by "rupees" and "by Cash/DD/Cheque bearing no". There are fields for "DT." and "towards". At the bottom, there is a "Print" button and a signature line for "Authorized Signatory:". The Windows taskbar at the bottom shows various icons and the date/time as 02-05-2021 19:12.

Invoice | Login | customers.html | products.html | accessories | receipt | payment.html | New Tab

File | C:/Users/Dell/Documents/sanjivini_home_solutions/receipt/receipt.html

SANJIVINI HOME SOLUTIONS

NO: _____ Date: dd-mm-yyyy

Received with thanks from _____

the sum of _____
rupees _____ by Cash/DD/Cheque bearing no _____
DT. _____ towards _____
Rs _____

Print

Authorized Signatory:

Type here to search

Windows Taskbar: 02-05-2021 19:12

IMPLEMENTATION PHASE

Responsibilities:

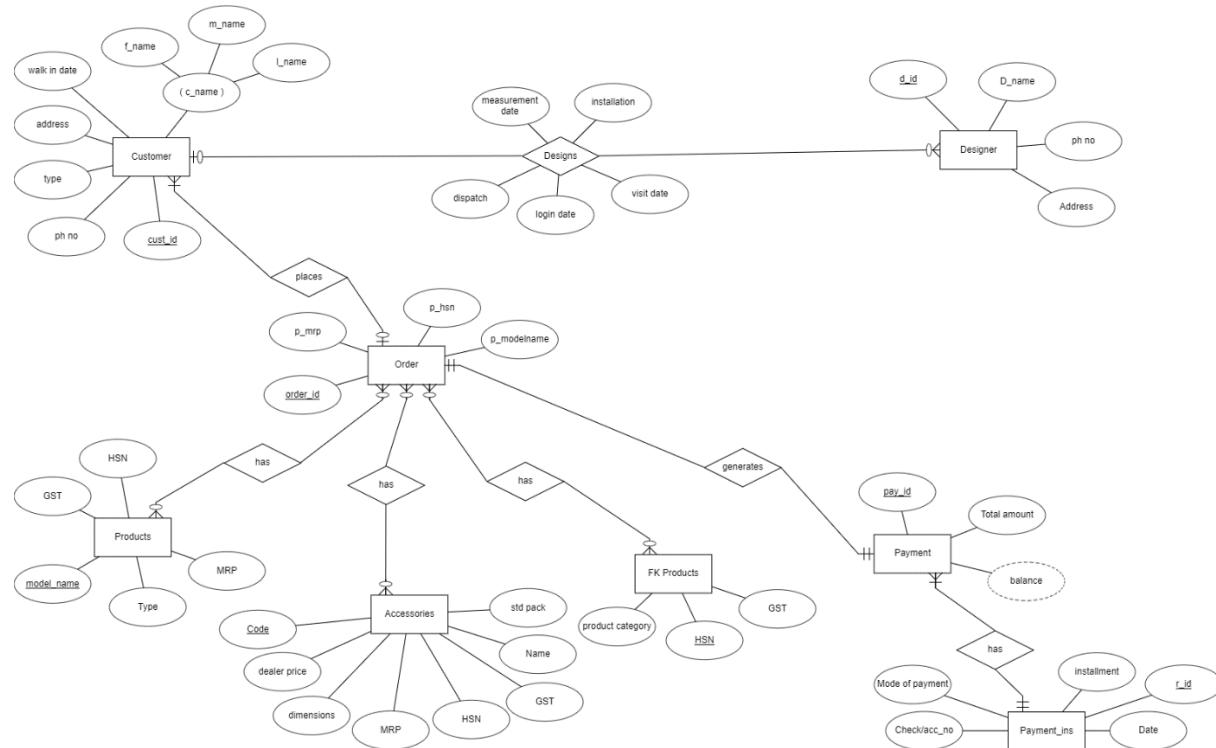
Mukti Bhansali – Backend functionalities of accessories and products which are search, add, delete and edit. Worked on orders and installment page.

Manisha Belagal – Login page and converting invoice and receipts to pdf. Worked on orders and payment page.

Mehar Anjum – Backend of customer functionalities which are add, edit and search. Worked on orders and generating the invoice.

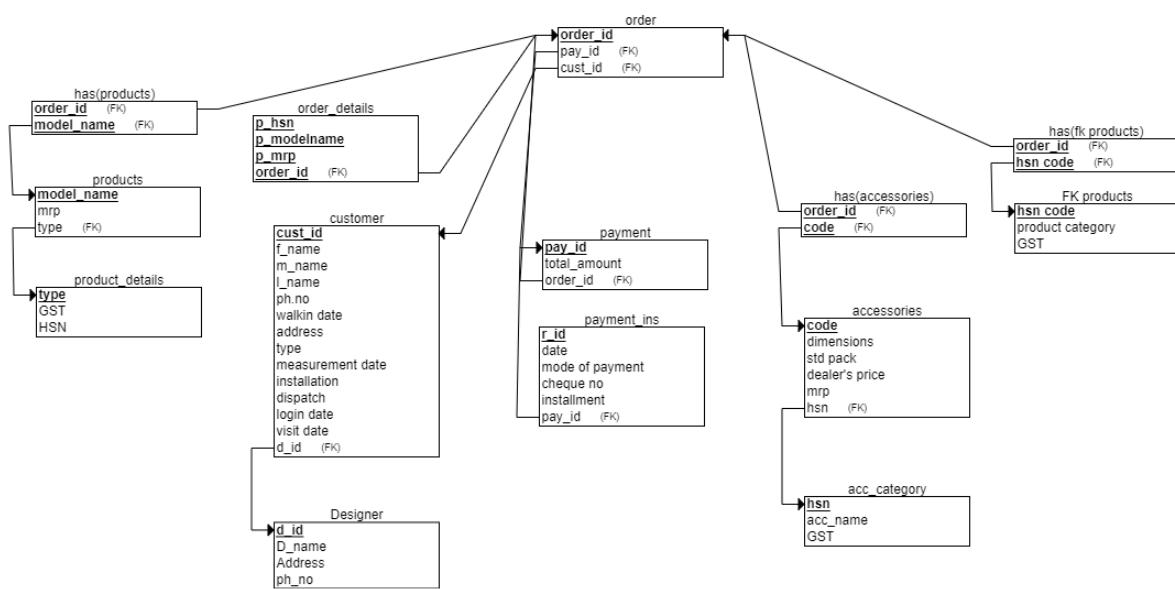
Akashini Koppad – Backend of functionalities of homepage. Worked on orders and generating receipts.

Design updating: The staff entity was removed as there are very few staff in the shop and instead only the designers data is maintained in an entity called designer.



Implementation Phase Questions to be answered

Normalization: The full kitchen customer entity is combined with the customer entity and the customer entity is found to be in 1NF and 2NF. As there are no functional dependencies, customer entity is not in 3NF. As the new entity designer is maintained instead of staff, it is found to be in 1NF and 2NF. As there are no functional dependencies in the designer entity, it is not in 3NF. The revised relation schema is drawn below.



