



Dhirubhai Ambani Institute of Information and
Communication Technology

Database Management System (DBMS)

Prof. PM Jat.

Medy-needs

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Project Title

Database for keeping the Track, Designing and Implementation of an Online Pharmacy Application.

Scope of Database

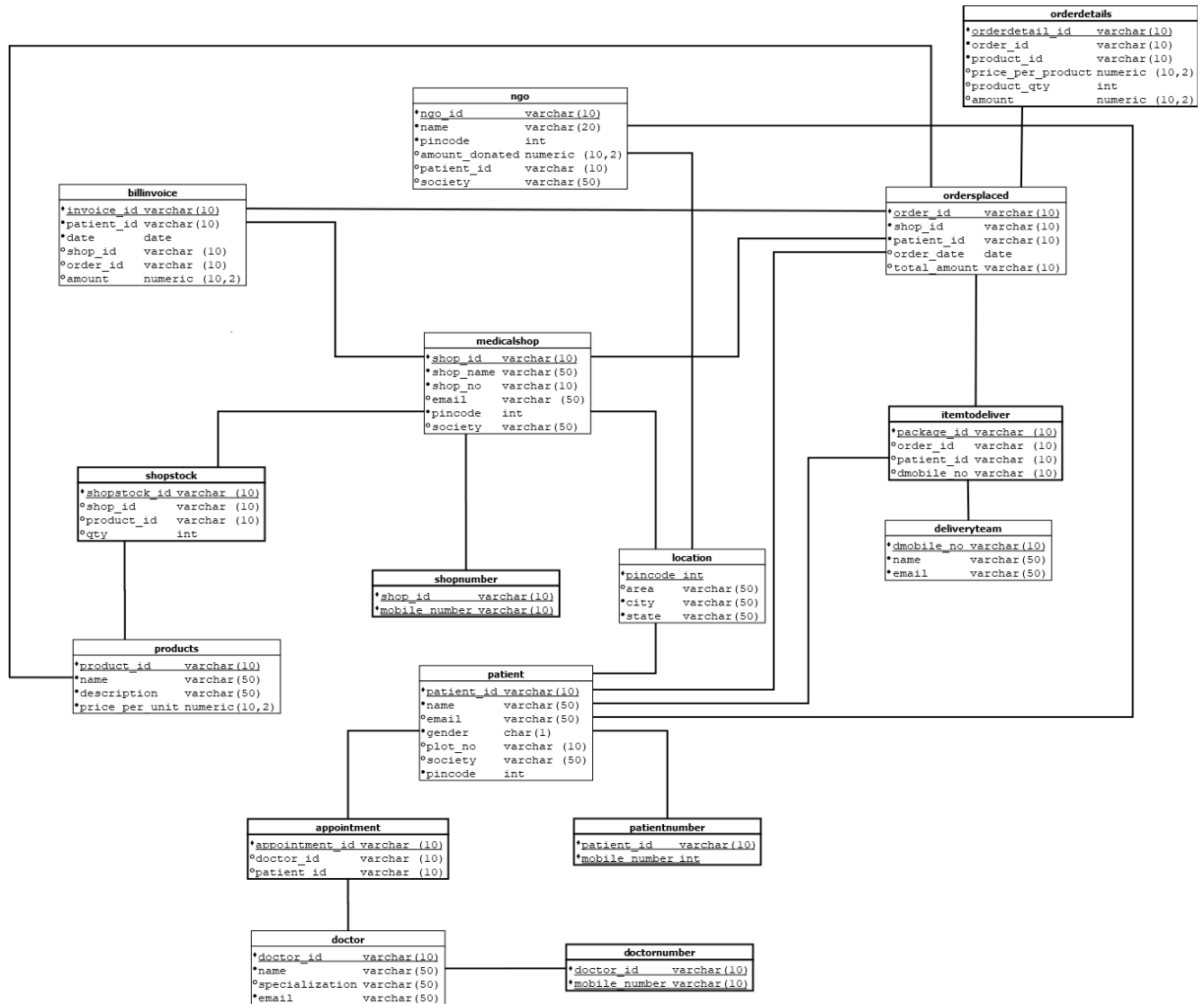
Medical Technology and Information Technology is growing day-by-day. It is a virtual showcase for the need of medicines. Medy-needs as its name suggests all the consumer needs for the medicines can easily be solved by this application. The aim of this project is to connect customers and sellers to each other by the help of designing online pharmacy applications and keep track of the purchasing and selling of medical items and management of the database of the pharmaceutical shop. This is done by creating a database of the available medicines in the shop. This program can be used in any pharmaceutical shop having a database to maintain. The software used can generate reports, as per the users' requirements. The software can also print Bills, Invoices, Receipts etc. It can also maintain the record of supplies sent in by the supplier. It is a computer-based system which helps the Pharmacist to improve inventory management, cost, medical safety and it is designed to improve the accuracy, enhance safety and efficiency in the pharmaceutical store.

