Database System Project

Group-5

Group Members

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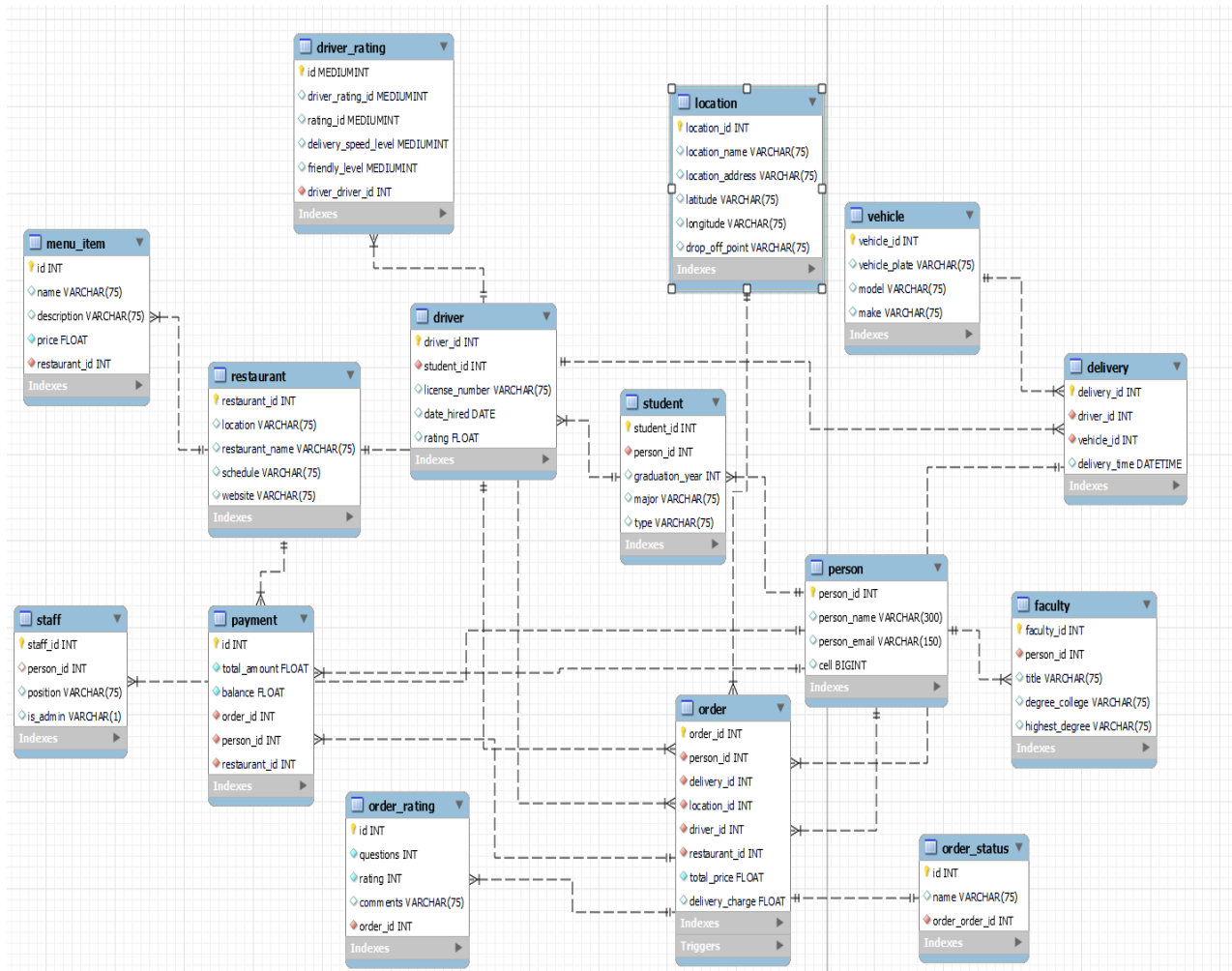Naveen Kolla
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Introduction:

Food delivery services are more vital than ever now that the Corona virus is a danger. Even when things return to normal, many experts believe that food delivery will have become a part of our daily routines. On campus, students like meal delivery services. Campuses dislike the constant influx of guests who may or may not be affiliated with the university. We will attempt to comprehend a test database for a campus-controlled food delivery business similar to craveoncampus.com in this project. The database we'll be utilizing for this project is on loan from the "Mavericks," a graduate student club (Dhananjay Arora, Akshay Babu, Sumit Kawale and Prashant Madaan). We'll be adding a rating system for both restaurants and delivery drivers to the database. We begin by thoroughly researching Crave and other relevant websites, followed by a thorough examination of the database system's original ERD and business rules (load the SQL script and reverse engineer the database). We could change the database design to reflect the business rules we want to adopt in our own database system. It's possible that we'll need to make some changes to the database system in order to make it more effective for our needs.

Business Rules:

- Only students are drivers

- University members are the only users of the system

- An order has one and only one rating

- Ratings are optional, etc.

- Order can be placed only via campus app

- Campus id is needed for placing the order

- Students can work only 20hrs/week

- Delivery can be made only within campus

- An individual delivery is tied to one and only one person for the order

- A unique identifier (ID) is tied to the id for the order at the individual restaurant

- Restaurants can have multiple menu items

- User can order from a single restaurant at a time

- User can order one or multiple items from the restaurant in a single order

EERD with new Tables

Data Dictionary

restaurant

P/F	Field Name	Caption	Data Type	Field Size	Expected Data - Example
PK	restaurant_id	id of restaurant	INT	11	id of a restaurant ex: 54,36 etc
	location	location of restaurant	VARCHAR	75	Ex: mallad creek, concord mills etc
	restaurant_name	name of the restaurant	VARCHAR	75	Burger king, Taco Bell
	schedule	schedule of restaurant	VARCHAR	75	9 am - 11 pm
	website	website of the restaurant	VARCHAR	75	burgerking.com

menu_item

P/F	Field Name	Caption	Data Type	Field Size	Expected Data - Example
PK	id	id of the item	INT	11	id of the item ex: 2,3,4 etc
	name	name of the item	VARCHAR	75	name of the item ex: burger, fries etc
	description	description of the item	VARCHAR	75	description of the item ex: pizza with chicken topping
	price	price of the item	FLOAT	50	9.99,12.99
	restaurant_id	id of restaurant	INT	11	id of restaurant refers to restaurant table ex: 56,32

location

P/F	Field Name	Caption	Data Type	Field Size	Expected Data - Example
PK	location_id	id of location	INT	11	id of location which is unique ex: 5 ,8,7
	location_name	name of location	VARCHAR	75	name of location ex: 2345 sovi
	location_address	address of location	VARCHAR	75	address of loc ex: 2345 sovi ,university city blvd, 28264
	latitude	latitude of location	VARCHAR	75	latitude of drop ex: 87.63252
	longitude	longitude of longitude	VARCHAR	75	longitude of drop ex: 56.39999
	drop_off_point	point of drop_off	VARCHAR	75	drop of point of order ex: sovi

driver

P/F	Field Name	Caption	Data Type	Field Size	Expected Data - Example
PK	driver_id	id of driver	INT	11	id of driver ex: 23, 32 etc
	student_id	id of student	INT	11	id of student which refers to student table ex: 80120 ,801206821
	license_number	license number of the driver	VARCHAR	75	license number of driver ex: nc852
	date_hired	driver hired date	DATE	NA	date on which driver is hired ex: mm:dd:yyyy
	rating	rating received by driver	FLOAT	50	rating of the driver ex: 5.3, 2.5

driver rating

P/F	Field Name	Caption	Data Type	Field Size	Expected Data - Example
PK	driver_rating_id	id of driver's rating	MEDIUMINT	20	driver rating ex: 2, 4 ,5
	rating_id	id of rating	MEDIUMINT	20	3,4,5
	delivery_speed_level	speed level of	MEDIUMINT	20	5 , 4 , 2
	friendly_level	friendliness o	MEDIUMINT	20	5,3
	driver_id	id of driver	INT	11	driver id refers to driver table ex: 45,52

staff

P/F	Field Name	Caption	Data Type	Field Size	Expected Data - Example
PK	staff_id	id of the staff	INT	11	staff id ex: 256. 123 etc
	person_id	id of a person	INT	11	person which refers to person table id ex: 256. 123 etc
	position	position of the staff	VARCHAR	75	Receptionist, Librarian
	is_admin	whether that staff person is admin or not	VARCHAR	75	N