Question1: Give the SQL statement(s) used to create the Oracle/MySQL database tables needed to implement the normalized relational schema.

```
class DesignerModel(models.Model):
    dname = models.CharField(max_length= 100)
    dph_no = models.CharField(max_length=10)
    daddress=models.CharField(max_length=400)

    def __str__(self):
        return self.dname

class CustomerModel(models.Model):
    TYPE =(
        ('Retail Customer','Retail Customer'),
        ('Full Kitchen Customer','Full Kitchen Customer'),
    )
    fname = models.CharField(max_length=30 )
    mname = models.CharField(max_length=30,null =True ,blank=True)
    lname = models.CharField(max_length=30,null =True,blank=True)
    ph_no=models.CharField(max_length=10,null=True,blank=True)
    address=models.CharField(max_length=400,null =True,blank=True)
    walk_in_date=models.DateField(null =True,blank=True)
    customer_type=models.CharField(max_length=100,null =True,choices=TYPE)
    designer_name=ForeignKey(DesignerModel, on_delete=models.CASCADE)
    visit_date =models.DateField(null =True,blank=True)
```

```

measure_date=models.DateField(null =True,blank=True)

login_date=models.DateField(null =True,blank=True)

dispatch_date=models.DateField(null =True,blank=True)

install_date=models.DateField(null =True,blank=True)

def __str__(self):
    return self.fname

class productCategoryModel(models.Model):
    name = models.CharField(max_length=30, primary_key=True)
    hsn = models.CharField(max_length=30)
    gst = models.FloatField()

def __str__(self):
    return self.name

class productModel(models.Model):
    category = ForeignKey(productCategoryModel, on_delete=models.CASCADE)
    name = models.CharField(max_length=30)
    dealersPrice = models.FloatField()
    mrp = models.FloatField()

def __str__(self):
    return self.name

```

```

class accessoriesCategoryModel(models.Model):
    name = models.CharField(max_length=30, primary_key=True)
    hsn = models.CharField(max_length=30)
    gst = models.FloatField()

    def __str__(self):
        return self.name


class accessoriesModel(models.Model):
    category = ForeignKey(accessoriesCategoryModel, on_delete=models.CASCADE)
    code = models.CharField(max_length=30)
    dealersPrice = models.FloatField()
    mrp = models.FloatField()
    stdPack = models.IntegerField()
    dimensions = models.CharField(max_length=20)

    def __str__(self):
        return self.code


class orderModel(models.Model):
    customer = models.ForeignKey(CustomerModel , on_delete= models.CASCADE)
    product = models.ForeignKey(productModel, on_delete= models.CASCADE)
    accessories = models.ForeignKey(accessoriesModel, on_delete= models.CASCADE)

```

```

class InvoiceModel(models.Model):
    order_no = models.ForeignKey(OrderModel, on_delete=models.CASCADE)
    totalamount = models.FloatField()

```

```

class PaymentModel(models.Model):
    invoice_no = models.ForeignKey(InvoiceModel, on_delete=models.CASCADE)

```

```

class InstallModel(models.Model):
    payid = models.ForeignKey(PaymentModel, on_delete=models.CASCADE)
    date = models.DateField()
    mode_of_pay = models.CharField(max_length=50)
    chequeno = models.CharField(max_length=30)
    amount_paid = models.FloatField()

```

Question2: Give the actual data stored in each table of the database. (real sample data)

Customer table:

<u>id</u>	<u>fname</u>	<u>mname</u>	<u>lname</u>	<u>ph_no</u>	<u>address</u>	<u>walk_in_date</u>	<u>customer_type</u>	<u>visit_date</u>	<u>measure_date</u>	<u>login_date</u>	<u>dispatch_date</u>	<u>install_date</u>	<u>designer_name_id</u>
3	pradeep	kulkarni	NULL	9844167066	Saptagiri layout Dharwad	2021-03-02	Full Kitchen Customer	2021-04-03	NULL	NULL	NULL	NULL	5
4	Ganesh	A	B	9845870818	Dharwad	2019-11-05	Full Kitchen Customer	NULL	NULL	NULL	NULL	NULL	6
5	prakash	.	Siddling	8971365836	Dharwad	2019-01-01	Full Kitchen Customer	NULL	NULL	NULL	NULL	NULL	5
6	vijay	.	kumar	8123999888	charantimath garden Dharwad	2019-04-03	Full Kitchen Customer	NULL	NULL	NULL	NULL	NULL	5
7	Anil	.	Jain	9448221689	Gandhi chowk Dharwad	2019-04-17	Full Kitchen Customer	NULL	NULL	NULL	NULL	NULL	5
8	Chandrashekhar	.	.	9008777974	belagam bypass Dharwad	2019-04-15	Full Kitchen Customer	NULL	NULL	NULL	NULL	NULL	6
9	Priya	.	patil	9904699993	Balleri	2019-04-08	Full Kitchen Customer	NULL	NULL	NULL	NULL	NULL	5

Designer table:

The screenshot shows a database interface with a dark header bar. In the top left, it says "SQL ▾". To its right are navigation icons: a left arrow, a page number "1", a right arrow, and a double arrow icon. Below these are the text "1 - 2 of 2" and a small trash bin icon. The main area is a table with four columns. The columns are labeled "id", "dname", "dph_no", and "daddress". The data rows are as follows:

id	dname	dph_no	daddress
5	Dinesh	7895436250	Gandhinagar Dharwad
6	Ashish	8890657125	4th cross road nizamuddin colony Dharwad

Product Category table:

The screenshot shows a database interface with a dark header bar. In the top left, it says "SQL ▾". To its right are navigation icons: a left arrow, a page number "1", a right arrow, and a double arrow icon. Below these are the text "1 - 1 of 1" and a small trash bin icon. The main area is a table with three columns. The columns are labeled "name", "hsn", and "gst". The data rows are as follows:

name	hsn	gst
Chimney	8414	18.0
Cooktops	7321	18.0
Shutters/cabinets	9403	18.0
installations	498739	18.0

Products table:

id	name	dealersPrice	mrp	category_id
1	Trina	39000.0	39990.0	Chimney
2	Terra	55900.0	56990.0	Chimney
3	Tupelo	45500.0	46990.0	Chimney
4	Brio	29800.0	30990.0	Chimney
5	Ventura	37600.0	38990.0	Chimney
6	Cypress	27660.0	29990.0	Chimney
7	Olive	21550.0	23990.0	Chimney
8	Celica	42460.0	45140.0	Chimney
9	Alpine White	34440.0	37790.0	Chimney
10	Suzy Plus	31260.0	33590.0	Chimney
11	Vitra	27000.0	28340.0	Chimney
12	Topaz	8440.0	8899.0	Cooktops
13	Jade	7440.0	7699.0	Cooktops
14	Opal	5950.0	6299.0	Cooktops
15	Amber WI	5660.0	6199.0	Cooktops
16	Emerald WI	7200.0	7599.0	Cooktops

Accessories Category table:

name	hsn	gst
tuff basket	1234	12.0
PVC Executive Cutlery Tray	39219099	18.0
Telescopic Channel	83024900	18.0
Hardware	73181500	18.0
SS Handles	83024200	18.0
Skirting System Scilm	39263090	18.0
Rolling Shutter	94034000	18.0
Lift Up Fittings	83021090	18.0
Under Sink Accessories	73239490	18.0

