

EXPERIMENT NO. 1

Date of Performance:

Date of Submission:

Aim: Case study on building Data Warehouse/ Data Mart.

Software used: Any online drawing tool.

Theory:

1. Detailed Problem statement

The ice cream parlor wants to gain a better understanding of its customers and their buying habits. They need to be able to track sales trends, identify popular flavors, and understand customer demographics. They also want to use data to improve marketing campaigns and personalize customer experiences.

2. Analysis to be done

- Customer Data: Collect data on customer demographics, purchase history, loyalty program memberships, and feedback.
- Product Data: Track sales volume, inventory levels, and popularity of different flavors and toppings.
- Sales Data: Analyze sales trends, peak hours, and revenue generated from different promotions.
- Marketing Data: Track the effectiveness of different marketing campaigns, including social media, email, and advertising.

3. How the above analysis improves the business i.e. above problem definition

- Targeted Marketing: Identify customer segments and tailor marketing campaigns to their preferences.
- Inventory Management: Predict demand for different flavors and optimize inventory levels.
- Product Development: Identify popular flavors and trends to create new and innovative products.
- Customer Service: Understand customer feedback and address issues to improve customer satisfaction.

1. Patient Management

Processes: Document the existing processes for scheduling, patient records, and medical histories. Identify steps involved and how data is managed.

Challenges: Gather data on issues like appointment scheduling errors, delays, or difficulties in accessing patient records.

2. Billing and Financial Management

Processes: Map out the current billing processes, including invoice generation, insurance claims, and financial reporting.

Challenges: Identify issues like billing errors, delays in insurance processing, or inaccuracies in financial reports.

3. Inventory and Resource Management

Processes: Document how inventory and resource management are currently handled, including supply ordering and tracking.

Challenges: Identify issues like stockouts, overstocking, and difficulties in tracking resource usage.

4. Staff Management

Processes: Map out current staff scheduling, workload management, and credential tracking processes.

Challenges: Identify issues like scheduling conflicts, inefficiencies in tracking staff credentials, and communication gaps.

5. Data Security and Compliance

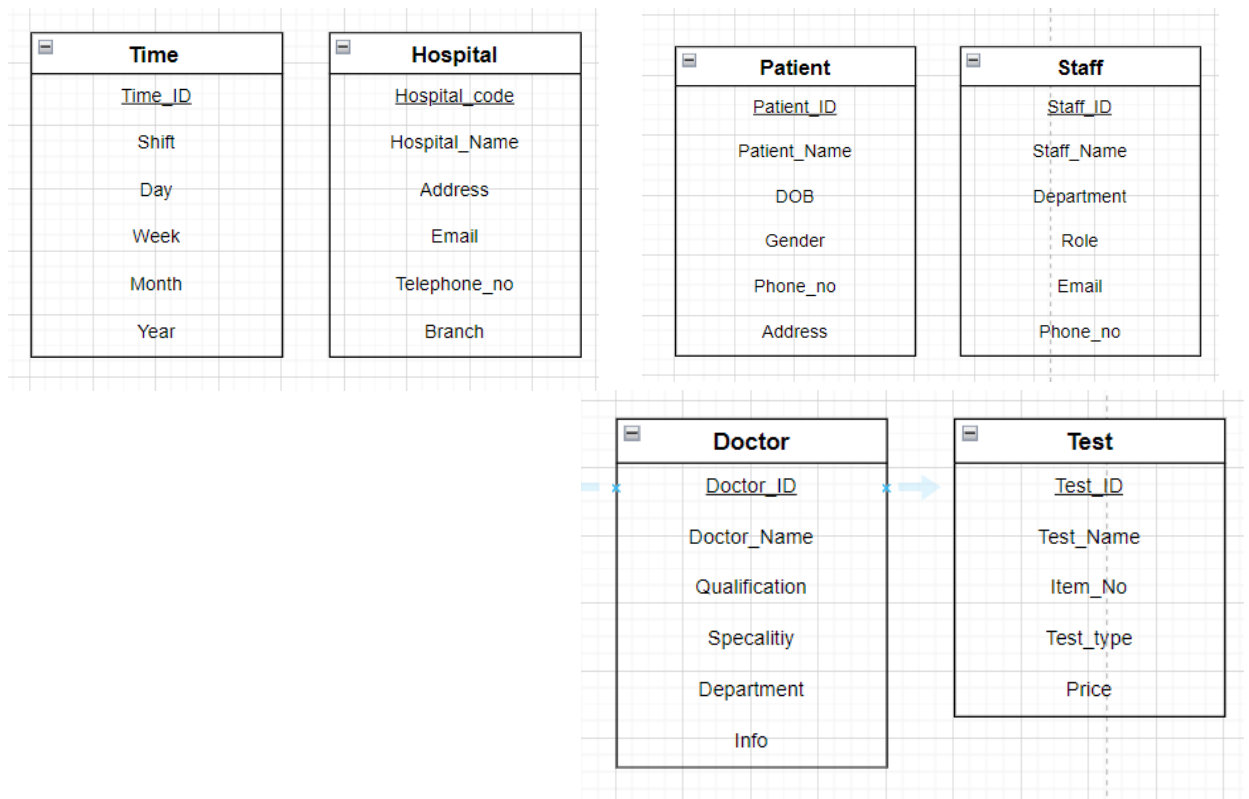
Processes: Assess current data security measures, compliance protocols, and risk management strategies.

