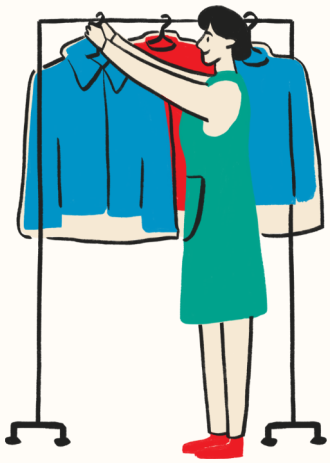
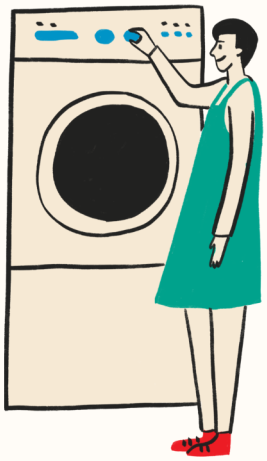
Database Systems Project

Dry Cleaning Database System





Project Details

The program is a database system for dry cleaning and tailors to keep the record of incoming and outgoing garments and products, to record complaints, to record the delivery, repair and repair dates of the products.

· In this scenario, the "Customers" table contains customer information. Each customer is assigned a unique "Customer_ID". Staff information is stored in the "staff" table and an "staff_ID" is created for each staff. This table also includes information such as name, surname, password, address of customers and staffs.(The id, name, surname of customers and staff does not change over time).

· The "Garments" table contains the garments provided by customers and their garment details. Each garment is assigned a unique "garment_ID" and contains references to relevant customer and employee information. The dates between which each customer leaves the product to the dry cleaning shop, the estimated processing time, the processing end date and the product's return by the customer are found here. (It can be applied to the incoming product in cleaning, repair or both processes.)

· Garments are brought to dry cleaning by the customer. A customer can bring multiple garments at the same time. However, a garment brought has only one customer.

· Each garments must be received by a staff. A staff can receive more than one garments.

· Cleaning and repair process or both processes can be applied to the incoming product. Which process will be applied, the type of the process is specified in detail, and a pricing is made accordingly. (Each staff dont have to undertake repairs but repairs must undertake by staff. Also Each staff dont have to undertake cleans but cleans must undertake by staff.)

· Cleans must clean the garments.Each garment don't have to cleaned by cleans. Repairs must repair the garments.Each garment don't have to repaired by repairs.

· Repairs and cleans have multiple staff, but a staff can only do one repair. And a staff can only do one cleans. A staff can't transfer between cleans and repairs

·The customer can give feedback about her complaints about the service she/he received, the employees or the logistics company.(More than one complaint can be made by customers. But the customer is not obliged to make a complaint)

· The customer may have two options for receiving the product. He/She can come and pick up the product directly or it can be delivered to the product address by the logistics company.(Not every garments has to be delivered by logistics. But logistics has to deliver the garments given to it.)

· Logistics company can deliver more than one garment at a time. However, a garment cannot be delivered by more than one logistics company

In this database scenario, all data about the dry cleaning shop can be kept.

Tables

Entity-1	Entity-2	Entity-3	Entity-4	Entity-5	Entity-6	Entity-7
Staff	Customers	Garments	Repairs	Cleans	Complaints	Logistics

	Entity-1	Entity-2	Entity-3	Entity-4	Entity-5	Entity-6	Entity-7
	Staff	Customers	Garments	Repairs	Cleans	Complaints	Logistics
Attribute-1	PK staff_id	PK customer_id	PK garment_id	PK repair_id	PK clean_id	PK complaint_id	PK logistic_id
Attribute-2	first_name	first_name	FK customer_id	FK garment_id	FK garment_id	FK garment_id	FK garment_id
Attribute-3	last_name	last_name	FK staff_id	repair_cost	clean_cost	complaint_details	logistic_details
Attribute-4	user_password	user_password	brought_date	repair_details	clean_details		
Attribute-5	addres	addres	expected_return_date				
Attribute-6	birth_date	birth_date	actual_return_date				
Attribute-7			pick_up_date				