Accessories table:

id	code	dealersPrice	mrp	stdPack	dimensions	category_id
1	ASSTPL380405100	692.0	1010.0	6	15*16*4	tuff basket
2	ASSTPL380405150	816.0	1190.0	4	15*16*6	tuff basket
3	ASSTPL380405200	951.0	1390.0	3	15*16*8	tuff basket
4	ASSTPL380500100	797.0	1160.0	6	15*16*4	tuff basket
5	ASSTPL380500150	960.0	1400.0	4	15*16*6	tuff basket
6	ASSTPL380500200	1114.0	1620.0	3	15*16*8	tuff basket
7	ASSTPL380555100	1056.0	1540.0	4	15*16*6	tuff basket
8	ASSTPL380555150	1056.0	1540.0	4	15*16*6	tuff basket
9	ASSTPL380555200	1239.0	1810.0	3	15*16*8	tuff basket
10	ASSTPL380605100	932.0	1360.0	6	15*24*4	tuff basket
11	ASSTPL380605150	1104.0	1620.0	4	15*24*6	tuff basket
12	ASSTPL380605200	1277.0	1860.0	3	15*24*8	tuff basket
13	AMSPEC1357477	440.0	610.0	5	14*9	PVC Executive Cutlery Tray
14	AMSPEC1407477	516.0	660.0	5	16*19	PVC Executive Cutlery Tray
15	AMSPEC1457477	514.0	730.0	5	18*19	PVC Executive Cutlery Tray
16	AMSPEC1507477	616.0	750.0	5	20*19	PVC Executive Cutlery Tray
17	HICH1366	204.0	332.0	10	10"	Telescopic Channel
18	HICH1367	241.0	391.0	10	12"	Telescopic Channel
19	HICH1358	375.0	444.0	10	14	Telescopic Channel
20	HICH1355	312.0	508.0	10	16"	Telescopic Channel
21	HICH1356	350.0	572.0	10	18"	Telescopic Channel
22	HICH1359	388.0	631.0	10	20"	Telescopic Channel
23	HICH1034	449.0	728.0	10	22"	Telescopic Channel
24	HICH1035	497.0	803.0	10	22"	Telescopic Channel
25	HICH1036	553.0	899.0	10	24"	Telescopic Channel

20	HICH1355	312.0	508.0	10	16"	Telescopic Channel
21	HICH1356	350.0	572.0	10	18"	Telescopic Channel
22	HTCH1359	388.0	631.0	10	20"	Telescopic Channel
23	HICH1034	449.0	728.0	10	22"	Telescopic Channel
24	HICH1035	497.0	803.0	10	22"	Telescopic Channel
25	HTCH1036	553.0	899.0	10	24"	Telescopic Channel
26	HLCH1089	0.8	1.15	50	Regular	Hardware
27	HLCH1090	1.2	1.72	50	16mm	Hardware
28	HLCH1091	0.6	0.86	50	Small	Hardware
29	HLCH1092	0.9	1.29	50	Big	Hardware
30	HLCH1093	3.6	5.15	50	Regular	Hardware
31	HLCH1554	0.55	0.79	50	4*16mm	Hardware
32	HLCH1555	0.66	0.94	50	4*20mm	Hardware
33	HLCH1556	1.0	1.43	50	4*25mm	Hardware
34	HLCH1557	1.12	1.6	50	4*30mm	Hardware
35	HLCH1558	1.26	1.8	50	4*50mm	Hardware
36	HLHA3238	477.0	658.0	1	128mm	SS Handles
37	HLHA3229	288.0	398.0	1	128mm	SS Handles
38	HLHA3239	578.0	798.0	1	128mm	SS Handles
39	HLHA3230	340.0	470.0	1	128mm	SS Handles
40	HLHA3240	408.0	564.0	1	128mm	SS Handles
41	HLHA3231	531.0	733.0	1	160mm	SS Handles
42	HLHA3211	281.0	387.0	1	160mm	SS Handles
43	HLHA3210	332.0	458.0	1	160mm	SS Handles
44	HLHA3241	374.0	517.0	10	160mm	SS Handles
45	HLHA3232	408.0	564.0	1	160mm	SS Handles

Question3: Give the snapshots, description and SQL queries for each of the user interface forms for your application. (Create the front end using Django and hook it up to the SQL.)

For login:

The username and password which are entered is compared with the one that is existing in the database. If it matches, then it is directed to the homepage or else “invalid login” error is shown.

```
def loginview(request):
    return render(request, "login.html")

def loginuser(request):
    #user=User.objects.create_user('s','a@123','sanjivini123').save()
    username=request.POST['username']
    password=request.POST['password']

    user = authenticate(username=username, password=password)
    if user is not None:
        login(request,user)
        return redirect("homepage")
    else:

        messages.add_message(request, messages.INFO, 'Invalid Login.')
        return redirect(request.META['HTTP_REFERER'])
```

For homepage:

In homepage, the analysis of customer data and orders data is displayed.

```
def homepageview(request):
    fullcust=CustomerModel.objects.filter(customer_type__contains='Full').count()
    retail=CustomerModel.objects.filter(customer_type__contains='Retail').count()
    order=OrderModel.objects.count()
    params={'retail':retail,'fullcust':fullcust,'order':order}
    return render(request,'homepage.html',params)
```

For Adding Customer:

When add customer button is clicked in the customer page, it will redirect the admin to a new page where he can add new customers into the database.

```
def addcustomer(request):
    form = Customer()
    if request.method == 'POST':
        form=Customer(request.POST)
        if form.is_valid():
            form.save()
            return redirect(request.META['HTTP_REFERER'])

    context ={'form':form}
    return render(request,"addcustomer.html",context)
```

For searching customer:

Admin can search the customers present in the database based on the first name. If the customer is found, the customer details are displayed, if the customer record is not found, a message is displayed for the same.

```
def searchcustomer(request):
    query = request.GET['searchcustomer']
    allcustomers = CustomerModel.objects.filter(fname__icontains=query)
    params ={'allcustomers':allcustomers,'query':query}
    return render(request,"searchcustomer.html",params)
```

For editing customer:

On clicking the edit button, the admin is redirected to a page where he can make changes to the existing customer record.

```
def editcustomer(request,pk):
    customer =CustomerModel.objects.get(id=pk)
    form = Customer(instance=customer)
    if request.method == 'POST':
        form=Customer(request.POST,instance=customer)
        if form.is_valid():
            form.save()
            return render(request,'success.html')

    context = {'form':form}
    return render(request,"addcustomer.html",context)
```

For adding product category:

Admin can add new category of the product to the database.

```
def addproductcat(request):
    form = productcat()
    if request.method == 'POST':
        form=productcat(request.POST)
        if form.is_valid():
            form.save()
            return redirect(request.META['HTTP_REFERER'])

    context ={'form':form}
    return render(request,"addproductcat.html",context)
```

For adding product:

When add product button is clicked in the product page, it will redirect the admin to a new page where he can add new products into the database.

```
def addproduct(request):
    form = product()
    if request.method == 'POST':
        form=product(request.POST)
        if form.is_valid():
            form.save()
        return redirect(request.META['HTTP_REFERER'])

    context ={'form':form}
    return render(request,"addproduct.html",context)
```

For searching product:

Admin can search the products present in the database based on the product name. If the product is found, the product details are displayed, if the product record is not found, a message is displayed for the same.

```
def searchproduct(request):
    query = request.GET['searchproduct']
    allproducts = productModel.objects.filter(name_icontains=query)
    params ={'allproducts':allproducts}
    return render(request,"searchproduct.html",params)
```