payment

P/F	Field Name	Caption	Data Type	Field Size	Expected Data - Example
PK	id	payment id	INT	11	13, 30 etc
	total_amount	total amount of order	FLOAT	50	26.99,30.57 etc
	balance	balance remai	FLOAT	50	3.25, 0.38 etc
	order_id	id of order	INT	11	order_id refers to order table ex: 13,85
	person_id	person_id refers to person table	INT	11	person_id refers to person table ex:55,36
	restaurant_id	restaurant id refers to restaurant table	INT	11	restaurant id refers to restaurant table

order

P/F	Field Name	Caption	Data Type	Field Size	Expected Data - Example
PK	order_id	id of order	INT	11	id of order ex: 21, 15 etc
	person_id	id of person	INT	11	id of person ex: 126,152 etc
	delivery_id	id of delivery	INT	11	id of delivery ex: 512,635 etc
	location_id	id of location	INT	11	id of location ex: 2, 5 etc
	driver_id	id of driver	INT	11	id of driver ex: 21, 45 etc
	restaurant_id	id of restaurant	INT	11	id of restaurant ex: 17,18 etc
	total_price	total price of order	FLOAT	50	total price of order ex: 21.36
	delivery_charge	delivery charge on order	FLOAT	50	delivery charge on order ex: 4.5,5.99

order_rating

P/F	Field Name	Caption	Data Type	Field Size	Expected Data - Example
PK	id	order id rating	INT	11	56, 33 etc
	questions	questions for c	INT	11	2,3
	rating	rating for order	INT	11	1,2,3,4,5
	comments	coments on order	VARCHAR	75	food is good etc
	order_id	id of order	INT	11	order_id refers to order table ex:33,21

order_status

P/F	Field Name	Caption	Data Type	Field Size	Expected Data - Example
PK	id		INT	11	order id ex:12,15
	name	name of the order	VARCHAR	75	order name : burger, fries
	order_id	id of the order	INT	11	ex: 15,32

student

P/F	Field Name	Caption	Data Type	Field Size	Expected Data - Example
PK	student_id	id of student	INT	11	id of student which refers to student table ex: 80120 ,801206821
	person_id	id of person	INT	11	ex: 326,522
	graduation_year	year of graduation student	INT	11	2024, 2023
	major	student major	VARCHAR	75	computer science etc
	type	type or level of education	VARCHAR	75	Graduate, UnderGraduate

person

P/F	Field Name	Caption	Data Type	Field Size	Expected Data - Example
PK	person_id	id of person	INT	11	ex: 256,320
	person_name	name of person	VARCHAR	75	Ex: naveen, john, jim
	person_email	email of person	VARCHAR	75	ex: nav@uncc.edu
	cell	cell num of person	BIGINT	20	ex: 8985521225

faculty

P/F	Field Name	Caption	Data Type	Field Size	Expected Data - Example
PK	faculty_id	id of faculty	INT	11	135,85
	person_id	id of person	INT	11	233, 120 etc
	title	title or position of faculty	VARCHAR	75	Professor, Dept chair etc
	degree_college	college of faculty	VARCHAR	75	college of business , college of computing etc
	highest_degree	highest degree of faculty	VARCHAR	75	PhD, Masters etc

vehicle

P/F	Field Name	Caption	Data Type	Field Size	Expected Data - Example
PK	vehicle_id	id of vehicle	INT	11	id of vehicle
	vehicle_plate	number plate of vehicle	VARCHAR	75	nc854j
	model	model of vehicle	VARCHAR	75	camry
	make	make of the vehicle	VARCHAR	75	toyota

delivery

P/F	Field Name	Caption	Data Type	Field Size	Expected Data - Example
PK	delivery_id	id of delivery	INT	11	id of deliver ex: 12, 15 etc
	driver_id	id of driver	INT	11	id of driver referring to driver table ex: 23,45 etc
	vehicle_id	id of vehicle	INT	11	id of vehicle from vehicle table
	delivery_time	time of delivery	DATETIME	NA	mm:dd:yyyy HH:mm:ss 11:12:2021 19:22:33