ONLINE FOOD ORDERING SYSTEM

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INNOVATIVE ASSIGNMENT PROJECT

Overview

The aim of this project is to develop a back-end for a simple and effective food ordering system. The database would have the details of users, cities, restaurants, areas, and food items; all closely linked to each other. The user, once logged in, would be able to select an area and check all available restaurants. After choosing a restaurant, the user should be able to uniquely select food items for the checkout. The process of bill calculation and updation of order process after successful delivery will also be handled.

Project functional requirements

1. USER

1.1 User login

This feature is used by the user to login into the system. They are required to enter user id and password before they are allowed to enter the system.

- User id is provided when they register
- The system must only allow user with valid id and password to enter the system
- The system performs an authorization process and decides what level the user has access to.
- The user must be able to logout after they finish using the system.

1.2 User Registration

This feature can be performed by all users to create accounts.

- System must be able to verify information (unique ID, password constraints)
- System must be able to delete information if information is wrong

1.3 Select Restaurant

This feature asks the user to select the area to browse the restaurants from

- System must display the list of restaurants with given area code.

1.4 Order placement
This feature allows user to select items from the available list of items

- Users must be able to select multiple items from restaurants from the chosen area.
- Users must be able to change/cancel orders before payment.
- System must allow the user to review the order before submitting.

2. Affiliated restaurants

2.1 Add restaurant
- System must allow the admin to add a new restaurant.
- System must make sure valid area code is assigned.