Challenges: Identify vulnerabilities in data security, compliance gaps, and risks of unauthorized access.

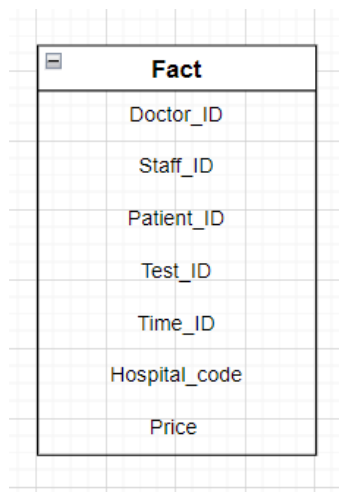
1.1 Design Information Package diagram

Subject: Hospital Management						
Facts: <u>Price</u> , <u>Branch</u>						
Time Dimension	<u>Time ID</u>	Shift	Day	week	Month	year
Hospital Dimension	<u>Hospital code</u>	<u>Hospital name</u>	Address	Email	<u>Telephone no</u>	Branch
Patient Dimension	<u>Patient Id</u>	<u>Patient name</u>	DOB	Gender	<u>Phone no</u>	Address
Staff Dimension	<u>Staff ID</u>	<u>Staff Name</u>	Department	Role	Email	<u>Phone no</u>
Doctor Dimension	<u>Doctor ID</u>	<u>Doctor Name</u>	Qualification	<u>specality</u>	Department	Info
Test Dimension	<u>Test ID</u>	<u>Test Name</u>	<u>Item No</u>	Price	<u>Test Type</u>	

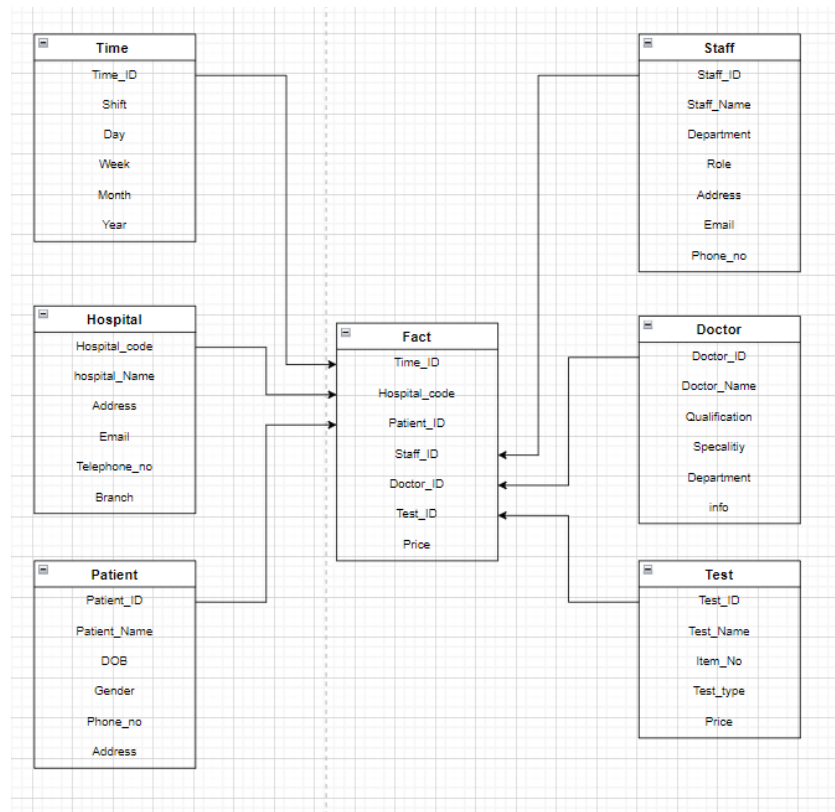
1.2 Details of Dimension table



1.3 Details of Fact table



1.4 Draw and attach Star Schema



1.1 Draw and attach Snowflake Schema (if applicable to your project)

No

CONCLUSION:

By implementing a data warehouse/data mart, the ice cream parlor can gain valuable insights into customer data and improve their business operations. They can use this data to make more informed decisions about marketing, product development, and customer service.

SIGN AND REMARK:

R1	R2	R3	Total Marks	Signature
(5)	(5)	(5)	(15)	