

JAYPEE INSTITUTE OF INFORMATION TECHNOLOGY
NOIDA, SECTOR-62



DATABASE SYSTEMS & WEB LAB
(15B17CI372)
DSW PROJECT
REPORT FILE

GROCIGO: GROCERY ON GO

(GROCERY SHOP MANAGEMENT SYSTEM)



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ABSTRACT OF THE PROJECT:

The main objective of this Web application is to provide an online product/ grocery purchasing website.

The purpose of this system is to automate the existing system by the help of software which helps the shopkeeper fulfilling all his requirements by providing all types of create, read and update operations. It also helps to store the data and information in the form of computerised records for a longer period of time with easy accessing and manipulation of the same. This in turn would make the management more efficient by reducing the manual work and also provide better utilisation of resources. It will also help in providing better services to the customers.

FEATURES OF THE PROJECT:

- Customer is able to:
 - Create Account and login
 - View products
 - Add products to cart
 - Order products
 - View Transactions

- Administrator is able to:
 - View Products
 - Update Stock
 - Add new product
 - View Depleted Products
 - View Customers
 - View Transactions

CONCEPTS USED:



Grocigo is a grocery shop management system web application which is developed using HTML, CSS, JavaScript for frontend and PHP and PLSQL for backend.

It uses various concepts of HTML, CSS and JavaScript including creation of html files, using inline CSS and various CSS functions in an external file and using JavaScript to add interactive hovers in the website.

Grocigo derives its data from backend using SQL, PHP and XAMPP, it uses SQL queries to show, update and insert data in the database.

TABLES STRUCTURE:



1) cart

	#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
<input type="checkbox"/>	1	product_id 	int(11)			No	None		
<input type="checkbox"/>	2	product_name	varchar(20)	latin1_swedish_ci		No	None		
<input type="checkbox"/>	3	quantity	int(11)			No	None		
<input type="checkbox"/>	4	price	int(11)			No	None		
<input type="checkbox"/>	5	customer_id 	varchar(20)	latin1_swedish_ci		No	None		

2) categories

	#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
<input type="checkbox"/>	1	category_id 	int(11)			No	None		
<input type="checkbox"/>	2	category_name	varchar(20)	latin1_swedish_ci		Yes	NULL		



3) customers

	#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
<input type="checkbox"/>	1	cust_id 	varchar(20)	latin1_swedish_ci		No	None		
<input type="checkbox"/>	2	cust_name	varchar(25)	latin1_swedish_ci		No	None		
<input type="checkbox"/>	3	email_id 	varchar(25)	latin1_swedish_ci		No	None		
<input type="checkbox"/>	4	password	varchar(25)	latin1_swedish_ci		No	None		


4) depleted_products

	#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
<input type="checkbox"/>	1	product_id	int(11)			Yes	NULL		
<input type="checkbox"/>	2	product_name	varchar(20)	latin1_swedish_ci		Yes	NULL		
<input type="checkbox"/>	3	quantity_left	int(11)			Yes	NULL		