3. Menu

3.1 Display menu
- System must be able to display all items of the selected restaurant with price.

3.2 Modify menu
- System must allow the authorised admin to make changes to the menu.
- System must make sure no other user can change the menu.
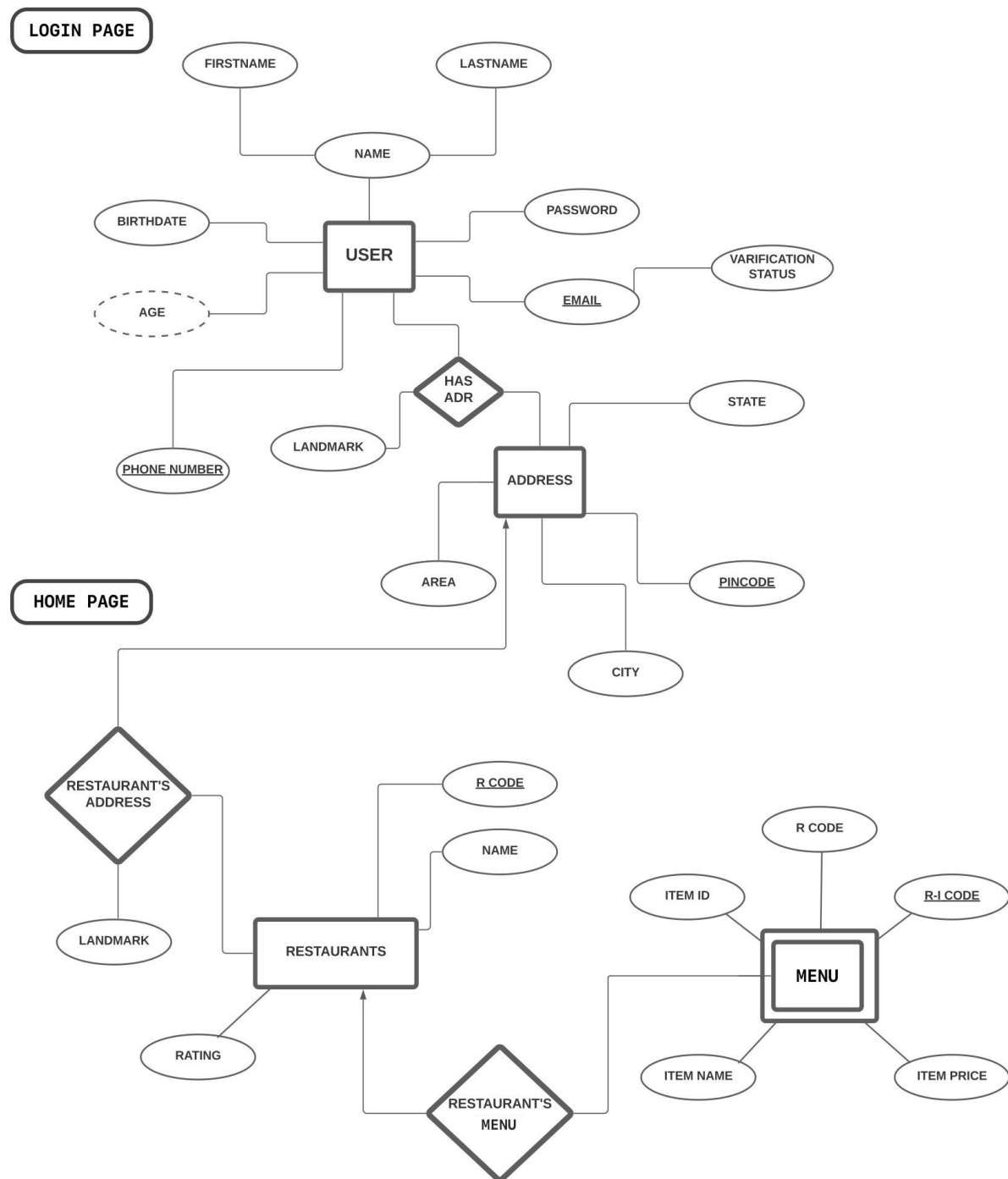
4. Food delivery details
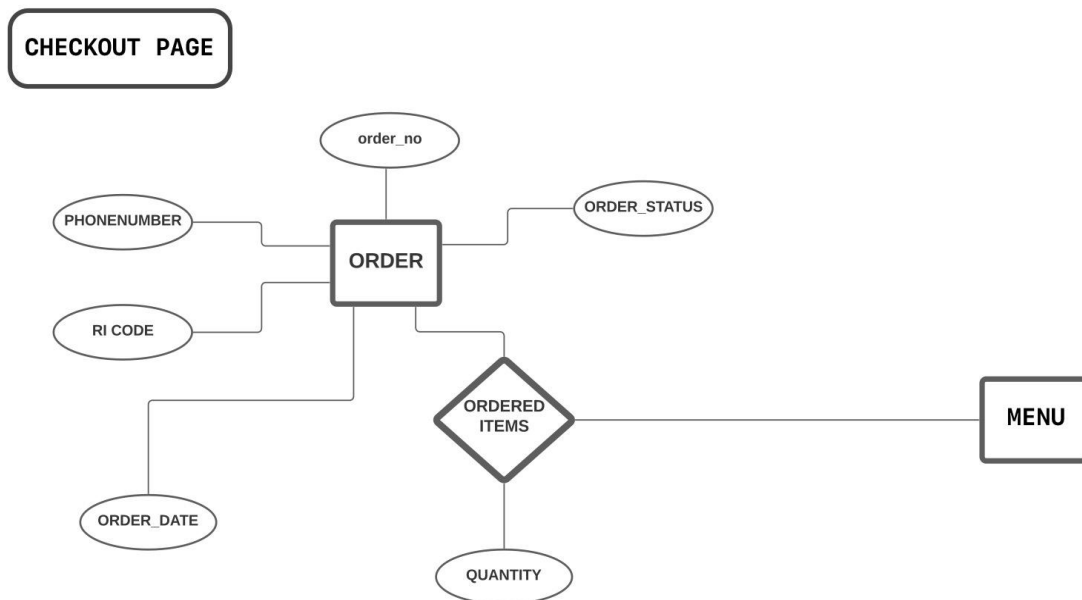
4.1 Display details of order
- System must generate order no, date, and bill according to items selected.
- Users can check the details and status of his/her orders.