For editing product:

On clicking the edit button, the admin is redirected to a page where he can make changes to the existing product record.

```
def editproduct(request,pk):
    Product =productModel.objects.get(id=pk)
    form = product(instance=Product)
    if request.method == 'POST':
        form=product(request.POST,instance=Product)
        if form.is_valid():
            form.save()
            return render(request,'homepage.html')

    context = {'form':form}
    return render(request,"addproduct.html",context)
```

For deleting product:

On clicking the delete product button, that particular product record will be deleted from the database.

```
def deleteproduct(request,pk):
    Product =productModel.objects.get(id=pk)
    Product.delete()
    return render(request,'homepage.html')
```

For adding accessories category:

Admin can add new category of the accessory to the database.

```
def addaccessoriescat(request):
    form = accessoriescat()
    if request.method == 'POST':
        form=accessoriescat(request.POST)
        if form.is_valid():
            form.save()
            return redirect(request.META['HTTP_REFERER'])

    context ={'form':form}
    return render(request,"addaccessoriescat.html",context)
```

For adding accessories:

When add accessory button is clicked in the accessory page, it will redirect the admin to a new page where he can add new accessories into the database.

```
def addaccessories(request):
    form = accessories()
    if request.method == 'POST':
        form=accessories(request.POST)
        if form.is_valid():
            form.save()
            return redirect(request.META['HTTP_REFERER'])

    context ={'form':form}
    return render(request,"addaccessories.html",context)
```

For searching accessories:

Admin can search the accessories present in the database based on the accessory name. If the accessory is found, the accessories details are displayed, if the accessory record is not found, a message is displayed for the same.

```
def searchaccessories(request):
    query = request.GET['searchaccessories']
    allaccessories = accessoriesModel.objects.filter(code_icontains=query)
    params ={'allaccessories':allaccessories}
    return render(request,"searchaccessories.html",params)
```

For editing accessories:

On clicking the edit button, the admin is redirected to a page where he can make changes to the existing accessory record.

```
def editaccessories(request,pk):
    accessories =accessoriesModel.objects.get(id=pk)
    form = accessories(instance=accessories)
    if request.method == 'POST':
        form=accessories(request.POST,instance=accessories)
        if form.is_valid():
            form.save()
            return render(request,'homepage.html')

    context = {'form':form}
    return render(request,"addaccessories.html",context)
```

For deleting accessories:

On clicking the delete accessory button, that particular accessory record will be deleted from the database.

```
def deleteaccessories(request,pk):
    accessories =accessoriesModel.objects.get(id=pk)
    accessories.delete()
    return render(request,'homepage.html')
```

For adding designers:

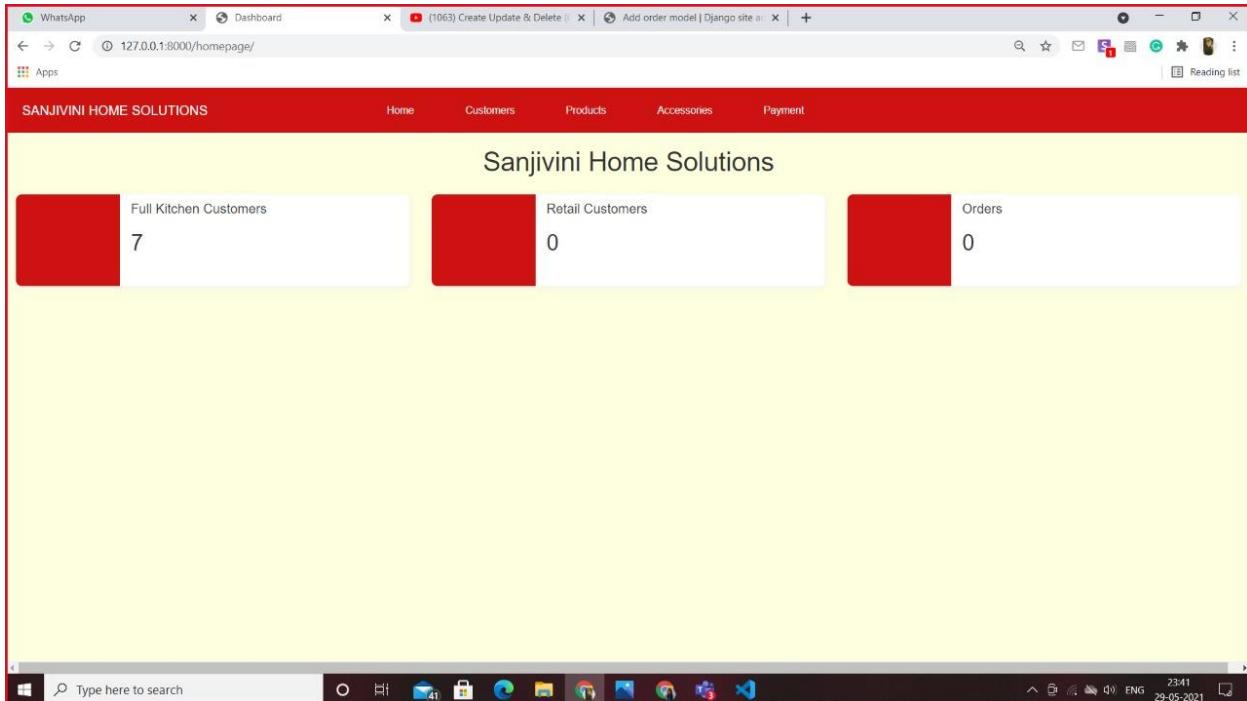
New designers can be added to the database.

```
def addDesigner(request):
    form = Designer
    if request.method == 'POST':
        form=Designer(request.POST)
        if form.is_valid():
            form.save()
            return redirect(request.META['HTTP_REFERER'])

    designers= DesignerModel.objects.all().order_by(Lower('dname'))
    params ={'designers':designers,'form':form}

    return render(request,"designer.html",params)
```

Question4: Give all possible final bill reports/other forms of ledger reports summarized etc and graphs obtained by your application.



SQL Statements:

```
class DesignerModel(models.Model):
    dname = models.CharField(max_length= 100)
    dph_no = models.CharField(max_length=10)
    daddress=models.CharField(max_length=400)

    def __str__(self):
        return self.dname
```

```

class CustomerModel(models.Model):
    TYPE =(
        ('Retail Customer','Retail Customer'),
        ('Full Kitchen Customer','Full Kitchen Customer'),
    )
    fname = models.CharField(max_length=30 )
    mname = models.CharField(max_length=30,null =True ,blank=True)
    lname = models.CharField(max_length=30,null =True,blank=True)
    ph_no=models.CharField(max_length=10,null=True,blank=True)
    address=models.CharField(max_length=400,null =True,blank=True)
    walk_in_date=models.DateField(null =True,blank=True)
    customer_type=models.CharField(max_length=100,null =True,choices=TYPE)
    designer_name=ForeignKey(DesignerModel, on_delete=models.CASCADE)
    visit_date =models.DateField(null =True,blank=True)
    measure_date=models.DateField(null =True,blank=True)
    login_date=models.DateField(null =True,blank=True)
    dispatch_date=models.DateField(null =True,blank=True)
    install_date=models.DateField(null =True,blank=True)

    def __str__(self):
        return self.fname