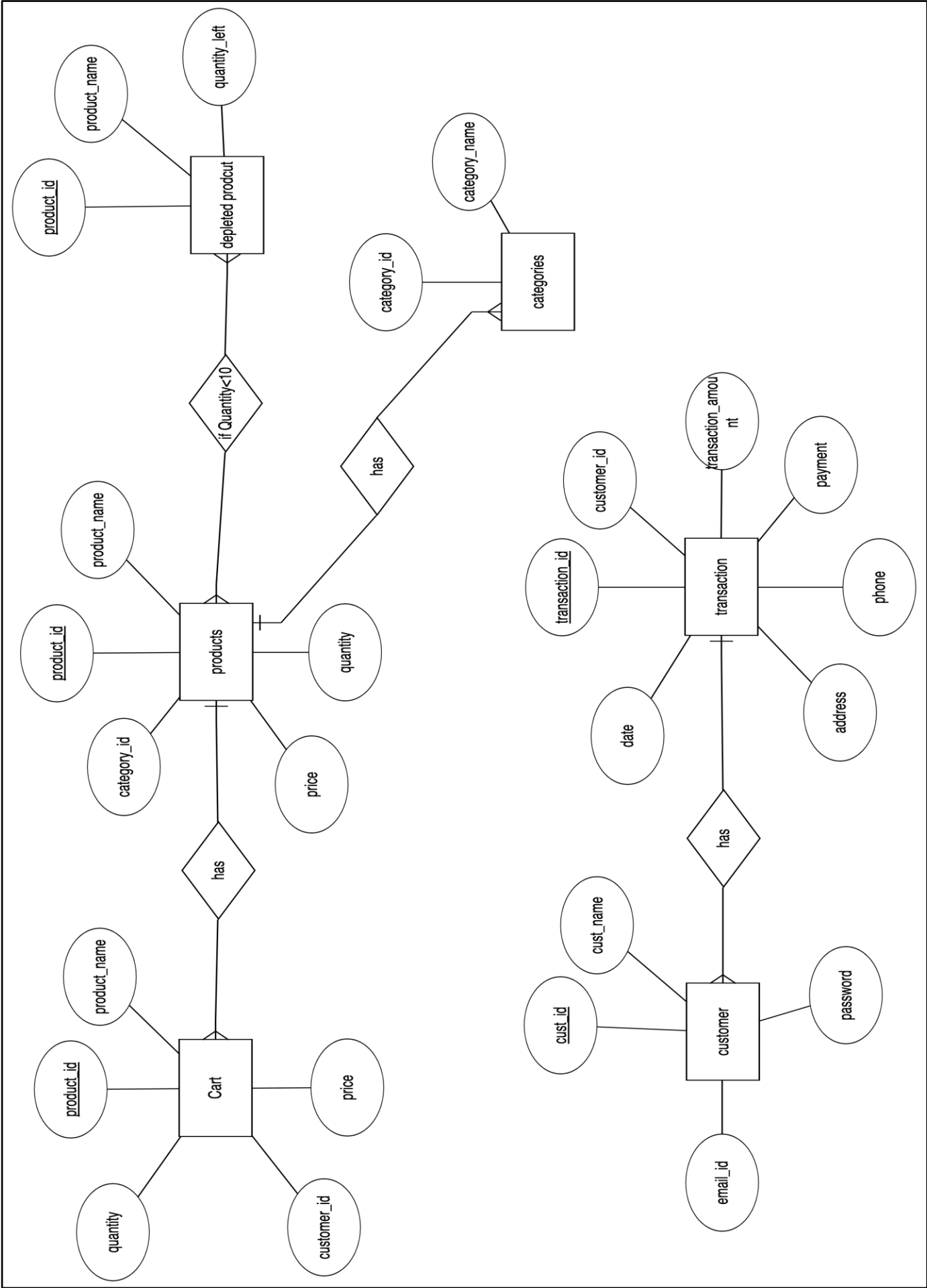
5) products

	#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
<input type="checkbox"/>	1	product_id 	int(11)			No	None		AUTO_INCREMENT
<input type="checkbox"/>	2	product_name	varchar(20)	latin1_swedish_ci		Yes	NULL		
<input type="checkbox"/>	3	category_id 	int(11)			Yes	NULL		
<input type="checkbox"/>	4	price	int(11)			No	None		
<input type="checkbox"/>	5	quantity	int(11)			No	None		

6) transaction

	#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
<input type="checkbox"/>	1	transaction_id 	int(11)			No	None		AUTO_INCREMENT
<input type="checkbox"/>	2	customer_id	varchar(20)	latin1_swedish_ci		Yes	NULL		
<input type="checkbox"/>	3	transaction_amount	int(11)			Yes	NULL		
<input type="checkbox"/>	4	payment	varchar(20)	latin1_swedish_ci		Yes	NULL		
<input type="checkbox"/>	5	phone	varchar(10)	latin1_swedish_ci		Yes	NULL		
<input type="checkbox"/>	6	address	varchar(100)	latin1_swedish_ci		Yes	NULL		
<input type="checkbox"/>	7	date	varchar(20)	latin1_swedish_ci		No	None		

ER DIAGRAM:



NORMALIZATION:

1) cart

Check Normal Form



2NF

The table is in 2NF



3NF

The table is in 3NF



BCNF

The table is in BCNF

Show Steps



2NF

find all candidate keys. The candidates keys are { product_id }, The set of key attributes are: { product_id }
for each non-trivial FD, check whether the LHS is a proper subset of some candidate key or the RHS are not all key attributes
checking FD: product_id --> product_name
checking FD: product_id --> quantity
checking FD: product_id --> price
checking FD: product_id --> customer_id

3NF

find all candidate keys. The candidates keys are { product_id }, The set of key attributes are: { product_id }
for each FD, check whether the LHS is superkey or the RHS are all key attributes
checking functional dependency product_id --> product_name
checking functional dependency product_id --> quantity
checking functional dependency product_id --> price
checking functional dependency product_id --> customer_id

BCNF

A table is in BCNF if and only if for every non-trivial FD, the LHS is a superkey.