The software is designed for complex automation of routine processes related to medication use, patient care, billing, document management, relationship with suppliers, prescription processing within pharmacies and pharmacy chains trading medicines, dietary supplements, hygiene items, medical supplies, and others.

Description / Requirements

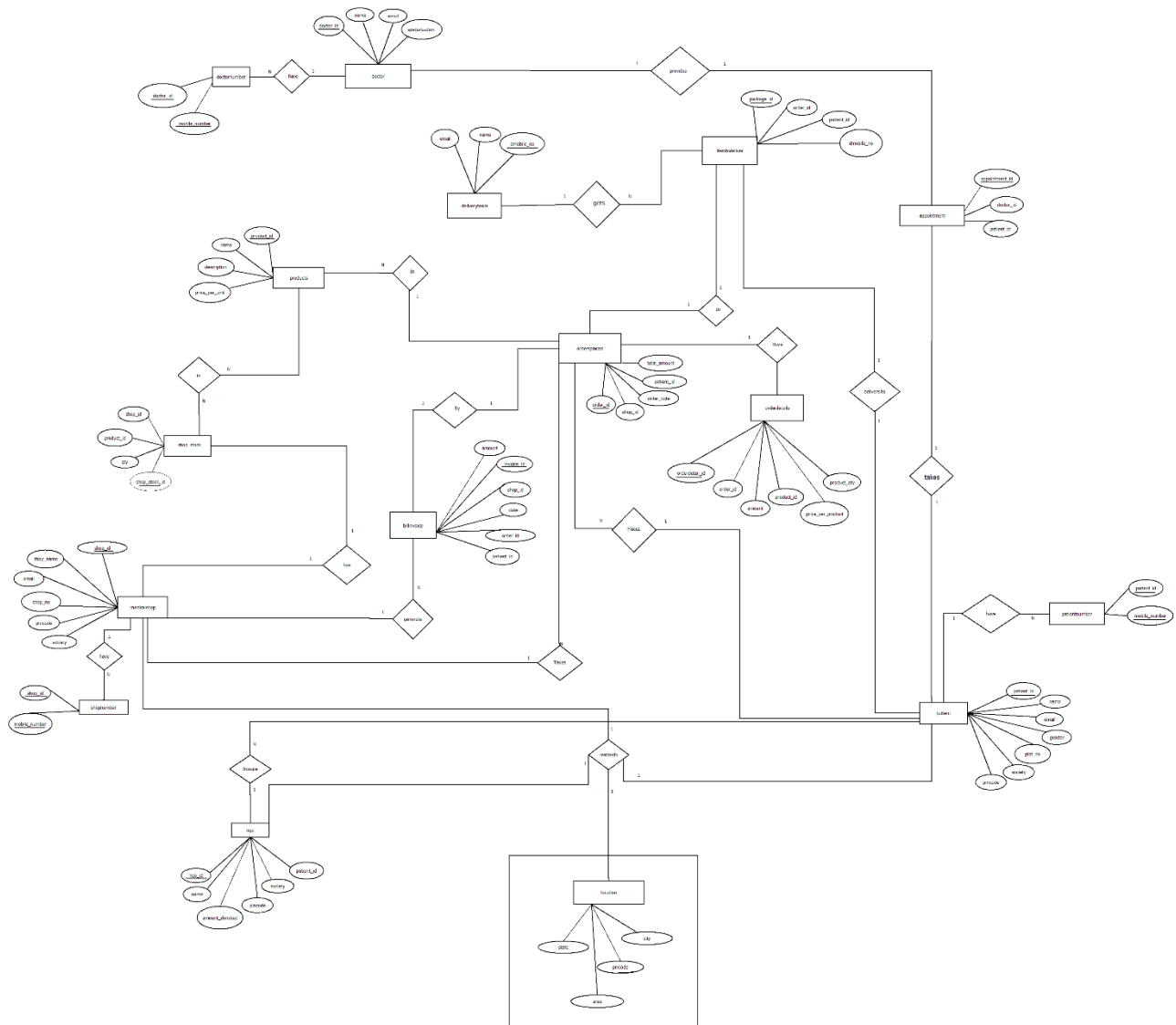
- Medy-needs provides all kinds of medicine, pharmacists and doctors.
- Customers have to create their account and they will be allocated a custid which will be unique. One customer can select multi-medicine to order but only one order at a time.
- Customers can connect to doctors to take advice (if the customer wants to connect). The doctor needs to create their profile with details (id, name, location, reg. number, mobile no, email).
- The database needs to keep track of customer's details (id, name, address, DOB, gender, mobile number, email) and the doctor's details (id, name, location, reg. number, mobile no, email).
- Our system connects the customer with sellers as well. The user can select medicine from the seller that she/he wants to buy.
- Each seller will allot or be given a different seller id. The seller needs to create their profile (name, shopno, reg. no, productid, phoneno, city, state, pincode of their location).
- When the customer places an order, one delivery person (having unique deliveryid) will be allotted the particular order (having the unique purchase id) and will deliver the product to the customer. And now customer can provide feedback.
- Provides the searching facilities based on various factors. Such as Medical Shop, Inventory, sells, Company.
- It tracks all the information of Stocks, Medicines, Sells etc.
- It manages the information of Stock.
- It shows the information and description of the Medical Shop, Inventory.
- All the fields such as medical shop, Inventory, Company are validated and do not take invalid values.
- It generates reports on Medical Shop, Stocks, Medicines.
- It provides filter reports on Inventory, Sells, Company.
- To increase efficiency of managing the medical shop, Stocks.
- It deals with monitoring the information and transactions of sales.
- Manage the information of the Medical Shop.
- Editing, adding and updating of records is improved which results in proper resource management of Medical Shop data.

