Food Online Ordering & Delivering Services (FOODS)

Submitted By Prayag Jain (170001037) Saurav Tayal (170001045)

Introduction

In this Digital world with technology making our lives convenient and hassle free in every walk of life, and everyone today having little time for themselves, even for having a good satisfactory meal, a revolution is needed for creating a system that can deliver food to people whenever wherever they need.

FOODS is such a revolutionary initiative that aims at providing tasteful and healthy food to students in the campus of IIT Indore, with every step of food making and delivering monitored, straight from the kitchens of experienced chefs made with the best quality ingredients in the most hygienic of conditions.

Description

The solution starts with creating a database of possible customers which includes students, faculty and non-teaching staff alike which will contain their personal credentials such as name, Phone no. E-mail etc. Another database containing information about the menu and the prices of the food items available is required to be created from different restaurants. Customers can login and access these facilities using a valid User ID(which can be their E-Mail or their Mobile No.) and Password which they create while signing up. Also a database is required for orders containing the order details of current and past orders which can be processed.

Facilities

Customer details

Customers can create account on this service using their Email or Mobile No. They have to provide details for successful creation of the account which are:-

- Email
- Mobile No.
- Name
- Address Details
- Password

They can also change these details.

Choosing size of order - for individual or group(default), or for some party or function(Predefined menu Plans)

Food & Item Category Managing

From the wide range of food items customers can search and select the desired item they want and add to their cart. Every available item will have a short description, customer rating and price of the item. Customers can search the food item and get their item from list of available restaurants or they can browse a restaurant and select food from their given menu.

Manage Shopping Cart

As customer finds their desired food item they can add it to their cart. The customer can also change the quantity of a particular item and see changes accordingly in the total bill. They can also remove items from their cart. Finally they can proceed to place the order for delivery.

Confirm Order

After verifying items in their cart they can proceed to place the order where they choose delivery address and also the mode of Payment (be it e-Wallet, Debit/Credit Card, Net Banking, Cash On Delivery). Once the order is placed they get an Order Receipt with Unique Order ID and time of order and all other order details. Also this order gets stored in the Customer's Past Orders Database.

Delivery address details

Customer can add or remove multiple address where they want to deliver the order.

Mode of Payment details

During the process of confirming the order the customer chooses the mode of payment be it e-Wallet, Debit/Credit Card, Net Banking, Cash On Delivery.

Order Handling

Once the order is placed the restaurant gets information of the order that is items to be made for delivery. As soon as the order is prepared the restaurant dispatches it for delivery.

Relational Schema

Customer

#	Name	Туре	Collation	Attributes	Null	Default	Comments	Extra
1	user_id 🔑	varchar(20)	latin1_swedish_ci		No	None		
2	email_id	varchar(100)	latin1_swedish_ci		No	None		
3	password	varchar(200)	latin1_swedish_ci		No	None		
4	first_name	varchar(50)	latin1_swedish_ci		No	None		
5	last_name	varchar(50)	latin1_swedish_ci		Yes	NULL		
6	mobile_no	varchar(20)	latin1_swedish_ci		Yes	NULL		

Restaurant

#	Name	Туре	Collation	Attributes	Null	Default	Comments	Extra
1	restaurant_id 🔑	int(11)			No	None		AUTO_INCREMENT
2	restaurant_Name	varchar(100)	latin1_swedish_ci		No	None		

Order

#	Name	Туре	Collation	Attributes	Null	Default	Comments	Extra
1	Product_id @	int(11)			Yes	NULL		
2	Order_id	int(11)			Yes	NULL		
3	Quantity	int(11)			Yes	0		
4	price	double			Yes	0		

Checkout

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	Order_id 🔑	int(11)			No	None		AUTO_INCREMENT
2	Payment_Method	enum('Cash', 'Net Banking', 'Credit Card', 'Debit	latin1_swedish_ci		No	Cash		
3	Order_time	datetime	890		No	CURRENT_TIMESTAMP		
4	Billing_id @	int(11)			Yes	NULL		
5	Amount	double			No	0		
6	Shipping_id	int(11)			Yes	NULL		
7	Address_id 🔎	int(11)			Yes	NULL		
8	user_id 🔎	varchar(20)	latin1_swedish_ci		No	None		

Category

#	Name	Туре	Collation	Attributes	Null	Default	Comments	Extra
1	Category_id 🔑	int(11)			No	None		AUTO_INCREMENT
2	Category_Name	varchar(100)	latin1_swedish_ci		No	None		
3	Category_Description	text	latin1_swedish_ci		Yes	NULL		

Cart

#	Name	Туре	Collation	Attributes	Null	Default	Comments	Extra
1	user_id 🔎	varchar(20)	latin1_swedish_ci		No	None		
2	Product_id @	int(11)			No	None		
3	QUANTITY	int(11)			No	1	j	

Addresses

#	Name	Туре	Collation	Attributes	Null	Default	Comments	Extra
1	Address_id 🔑	int(11)			No	None		AUTO_INCREMENT
2	Address_1	varchar(100)	latin1_swedish_ci		No	None		
3	Address_2	varchar(100)	latin1_swedish_ci		Yes	NULL		
4	zip_code	int(11)			No	None		
5	city 🔎	varchar(100)	latin1_swedish_ci		No	None		
6	state 🔎	varchar(100)	latin1_swedish_ci		No	None		
7	user_id 🔎	varchar(100)	latin1_swedish_ci		No	None		

Product

#	Name	Туре	Collation	Attributes	Null	Default	Comments	Extra
1	Product_id 🔑	int(11)			No	None		AUTO_INCREMENT
2	Product_name	varchar(100)	latin1_swedish_ci		No	None		
3	Units	int(11)			No	0		
4	Picture	varchar(100)	latin1_swedish_ci		No	No_image_available.svg		
5	Weight	double			No	None		
6	Category_id	int(11)			No	None		
7	Price	double			No	None		
8	Product_description	text	latin1_swedish_ci		Yes	NULL		
9	restaurant_id 🔎	int(11)			No	None		

Functional Dependencies -

R1 Customer

Email -> R1

Phone No -> R1

R3 Address

{Email,Address Line1, Address Line2, City} -> R3 Pincode -> City,State

R4 Order

Order ID -> R4

R5 Payment

Payment ID -> R5

R6 Restaurant

Restaurant ID -> R6

R7 Items

Item No -> R7
Item Name -> Category, Description

R8 Cart

{Item No,Quantity, Amount} -> R8

ER Diagram