2) categories

Check Normal Form



2NF

The table is in 2NF



3NF

The table is in 3NF



BCNF

The table is in BCNF

Show Steps



2NF

find all candidate keys. The candidates keys are { category_id}, The set of key attributes are: { category_id }
for each non-trivial FD, check whether the LHS is a proper subset of some candidate key or the RHS are not all key attributes
checking FD: category_id --> category_name

3NF

find all candidate keys. The candidates keys are { category_id}, The set of key attributes are: { category_id }
for each FD, check whether the LHS is superkey or the RHS are all key attributes
checking functional dependency category_id --> category_name

BCNF

A table is in BCNF if and only if for every non-trivial FD, the LHS is a superkey.

3) customers

Check Normal Form



2NF

The table is in 2NF



3NF

The table is in 3NF



BCNF

The table is in BCNF

Show Steps



2NF

find all candidate keys. The candidates keys are { cust_id}, The set of key attributes are: { cust_id }
for each non-trivial FD, check whether the LHS is a proper subset of some candidate key or the RHS are not all key attributes
checking FD: cust_id --> cust_name
checking FD: cust_id --> email_id
checking FD: cust_id --> password

3NF

find all candidate keys. The candidates keys are { cust_id}, The set of key attributes are: { cust_id }
for each FD, check whether the LHS is superkey or the RHS are all key attributes
checking functional dependency cust_id --> cust_name
checking functional dependency cust_id --> email_id
checking functional dependency cust_id --> password

BCNF

A table is in BCNF if and only if for every non-trivial FD, the LHS is a superkey.

4) depleted_products

Check Normal Form



2NF

The table is in 2NF



3NF

The table is in 3NF



BCNF

The table is in BCNF

Show Steps



2NF

find all candidate keys. The candidates keys are { product_id}, The set of key attributes are: { product_id }
for each non-trivial FD, check whether the LHS is a proper subset of some candidate key or the RHS are not all key attributes
checking FD: product_id --> product_name
checking FD: product_id --> quantity_left

3NF

find all candidate keys. The candidates keys are { product_id}, The set of key attributes are: { product_id }
for each FD, check whether the LHS is superkey or the RHS are all key attributes
checking functional dependency product_id --> product_name
checking functional dependency product_id --> quantity_left

BCNF

A table is in BCNF if and only if for every non-trivial FD, the LHS is a superkey.

5) products

Check Normal Form



2NF

The table is in 2NF



3NF

The table is in 3NF



BCNF

The table is in BCNF

Show Steps



2NF

find all candidate keys. The candidates keys are { product_id }, The set of key attributes are: { product_id }
for each non-trivial FD, check whether the LHS is a proper subset of some candidate key or the RHS are not all key attributes
checking FD: product_id → product_name
checking FD: product_id → category_id
checking FD: product_id → price
checking FD: product_id → quantity

3NF

find all candidate keys. The candidates keys are { product_id }, The set of key attributes are: { product_id }
for each FD, check whether the LHS is superkey or the RHS are all key attributes
checking functional dependency product_id → product_name
checking functional dependency product_id → category_id
checking functional dependency product_id → price
checking functional dependency product_id → quantity

BCNF

A table is in BCNF if and only if for every non-trivial FD, the LHS is a superkey.

6) transaction

Check Normal Form



2NF

The table is in 2NF



3NF

The table is in 3NF



BCNF

The table is in BCNF

Show Steps



2NF

find all candidate keys. The candidates keys are { transaction_id}, The set of key attributes are: { transaction_id }
for each non-trivial FD, check whether the LHS is a proper subset of some candidate key or the RHS are not all key attributes
checking FD: transaction_id \rightarrow customer_id
checking FD: transaction_id \rightarrow transaction_amount
checking FD: transaction_id \rightarrow payment
checking FD: transaction_id \rightarrow phone
checking FD: transaction_id \rightarrow address
checking FD: transaction_id \rightarrow date

3NF

find all candidate keys. The candidates keys are { transaction_id}, The set of key attributes are: { transaction_id }
for each FD, check whether the LHS is superkey or the RHS are all key attributes
checking functional dependency transaction_id \rightarrow customer_id
checking functional dependency transaction_id \rightarrow transaction_amount
checking functional dependency transaction_id \rightarrow payment
checking functional dependency transaction_id \rightarrow phone
checking functional dependency transaction_id \rightarrow address
checking functional dependency transaction_id \rightarrow date

BCNF

A table is in BCNF if and only if for every non-trivial FD, the LHS is a superkey.

OUTPUT:

Grocigo : Grocery On Go

LoginCreate New Account

Login

Username

Password

Login

Grocigo

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Home

View Products

Add Stock

Add New Product

Depleted Products

Customers

Transactions

Logout

Options :

- View Products

- Update Stock

- Add New Product

- View Depleted Products

- View Customers

- View Transactions

Grocigo

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Home

View Products

Order

Cart

My Transactions

Logout

Options :

- View Products

- Order Products

- View Transactions