```

```
class productCategoryModel(models.Model):
    name = models.CharField(max_length=30, primary_key=True)
    hsn = models.CharField(max_length=30)
    gst = models.FloatField()
```

```
def __str__(self):
    return self.name
```

```
class productModel(models.Model):
    category = ForeignKey(productCategoryModel, on_delete=models.CASCADE)
    name = models.CharField(max_length=30)
    dealersPrice = models.FloatField()
    mrp = models.FloatField()
```

```
def __str__(self):
    return self.name
```

```
class accessoriesCategoryModel(models.Model):
    name = models.CharField(max_length=30, primary_key=True)
    hsn = models.CharField(max_length=30)
    gst = models.FloatField()
```

```
def __str__(self):
    return self.name
```

```
class accessoriesModel(models.Model):  
    category = ForeignKey(accessoriesCategoryModel, on_delete=models.CASCADE)  
    code = models.CharField(max_length=30)  
    dealersPrice = models.FloatField()  
    mrp = models.FloatField()  
    stdPack = models.IntegerField()  
    dimensions = models.CharField(max_length=20)  
  
    def __str__(self):  
        return self.code
```

```
class orderModel(models.Model):  
    customer = models.ForeignKey(CustomerModel , on_delete= models.CASCADE)  
    product = models.ForeignKey(productModel, on_delete= models.CASCADE)  
    accessories = models.ForeignKey(accessoriesModel, on_delete= models.CASCADE)
```

```
class InvoiceModel(models.Model):  
    order_no = models.ForeignKey(OrderModel, on_delete=models.CASCADE)  
    totalamount = models.FloatField()
```

```
class PaymentModel(models.Model):
    invoice_no = models.ForeignKey(InvoiceModel, on_delete=models.CASCADE)
```

```
class InstallModel(models.Model):
    payid = models.ForeignKey(PaymentModel, on_delete=models.CASCADE)
    date = models.DateField()
    mode_of_pay = models.CharField(max_length=50)
    chequeno = models.CharField(max_length=30)
    amount_paid = models.FloatField()
```

Queries:

For login:

```
def loginview(request):
    return render(request, "login.html")

def loginuser(request):
    #user=User.objects.create_user('S', 'a@123', 'sanjivini123').save()
    username=request.POST['username']
    password=request.POST['password']

    user = authenticate(username=username, password=password)
    if user is not None:
        login(request, user)
        return redirect("homepage")
    else:

        messages.add_message(request, messages.INFO, 'Invalid Login.')
        return redirect(request.META['HTTP_REFERER'])
```

For homepage:

```
def homepageview(request):
    fullcust=CustomerModel.objects.filter(customer_type__contains='Full').count()
    retail=CustomerModel.objects.filter(customer_type__contains='Retail').count()
    order=OrderModel.objects.count()
    params={'retail':retail,'fullcust':fullcust,'order':order}
    return render(request,'homepage.html',params)
```

For Adding Customer:

```
def addcustomer(request):
    form = Customer()
    if request.method == "POST":
        form=Customer(request.POST)
        if form.is_valid():
            form.save()
            return redirect(request.META['HTTP_REFERER'])

    context ={'form':form}
    return render(request,"addcustomer.html",context)
```

For searching customer:

```
def searchcustomer(request):
    query = request.GET['searchcustomer']
    allcustomers = CustomerModel.objects.filter(fname__icontains=query)
    params ={'allcustomers':allcustomers,'query':query}
    return render(request,"searchcustomer.html",params)
```

For editing customer:

```
def editcustomer(request,pk):
    customer =CustomerModel.objects.get(id=pk)
    form = Customer(instance=customer)
    if request.method == 'POST':
        form=Customer(request.POST,instance=customer)
        if form.is_valid():
            form.save()
            return render(request,'success.html')

    context = {'form':form}
    return render(request,"addcustomer.html",context)
```

For adding product category:

```
def addproductcat(request):
    form = productcat()
    if request.method == 'POST':
        form=productcat(request.POST)
        if form.is_valid():
            form.save()
            return redirect(request.META['HTTP_REFERER'])

    context ={'form':form}
    return render(request,"addproductcat.html",context)
```

For adding product:

```
def addproduct(request):
    form = product()
    if request.method == 'POST':
        form=product(request.POST)
        if form.is_valid():
            form.save()
        return redirect(request.META['HTTP_REFERER'])

    context ={'form':form}
    return render(request,"addproduct.html",context)
```

For searching product:

```
def searchproduct(request):
    query = request.GET['searchproduct']
    allproducts = productModel.objects.filter(name__icontains=query)
    params ={'allproducts':allproducts}
    return render(request,"searchproduct.html",params)
```

For editing product:

```
def editproduct(request,pk):
    Product =productModel.objects.get(id=pk)
    form = product(instance=Product)
    if request.method == 'POST':
        form=product(request.POST,instance=Product)
        if form.is_valid():
            form.save()
            return render(request,'homepage.html')

    context = {'form':form}
    return render(request,"addproduct.html",context)
```

For deleting product:

```
def deleteproduct(request,pk):
    Product =productModel.objects.get(id=pk)
    Product.delete()
    return render(request,'homepage.html')
```

For adding accessories category:

```
def addaccessoriescat(request):
    form = accessoriescat()
    if request.method == 'POST':
        form=accessoriescat(request.POST)
        if form.is_valid():
            form.save()
            return redirect(request.META['HTTP_REFERER'])

    context ={'form':form}
    return render(request,"addaccessoriescat.html",context)
```

For adding accessories:

```
def addaccessories(request):
    form = accessories()
    if request.method == 'POST':
        form=accessories(request.POST)
        if form.is_valid():
            form.save()
            return redirect(request.META['HTTP_REFERER'])

    context ={'form':form}
    return render(request,"addaccessories.html",context)
```

For searching accessories:

```
def searchaccessories(request):
    query = request.GET['searchaccessories']
    allaccessories = accessoriesModel.objects.filter(code__icontains=query)
    params ={'allaccessories':allaccessories}
    return render(request,"searchaccessories.html",params)
```

For editing accessories:

```
def editaccessories(request,pk):
    accessories =accessoriesModel.objects.get(id=pk)
    form = accessories(instance=accessories)
    if request.method == 'POST':
        form=accessories(request.POST,instance=accessories)
        if form.is_valid():
            form.save()
            return render(request,'homepage.html')

    context = {'form':form}
    return render(request,"addaccessories.html",context)
```

For deleting accessories:

```
def deleteaccessories(request,pk):
    accessories =accessoriesModel.objects.get(id=pk)
    accessories.delete()
    return render(request,'homepage.html')
```

For adding designers:

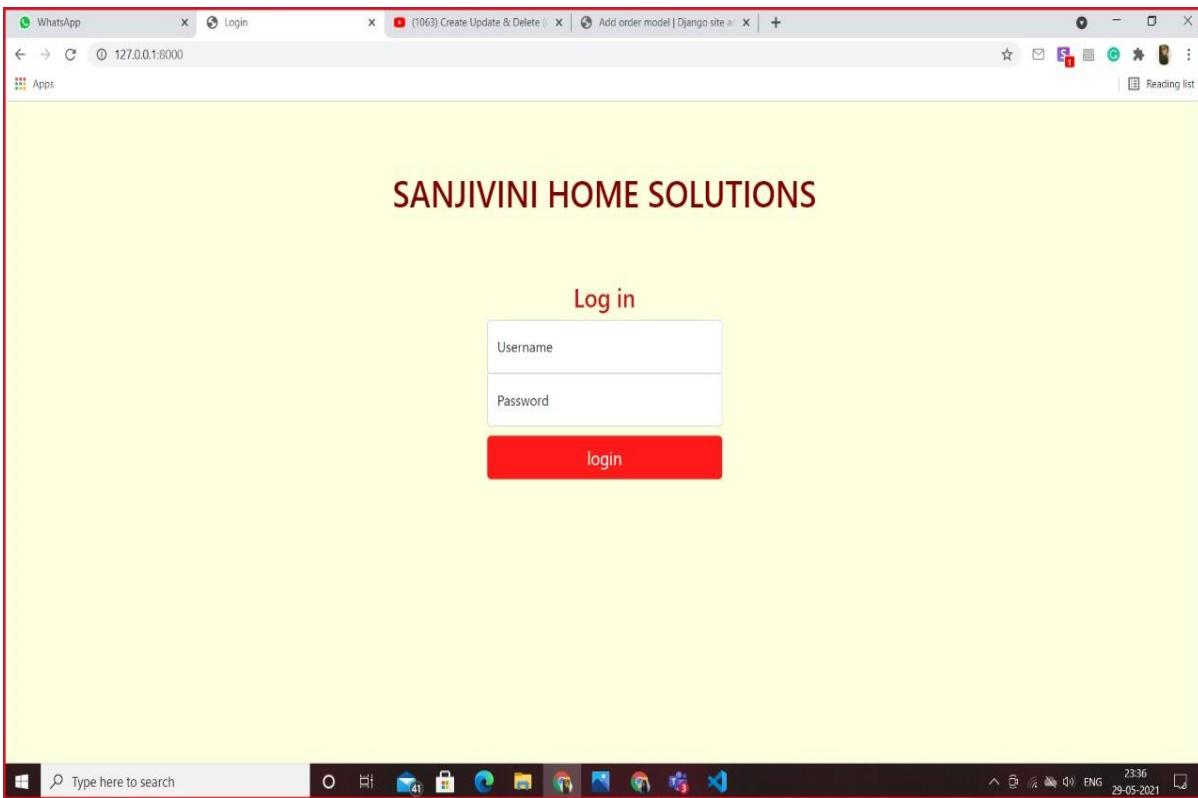
```
def addDesigner(request):
    form = Designer
    if request.method == 'POST':
        form=Designer(request.POST)
        if form.is_valid():
            form.save()
            return redirect(request.META['HTTP_REFERER'])

    designers= DesignerModel.objects.all().order_by(Lower('dname'))
    params ={'designers':designers,'form':form}

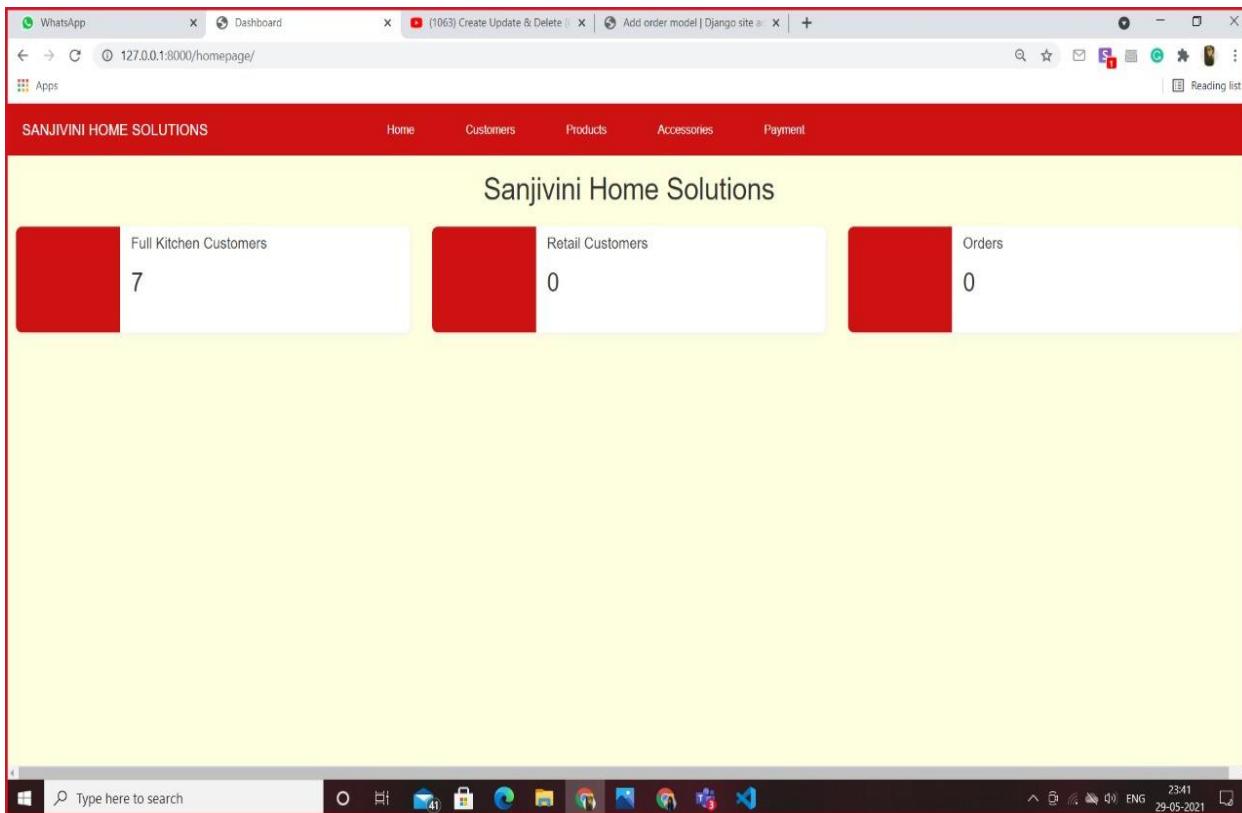
    return render(request,"designer.html",params)
```

User Interface Screenshots:

Login page:



Homepage:



Add customer page:

A screenshot of a web browser window showing the "Add customer" page of "SANJIVINI HOME SOLUTIONS". The title bar shows the URL "127.0.0.1:8000/addcustomer/". The page has a red header with the site name and a navigation menu with links for Home, Customers, Products, Accessories, and Payment. The main content area contains a form with fields for Fname, Mname, Lname, Ph no, Address, Walk in date, Customer type (dropdown), Designer name (dropdown), visit date, Measure date, Login date, Dispatch date, and Install date. A "Submit" button is at the bottom of the form. The bottom of the screen shows a Windows taskbar with various icons and system status.

