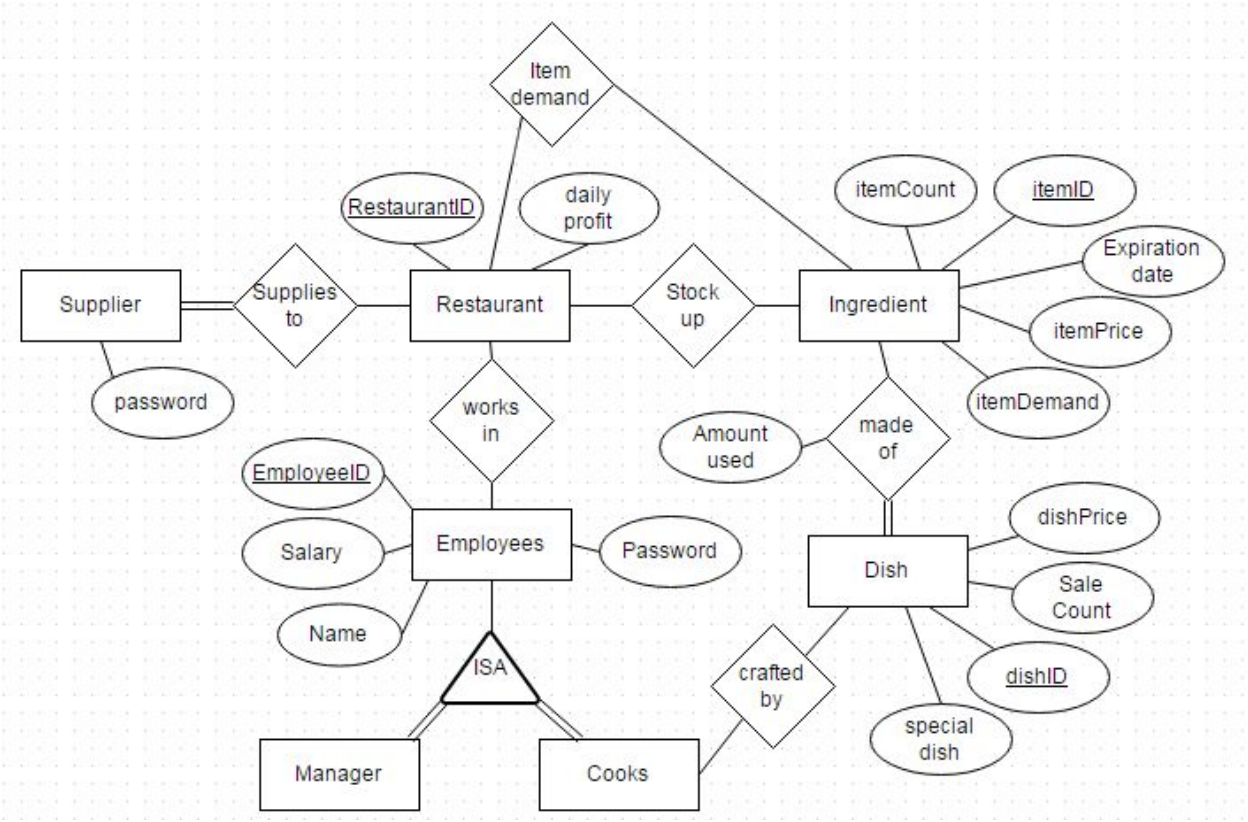
CS 336
DBMS Project
Group - 7
Amgad Armanus
Frank Lee
HyunMo Yang

Stage 2

In our project we are creating a database to manage restaurant chain. There is one supplier and there are multiple restaurants. There are three types of users, supplier, managers, and cooks. We will be using HTML, PHP and MySQL.

ER Diagram:



The constraint for the ISA relationship:

Each restaurant would have at least one manager and one cook. An employee cannot be manager and cook at the same time. An employee must be either cook or manager. The supplier is the food market, which means it is constrained to be at least/at most one supplier. The salary is fixed as soon as the restaurant hires the cook. Each dish has been made at least by one cook.

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User interface:
Once the user goes on the server, they will be prompted to log in. According to the types of account (either supplier, manager, or cook) they have, they will be presented with different options after they log in successfully.

For the supplier, they will be able to choose from four options. These options are, check demand for each restaurant, check expiration dates on items, check popular dishes at each restaurant, check profit by restuarant. If the supplier chooses to check demand for each restaurant, they will be presented with a list of items, the amount demanded for each item, and the restaurant that demands those items.They can reset the item demand to zero once they fulfil that demand. Once the demand is fulfilled, then number demanded for each item is added to the "in stock" field for that item. If the supplier chooses to check expiration dates, they will be presented with a list of items that are expiring soon and the restaurant id where each item is located. If the supplier chooses to check popular dishes at each restaurant, they will be prompted to select a restaurant and then they will be able to view a list of their most popular dishes. If the supplier chooses to view profit by restaurant, they will be prompted to select a restaurant and once they select a restaurant they will be about to view profit by day, week, month and annual profit.

For the manager, they will be able to choose from three options. These options are, check stock for items at the restaurant, update demand for items, view profit. If the manager chooses to check stock for items, they will be able to view a list of items in stock and the number of each item that is in stock. If the manager chooses to update demand for items, they will be able to view a list of items that are offered by the supplier and update the demand for each item they need. If the manager chooses to view profit, they will be able to view the restaurant's daily, weekly, monthly, and annual profit. They will able to be able to see the most popular dishes and the most profitable dishes.

For the cook, they will be able to choose from three options. These options are, update item's stock number, check dish's ingredients, add new specialty dishes. If the cook chooses to update item's stock number, they will be able to update the stock for each item they used when making a dish. If the cook chooses to check dish's ingredients, they will prompted to select a dish then they will be able to view the items that make up that dish. If the cook chooses to add new specialty dish, they will be prompted to enter a name for the dish and then select the ingredients that make up that dish.

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Possible Data type:

supplier

password	varchar(32)	IS NOT NULL

emp

empID	int(5)	IS NOT NULL
password	varchar(32)	IS NOT NULL
position	enum('m', 'c')	IS NOT NULL
salary	decimal	defined as 0
name	varchar(32)	IS NOT NULL

ingredient

itemID	int(5)	IS NOT NULL
itemCount	int	defined as 0
itemPrice	decimal	IS NOT NULL
expirationDate	date	IS NOT NULL
itemDemand	int	defined as 0

restaurant

restID	int(5)	IS NOT NULL
restProfit	decimal	defined as 0

dish

dishID	int(5)	IS NOT NULL
saleCount	int	defined as 0
dishPrice	decimal	defined as 0
specialDish	boolean	defined as F

relations

AmountUsed	int	defined as 0