Relational Schema



https://drive.google.com/file/d/1v80cqK6vHY_hjP3iUQ3hhOfIM8Opu900/view?usp=sharing

ER Diagram



https://drive.google.com/file/d/16gyTS_wz6z8sEo5lEIzKuk9bJIH5A6w/view?usp=sharing

Normalization Proofs (BCNF)

❖ medicalshop

<u>shop_id</u>	shop_name	shop_no	email	pincode	society
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FD's :

- shop_id -> shop_name
- shop_id -> shop_no
- shop_id -> email
- shop_id -> pincode
- shop_id -> society

KEY = shop_id

DETERMINANT IS KEY HENCE RELATION IS IN **BCNF**

❖ location

<u>pincode</u>	area	city	state
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FD's :

- pincode -> area
- pincode -> city
- pincode -> state

KEY = pincode

DETERMINANT IS KEY HENCE RELATION IS IN **BCNF**

❖ patient

<u>Patient_id</u>	name	email	gender	plot_no	society	pincode
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FD's :

- patient_id -> name
- patient -> email
- patient -> gender
- patient -> plot_no
- patient -> society
- patient -> pincode

KEY = patient_id

DETERMINANT IS KEY HENCE RELATION IS IN **BCNF**

❖ appointment

<u>appointment_id</u>	doctor_id	patient_id
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FD's :

- appointment_id -> doctor_id
- appointment_id -> patient_id

KEY = appointment_id

DETERMINANT IS KEY HENCE RELATION IS IN **BCNF**

❖ product

<u>product_id</u>	name	description	price_per_unit
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FD's :

- product_id -> name
- product_id -> description
- product_id -> price_per_unit

KEY = product_id

DETERMINANT IS KEY HENCE RELATION IS IN **BCNF**

❖ shopstock

<u>shopstock_id</u>	shop_id	product_id	qty
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FD's :

- shopstock_id -> shop_id
- shopstock_id -> product_id
- shopstock_id -> qty

KEY = shopstock_id

DETERMINANT IS KEY HENCE RELATION IS IN **BCNF**

❖ **billinvoice**

<u>invoice_id</u>	patient_id	date	shop_id	order_id	amount
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FD's :

- invoice id -> patient_id
- invoice id -> date
- invoice id -> shop_id
- invoice id -> order_id
- invoice id -> amount

KEY = invoice_id

DETERMINANT IS KEY HENCE RELATION IS IN **BCNF**

❖ **ordersplaced**

<u>order_id</u>	shop_id	patient_id	order_date	total_amount
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FD's :

- order_id -> shop_id
- order_id -> patient_id
- order_id -> order_date
- order_id -> total_amount

KEY = order_id

DETERMINANT IS KEY HENCE RELATION IS IN **BCNF**

❖ deliveryteam

<u>dmobile_no</u>	name	email
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FD's :

- dmobile_no -> name
- dmobile_no -> email

KEY = dmobile_no

DETERMINANT IS KEY HENCE RELATION IS IN **BCNF**

❖ doctor

<u>doctor_id</u>	name	specialization	email
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FD's :

- doctor_id -> name
- doctor_id -> specialization
- doctor_id -> email

KEY = doctor_id

DETERMINANT IS KEY HENCE RELATION IS IN **BCNF**

❖ itemtodeliver

<u>package_id</u>	order_id	patient_id	dmobile_no
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FD's :

- package_id -> order_id
- package_id -> patient_id
- package_id -> dmobile_no

KEY = package_id

DETERMINANT IS KEY HENCE RELATION IS IN **BCNF**

❖ ngo

<u>ngo_id</u>	name	pincode	amount_donated	patient_id	society
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FD's :

- ngo_id -> name
- ngo_id -> pincode
- ngo_id -> amount_donated
- ngo_id -> patient_id
- ngo_id -> society

KEY = ngo_id

DETERMINANT IS KEY HENCE RELATION IS IN **BCNF**

❖ orderdetails

<u>orderdetail_id</u>	order_id	product_id	price_per_p roduct	product_qt y	amount
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FD's :

- orderdetail_id -> order_id
- orderdetail_id -> product_id
- orderdetail_id -> price_per_product
- orderdetail_id -> product_qty
- orderdetail_id -> amount

KEY = orderdetail_id

DETERMINANT IS KEY HENCE RELATION IS IN **BCNF**