Customer page:

The screenshot shows a web application interface for managing customers. At the top, there is a navigation bar with links for Home, Customers, Products, Accessories, and Payment. Below the navigation bar, there is a search bar with the placeholder "Search Customer" and a "Search" button. A red button labeled "Add Customer" is located on the left side of the main content area. The main content area is titled "CUSTOMERS" and contains a table with the following data:

Name	Phone	Walk-in-date	Address	Type	Designer	Visit Date	Measurement date	Login date	Dispatch date	Installment date	Edit	Order
Anil . Jain	9448221609	April 17, 2019	Gandhi chowk Dharwad	Full Kitchen Customer	Dinesh	None	None	None	None	None	<button>edit</button>	<button>order</button>
Chandrashekhar . .	9008777974	April 15, 2019	belaguma bypass Dharwad	Full Kitchen Customer	Ashish	None	None	None	None	None	<button>edit</button>	<button>order</button>
Ganesh A B	9845870818	Nov. 5, 2019	Dharwad	Full Kitchen Customer	Ashish	None	None	None	None	None	<button>edit</button>	<button>order</button>
pradeep kulkarni . None	9844167066	March 2, 2021	Saptagiri layout Dharwad	Full Kitchen Customer	Dinesh	April 3, 2021	None	None	None	None	<button>edit</button>	<button>order</button>
prakash . Siddling	8971365036	April 1, 2019	Dharwad	Full Kitchen Customer	Dinesh	None	None	None	None	None	<button>edit</button>	<button>order</button>
Priya . patil	9964699993	April 8, 2019	Balleri	Full Kitchen Customer	Dinesh	None	None	None	None	None	<button>edit</button>	<button>order</button>

Search customer page:

The screenshot shows a web browser window with a red header bar. The header bar contains the text "SANJIVINI HOME SOLUTIONS" and navigation links for "Home", "Customers", "Products", "Accessories", and "Payment". Below the header is a yellow section titled "SEARCH RESULTS:" containing a table with two rows of customer data. The table has columns for Name, Phone, Walk-in-date, Address, Type, Designer, Visit Date, Measurement date, Login date, Dispatch date, Installment date, and Edit. The first row shows "pradeep kulkarni" with phone "9844167066" and walk-in date "March 2, 2021". The second row shows "prakash . Siddling" with phone "8971365036" and walk-in date "April 1, 2019". Each row has an "Edit" button in the last column. The browser's address bar shows the URL "127.0.0.1:8000/searchcustomer/?searchcustomer=pra". The taskbar at the bottom of the screen shows various application icons.

Add product category page:

The screenshot shows a web browser window with a red header bar. The header bar contains the text "SANJIVINI HOME SOLUTIONS" and navigation links for "Home", "Customers", "Products", "Accessories", and "Payment". Below the header is a yellow section containing a form for adding a product category. The form includes fields for "Name:", "Hsn:", and "Gst:", each with a corresponding input box. A red "Submit" button is located below the input fields. The browser's address bar shows the URL "127.0.0.1:8000/addproductcat/". The taskbar at the bottom of the screen shows various application icons.

Add product page:

SANJIVINI HOME SOLUTIONS

Category:

Name:

DealersPrice:

Mrp:

Submit

Products page:

SANJIVINI HOME SOLUTIONS

Search Product Search

Add Product Add Category

Category	Name	Dealer's Price	MRP	Edit	Delete
Chimney	Trina	39000.0	39990.0	<input type="button" value="edit"/>	<input type="button" value="delete"/>
Chimney	Terra	55900.0	56990.0	<input type="button" value="edit"/>	<input type="button" value="delete"/>
Chimney	Tupelo	45500.0	46990.0	<input type="button" value="edit"/>	<input type="button" value="delete"/>
Chimney	Brio	29800.0	30990.0	<input type="button" value="edit"/>	<input type="button" value="delete"/>
Chimney	Ventura	37600.0	38990.0	<input type="button" value="edit"/>	<input type="button" value="delete"/>
Chimney	Cypress	27660.0	29990.0	<input type="button" value="edit"/>	<input type="button" value="delete"/>
Chimney	Olive	21550.0	23990.0	<input type="button" value="edit"/>	<input type="button" value="delete"/>
Chimney	Celica	42460.0	45140.0	<input type="button" value="edit"/>	<input type="button" value="delete"/>
Chimney	Alpine White	34440.0	37790.0	<input type="button" value="edit"/>	<input type="button" value="delete"/>
Chimney	Suzy Plus	31260.0	33590.0	<input type="button" value="edit"/>	<input type="button" value="delete"/>
Chimney	Vitra	27000.0	28340.0	<input type="button" value="edit"/>	<input type="button" value="delete"/>
Cooktops	Topaz	8440.0	8899.0	<input type="button" value="edit"/>	<input type="button" value="delete"/>
Cooktops	Jade	7440.0	7699.0	<input type="button" value="edit"/>	<input type="button" value="delete"/>
Cooktops	Opal	5950.0	6299.0	<input type="button" value="edit"/>	<input type="button" value="delete"/>
Cooktops	Amber WI	5660.0	6199.0	<input type="button" value="edit"/>	<input type="button" value="delete"/>
Cooktops	Emerald WI	7200.0	7599.0	<input type="button" value="edit"/>	<input type="button" value="delete"/>

Add accessories category page:

The screenshot shows a web browser window with a red header bar. The header bar includes the title 'SANJIVINI HOME SOLUTIONS' and navigation links for Home, Customers, Products, Accessories, and Payment. Below the header is a yellow content area containing three input fields: 'Name:' (with a placeholder 'Enter Name'), 'Hsn:' (with a placeholder 'Enter Hsn'), and 'Gst:' (with a placeholder 'Enter Gst'). A red 'Submit' button is located at the bottom left of the yellow area. The browser's address bar shows the URL '127.0.0.1:8000/addproductcat/'. The system tray at the bottom right shows the date as 29-05-2021.

Add accessories page:

The screenshot shows a web browser window with a red header bar. The header bar includes the title 'SANJIVINI HOME SOLUTIONS' and navigation links for Home, Customers, Products, Accessories, and Payment. Below the header is a yellow content area containing six input fields: 'Category:' (with a dropdown menu), 'Code:' (with a dropdown menu), 'DealersPrice:' (with a placeholder 'Enter DealersPrice'), 'Mrp:' (with a placeholder 'Enter Mrp'), 'StdPack:' (with a placeholder 'Enter StdPack'), and 'Dimensions:' (with a placeholder 'Enter Dimensions'). A red 'Submit' button is located at the bottom left of the yellow area. The browser's address bar shows the URL '127.0.0.1:8000/addaccessories/'. The system tray at the bottom right shows the date as 29-05-2021.

Accessories page:

The screenshot shows a web browser window with the URL `127.0.0.1:8000/accessories/`. The page title is "accessories". The main content area is titled "SANJIVINI HOME SOLUTIONS" and contains a navigation menu with links to Home, Customers, Products, Accessories, and Payment. Below the menu is a search bar with the placeholder "Search accessories" and a "Search" button. Two red buttons are visible: "Add Category" and "Add accessories". The central part of the page is a table listing accessories. The table has columns for Category, Code, Dealer's Price, MRP, Std pack, Dimensions, Edit, and Delete. Each row represents a different accessory item. The table is scrollable, indicated by a vertical scrollbar on the right. The bottom of the screen shows a Windows taskbar with icons for Start, Task View, File Explorer, Task Manager, and other system tools. The date and time "29-05-2021 23:40" are also visible.