		Entity-1	Entity-2	Entity-3	Entity-4	Entity-5	Entity-6	Entity-7
		Staff	Customers	Garments	Repairs	Cleans	Complaints	Logistics
Entity-1	Staff			receive	undertake	undertake		
Entity -2	Customers			bring			make	
Entity -3	Garments	received by	brought by		repaired by	cleaned by		delivered by
Entity -4	Repairs	undertaken by		repair				
Entity -5	Cleans	undertaken by		clean				
Entity -6	Complaints		made by					
Entity -7	Logistics			deliver				

Instance Chart Tables

Table Name: Staff

Column Name	staff_id	first_name	last_name	user_password	addres	birth_date
Key Type	PK					
Nulls/Unique		NOT NULL	NOT NULL			
FK Table						
FK Column						
Data Type	NUMBER(11)	VARCHAR(20)	VARCHAR(20)	VARCHAR(15)	VARCHAR2(30)	DATE

Table Name: Customer

Column Name	customer_id	first_name	last_name	user_password	addres	birth_date
Key Type	PK					
Nulls/Unique		NOT NULL	NOT NULL			
FK Table						
FK Column						
Data Type	NUMBER(11)	VARCHAR(20)	VARCHAR(20)	VARCHAR(15)	VARCHAR2(30)	DATE

Table Name: Garments

Column Name	garment_id	customer_id	staff_id	brought_date	expected_return_date	actual_return_date	pick_up_date
Key Type	PK	FK	FK				
Nulls/Unique							
FK Table		CUSTOMERS	STAFF				
FK Column		CUSTOMER_ID	STAFF_ID				
Data Type	NUMBER(11)	NUMBER(11)	NUMBER(11)	DATE	DATE	DATE	DATE

Instance Chart Tables

Table Name: Repairs

Column Name	repair_id	garment_id	repair_cost	repair_details
Key Type	PK	FK		
Nulls/Unique				
FK Table		GARMENTS		
FK Column		GARMENT_ID		
Data Type	NUMBER(11)	NUMBER(11)	NUMBER(6,2)	VARCHAR2(30)

Table Name: Cleans

Column Name	clean_id	garment_id	clean_cost	clean_details
Key Type	PK	FK		
Nulls/Unique				
FK Table		GARMENTS		
FK Column		GARMENT_ID		
Data Type	NUMBER(11)	NUMBER(11)	NUMBER(6,2)	VARCHAR2(30)

Table Name: Complaints

Column Name	complaint_id	garment_id	complaint_details
Key Type	PK	FK	
Nulls/Unique			
FK Table		GARMENTS	
FK Column		GARMENT_ID	
Data Type	NUMBER(11)	NUMBER(11)	VARCHAR2(30)

Instance Chart Tables

Table Name: Logistics

Column Name	logistic_id	garment_id	logistic_details
Key Type	PK	FK	
Nulls/Unique			
FK Table		GARMENTS	
FK Column		GARMENT_ID	
Data Type	NUMBER(11)	NUMBER(11)	VARCHAR2(30)