4.2 Change status of order
- System must update the order status after delivery or cancellation.
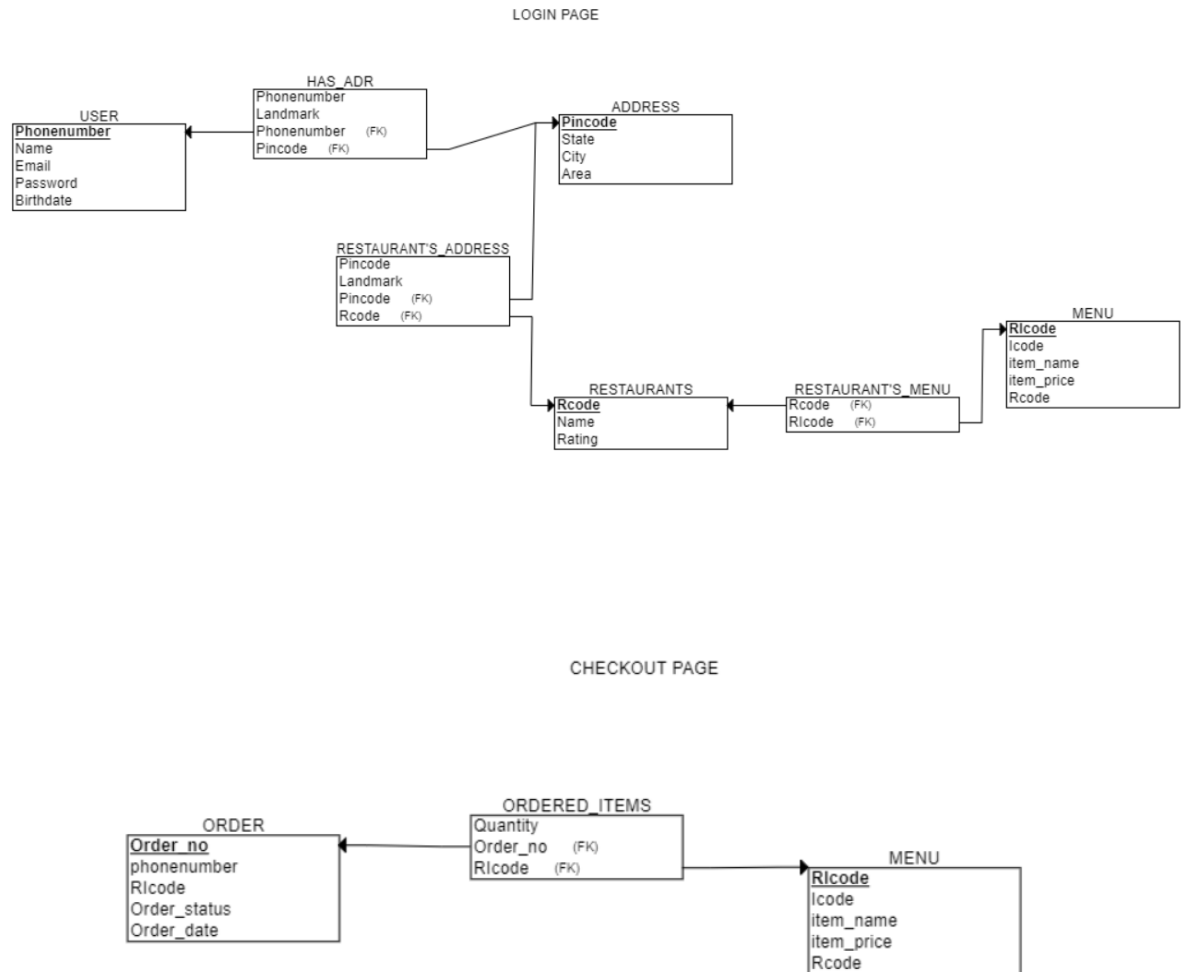
ER diagram

Relational model

I. DATABASE SCHEME

- USER.scheme(**name , email , password , birthdate , phonenumber**)
- HAS_ADR.scheme(**phonenumber , pincode , landmark**)
- ADDRESS.scheme(**state , city , area , pincode**)
- RESTAURANTS.scheme(**name , rating , Rcode**)
- RESTAURANT'S_ADDRESS.scheme(**Rcode , pincode , landmark**)
- RESTAURANT'S_MENU.scheme() = MENU.scheme()
- MENU.scheme(**Icode , item_name , item_price , Rcode , RIcode**)
- ORDER.scheme(**order_no , phonenumber , RIcode , order_status , order_date**)
- ORDERED_ITEMS.scheme(**order_no , RIcode , Quantity**)

II.   RELATIONAL DIAGRAM

LOGIN PAGE

USER
Phonenumber
Name
Email
Password
Birthdate

HAS_ADR
Phonenumber
Landmark
Phonenumber   (FK)
Pincode   (FK)

ADDRESS
Pincode
State
City
Area

RESTAURANT'S_ADDRESS
Pincode
Landmark
Pincode   (FK)
Rcode   (FK)

MENU
RIcode
Icode
item_name
item_price
Rcode

RESTAURANTS
Rcode
Name
Rating

RESTAURANT'S_MENU
Rcode   (FK)
RIcode   (FK)

CHECKOUT PAGE

ORDER
Order_no
phonenumber
RIcode
Order_status
Order_date

ORDERED_ITEMS
Quantity
Order_no   (FK)
RIcode   (FK)

MENU
RIcode
Icode
item_name
item_price
Rcode

CONCLUDING REMARKS

The ER diagram and Relational model sets the base of an applet which we are going to construct. With the help of an ER diagram we will be able to create the required database and perform queries. Converting a database representation from an E-R diagram to a table format we arrive at a relational-database design from an E-R diagram. Both models are relatively similar and useful.

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