Category	Code	Dealer's Price	MRP	Std pack	Dimensions	Edit	Delete
tuff basket	ASSTPL380405100	692.0	1010.0	6	15*16*4	edit	delete
tuff basket	ASSTPL380405150	816.0	1190.0	4	15*16*6	edit	delete
tuff basket	ASSTPL380405200	951.0	1390.0	3	15*16*8	edit	delete
tuff basket	ASSTPL380500100	797.0	1160.0	6	15*16*4	edit	delete
tuff basket	ASSTPL380500150	960.0	1400.0	4	15*16*6	edit	delete
tuff basket	ASSTPL380500200	1114.0	1620.0	3	15*16*8	edit	delete
tuff basket	ASSTPL380555100	1056.0	1540.0	4	15*16*6	edit	delete
tuff basket	ASSTPL380555150	1056.0	1540.0	4	15*16*6	edit	delete
tuff basket	ASSTPL380555200	1239.0	1810.0	3	15*16*8	edit	delete
tuff basket	ASSTPL380605100	932.0	1360.0	6	15*24*4	edit	delete
tuff basket	ASSTPL380605150	1104.0	1620.0	4	15*24*6	edit	delete
tuff basket	ASSTPL380605200	1277.0	1860.0	3	15*24*8	edit	delete
PVC Executive Cutlery Tray	AMSBC1357477	440.0	610.0	5	14*9	edit	delete
PVC Executive Cutlery Tray	AMSBC1407477	516.0	660.0	5	16*19	edit	delete
PVC Executive Cutlery Tray	AMSBC1457477	514.0	730.0	5	18*19	edit	delete
PVC Executive Cutlery Tray	AMSBC1507477	616.0	750.0	5	20*19	edit	delete
Telescopic Channel	HICH1366	204.0	332.0	10	10"	edit	delete
Telescopic Channel	HICH1367	241.0	391.0	10	12"	edit	delete
Telescopic Channel	HICH1358	375.0	444.0	10	14	edit	delete
Telescopic Channel	HICH1355	312.0	508.0	10	16"	edit	delete

The screenshot shows a Windows desktop environment with a browser window open to a Django admin site at 127.0.0.1:8000/accessories/. The browser tabs include WhatsApp, accessories, (1063) Create Update & Delete, and Add order model | Django site. The main content is a table listing items under the 'accessories' model. The table has columns: Item Type, Code, Width, Height, Depth, Unit, and Actions (edit, delete). The data includes various hardware components like Telescopic Channel, Hardware, and SS Handles, each with specific dimensions and unit information.

Item Type	Code	Width	Height	Depth	Unit	Action	Action
Telescopic Channel	HICH1366	204.0	532.0	10	10	edit	delete
Telescopic Channel	HICH1367	241.0	391.0	10	12"	edit	delete
Telescopic Channel	HICH1358	375.0	444.0	10	14	edit	delete
Telescopic Channel	HICH1355	312.0	508.0	10	16"	edit	delete
Telescopic Channel	HICH1356	350.0	572.0	10	18"	edit	delete
Telescopic Channel	HICH1359	388.0	631.0	10	20"	edit	delete
Telescopic Channel	HICH1034	449.0	728.0	10	22"	edit	delete
Telescopic Channel	HICH1035	497.0	803.0	10	22"	edit	delete
Telescopic Channel	HICH1036	553.0	899.0	10	24"	edit	delete
Hardware	HLCH1089	0.8	1.15	50	Regular	edit	delete
Hardware	HLCH1090	1.2	1.72	50	16mm	edit	delete
Hardware	HLCH1091	0.6	0.86	50	Small	edit	delete
Hardware	HLCH1092	0.9	1.29	50	Big	edit	delete
Hardware	HLCH1093	3.6	5.15	50	Regular	edit	delete
Hardware	HLCH1554	0.55	0.79	50	4*16mm	edit	delete
Hardware	HLCH1555	0.66	0.94	50	4*20mm	edit	delete
Hardware	HLCH1556	1.0	1.43	50	4*25mm	edit	delete
Hardware	HLCH1557	1.12	1.6	50	4*30mm	edit	delete
Hardware	HLCH1558	1.26	1.8	50	4*50mm	edit	delete
SS Handles	HLHA3238	477.0	658.0	1	128mm	edit	delete
SS Handles	HLHA3229	288.0	398.0	1	128mm	edit	delete
SS Handles	HLHA3239	578.0	798.0	1	128mm	edit	delete
SS Handles	HLHA3230	340.0	470.0	1	128mm	edit	delete
SS Handles	HLHA3240	408.0	564.0	1	128mm	edit	delete
SS Handles	HLHA3231	531.0	733.0	1	160mm	edit	delete
SS Handles	HLHA3211	281.0	387.0	1	160mm	edit	delete
SS Handles	HLHA3210	332.0	458.0	1	160mm	edit	delete
SS Handles	HLHA3241	374.0	517.0	10	160mm	edit	delete
SS Handles	HLHA3232	408.0	564.0	1	160mm	edit	delete

USER MANUAL

The Project consists of various pages:

login - Login with the credentials and you will be directed to the home page.

homepage - This page displays the dashboard of your shop. The navigation bar has links to navigate to various pages. These pages include customers, products, accessories and designer.

customers - This page consists of data of the customers. It also includes links to take order, edit the customer's details and make payments. It also consists of a search box to search a customer by his name.

products - This page consists the data of all the products sold by the shop. It also consists of a search box to search a product by its name. Products can be added, deleted and modified.

accessories - This page consists the data of all the accessories sold by the shop. It also consists of a search box to search accessories by its hsn. Accessories can be added, deleted and modified.

orders - This page can be accessed from the customers page when a particular customer wishes to place an order. It enables the user to select the products and accessories he wishes to buy. It contains a link to invoice page.

invoice - This page can be accessed from the orders page to generate an invoice for a particular customer. The invoice can also be downloaded and shared.

payment - This page keeps track of the customer's total order amount and link to the installment page.

installment - This page creates an installment of amount for a particular customer. It also has link to generate receipt of that installment.

receipt - This page creates receipt of the amount paid and lets the owner to download and share the receipt.

designer - This page contains designer's data.

SNAPSHOTS

Snapshot of the client and the shop.



ACCEPTANCE LETTER

Sanjivini Home Solutions

Near Hanuman Temple,Line Bazar, Dharwad-580001

Ph No.9880447728

Date:17-04-2021

To,

Mr. Shankar Gangisetty.
(Project Guide), Div-D
KLE Technological University, Hubballi

Subject: Grant of Permission to use our data for the project

Respected sir,

I Dinakar G Shetty of Sanjivini Home Solutions declare that we accept and authorize Mukti Bhansali (01fe19bcs203), Manisha Belagal (01fe19bcs207), Mehar Anjum Soudagar (01fe19bcs208), Akashini Koppad (01fe19bcs210) from Department of Computer Science, KLE Technological University, Hubballi, to use our information and related data for building database system.

Therefore, I grant the permission to the above mentioned names to work under you declaring myself as a client for this project.

Best Regards,

SANJIVINI HOME SOLUTIONS
Line Bazar, Near Hanuman Temple,
DHARWAD - 580 001

Signature
(Dinakar G Shetty)

Ph No.9880447728