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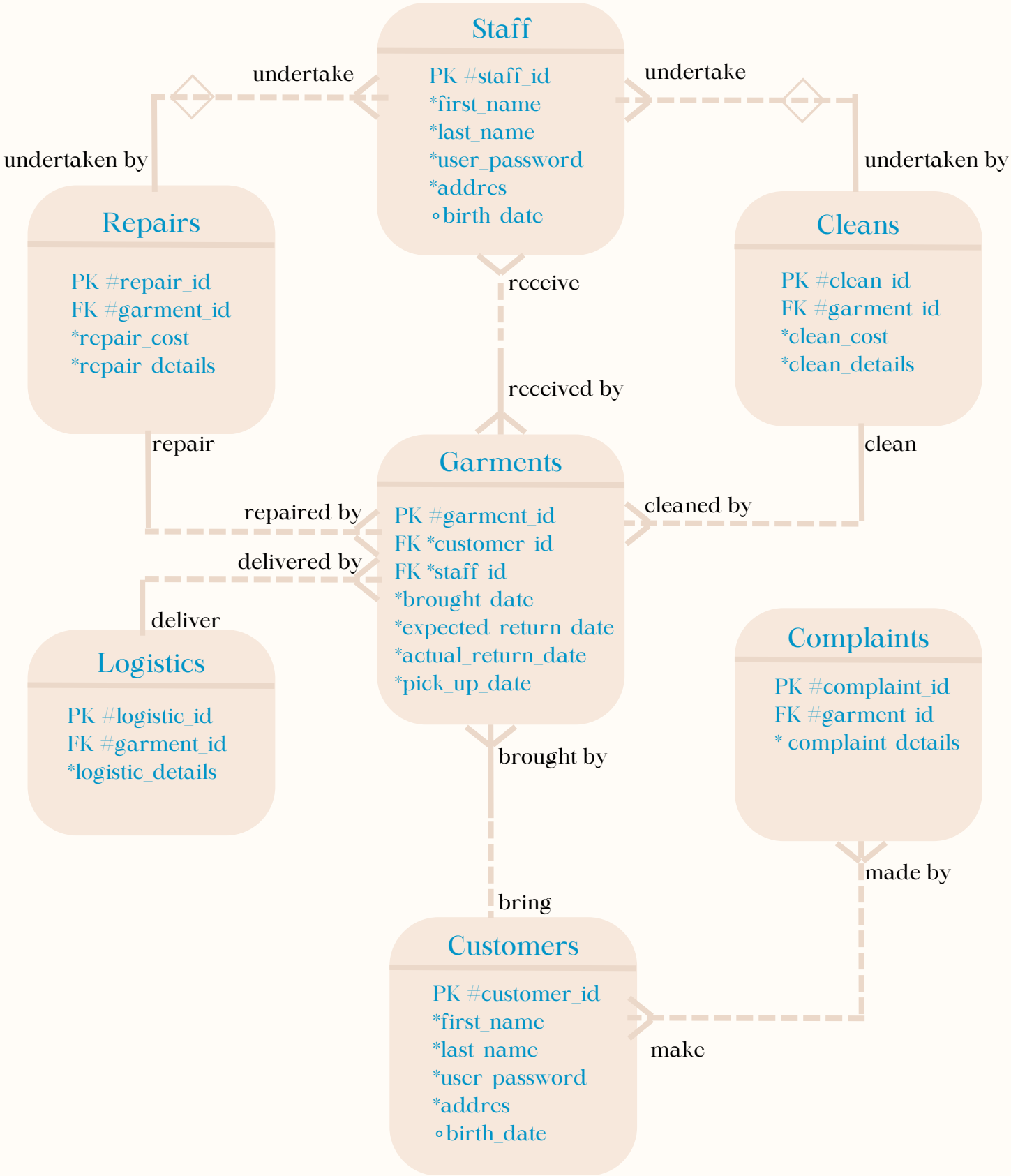
Staff
PK #staff_id
*first_name
*last_name
*user_password
*addres
◦birth_date
undertake
undertake
undertaken by
undertaken by
Repairs
PK #repair_id
FK #garment_id
*repair_cost
*repair_details
Cleans
PK #clean_id
FK #garment_id
*clean_cost
*clean_details
receive
received by
repair
clean
Garments
PK #garment_id
FK *customer_id
FK *staff_id
*brought_date
*expected_return_date
*actual_return_date
*pick_up_date
repaired by
cleaned by
delivered by
deliver
Logistics
PK #logistic_id
FK #garment_id
*logistic_details
Complaints
PK #complaint_id
FK #garment_id
* complaint_details
brought by
made by
bring
Customers
PK #customer_id
*first_name
*last_name
*user_password
*addres
◦birth_date
make