1. DATA DICTONARY:

What Is Data Dictionary ?

- A data dictionary contains metadata i.e data about the database.
- The users of the database normally don't interact with the data dictionary, it is only handled by the database administrators.
- The data dictionary is very important as it contains information such as what is in the database, who is allowed to access it, where is the database physically stored etc.
- The data dictionary generally contains the information about the following:
  - Names of all the database tables and their schemas.
  - Details about all the database, such as their owners, their security constraints, when they were created etc.
  - Physical information about the table such as where they are stored and how.
  - Table constraints such as primary key attributes and foreign key information etc.
  - Information about the database views that are visible.

❖ The different type of data dictionary are as follows:

- Active Data Dictionary :

  - If the structure of the database or its specifications change at any point of time, it should be reflected in the data dictionary. This is the responsibility of the database management system in which the data dictionary resides.
  - So, the data dictionary is automatically updated by the database management system when any changes are made in

the database. This is known as an active data dictionary as it is self-updating.

- Passive Data Dictionary :

  - This is not as useful or easy to handle as an active data dictionary. A passive data dictionary is maintained separately to the database whose contents are stored in the dictionary.
  - That means that if the database is modified the database dictionary is not automatically updated as in the case of Active Data Dictionary.

❖ DATABASE DESIGN

DataBase Name : ehealthcare

1. **Table Name :** admin

This Table Is Used To Store Information Of Admin.This Table Has Multiple Field Like admin_id,admin_email,admin_name and admin_password this all field are used to login in system for administration.

Sr.no	Field Name	Data Type	Size	Constraint	Description
1	admin_id	Int	3	Primary Key,Auto Increment	Use to Store Admin Id
2	admin_email	Varchar	25	Unique , NotNull	Use to Store Email Id
3	admin_Name	Varchar	15	Notnull	Use to Store Admin Name
4	admin_password	Varchar	8	NotNull	Use to Store Password

2. Table Name : doctor

This Table Is Used To Store Information Of Doctor .This Table Is Use When Any Patient Or doctor Want To See The Information Related TO Doctor On System Then This Table Is Use.

This Table Also Contain Image Field With That Doctor Can Upload His/her Image in Sysem.

Sr.no	Field Name	Data Type	Size	Constraint	Description
1	doc_id	Int	3	Primary Key,Auto Increment	Use To Store Doctor Id
2	doc_email	Varchar	25	Unique , NotNull	Use to store doctor email
3	doc_name	Varchar	15	NotNull	Use To Store Doctor's Name
4	doc_gender	Varchar	6	Notnull	Use to Store Gender Of Doctor.
5	doc_password	Varchar	8	NotNull	Use To Store Doctor's Email Password
6	doc_phoneno	Varchar	12	Unique , NotNull	Use To Store Doctor's Phone Number
7	spec_id	Int	2	References (specialist Table)	Use to Store Doctor's Specialist
8	doc_charge	Int	5	NotNull	Use TO Store Charge Of Doctor
9	doc_img	Varchar	30	Notnull,unique key	Use To Store Path Of Image

3. **Table Name :** schedule

This Table Is Use To Store Information Of Doctor's Session Or Schedule . This Schedule Are Create By Doctor It Self And Also Editable And Also Admin Can manage It.

Sr.no	Field Name	Data Type	Size	Constraint	Description
1	sche_id	Int	3	Primary Key,Auto Increment	Use To Store Schedule Id
2	doc_id	Int	3	References (doctor Table)	Use To Store Doctor Id
3	sche_title	Varchar	20	NotNull , unique key	Use To Store Schedule Title
4	sche_date	date		NotNull	Use To Store Schedule Date
5	sche_start	time		NotNull	Use To Store Schedule Starting Time
6	sche_end	time		NotNull	Use To Store Schedule Ending Time
7	sche_noappo	Int	3	NotNull	Use TO Store Maximum Appointment For Schedule

4. **Table Name :** transaction

This Table Is Used TO Store Information of Transaction That Perform By Any Patient On Booking Appointment .This Table Have Multiple Reference Table For get Multiple Data Easyly.

Sr.no	Field Name	Data Type	Size	Constraint	Description
1	tra_id	Int	3	Primary Key, Auto Increment	Use To Store Unique Id Of Transaction
2	doc_id	Int	3	References (doctor table)	Use To Store Doctor Id That reference From doctor Table
3	sche_id	Int	3	References (schedule table)	Use To Store schedule id That Reference From schedule Table
4	patient_id	Int	3	References (patient table)	Use To Store patient id That Reference From schedule Table
5	appo_id	Int	3	References (appointment table)	Use To Store Appointment Id That Reference From appointment Table
6	charge	Int	5	NotNull	Use To Store Charge Of Schedule / Session .

5. **Table Name :** Specialist

This Table Is Use to Store Information Of All Specialist . This Table Is Used In Doctor table For Get Doctor's Specialist.

Sr.no	Field Name	Data Type	Size	Constraint	Description
1	spec_id	Int	2	Primary Key,Auto Increment	Use to Store Specialist Type Id
2	spec_type	Varchar	25	NotNull	Use to Store Specialist Type

6. **Table Name :** article

This Table Is Use When Any Doctor Want's TO Post His/her Article On any Health Topic Then This Table Is Used TO Store This Information . also It Contain Image Field With That Doctor Give Visual media.

Sr.no	Field Name	Data Type	Size	Constraint	Description
1	article_id	Int	3	Primary Key,Auto Increment	Use to Store Article Unique Id
2	doc_id	Int	3	Reference(doctor Table)	Use to Store doctor Id That Reference From Doctor Table.
3	article_date	Date		Notnull	Use To Store Date of Article .
4	article_title	Varchar	25	Nonull	Use To Store Title Of Any Article.
5	article_description	Varchar	500	Notnull	Use To Store Deatil of Article.
6	article_image	Varchar	25	Notnull	Use To Store Path Of Image That Use In Article.

2. Data Flow Diagram :-

❖ What Is DFD ?

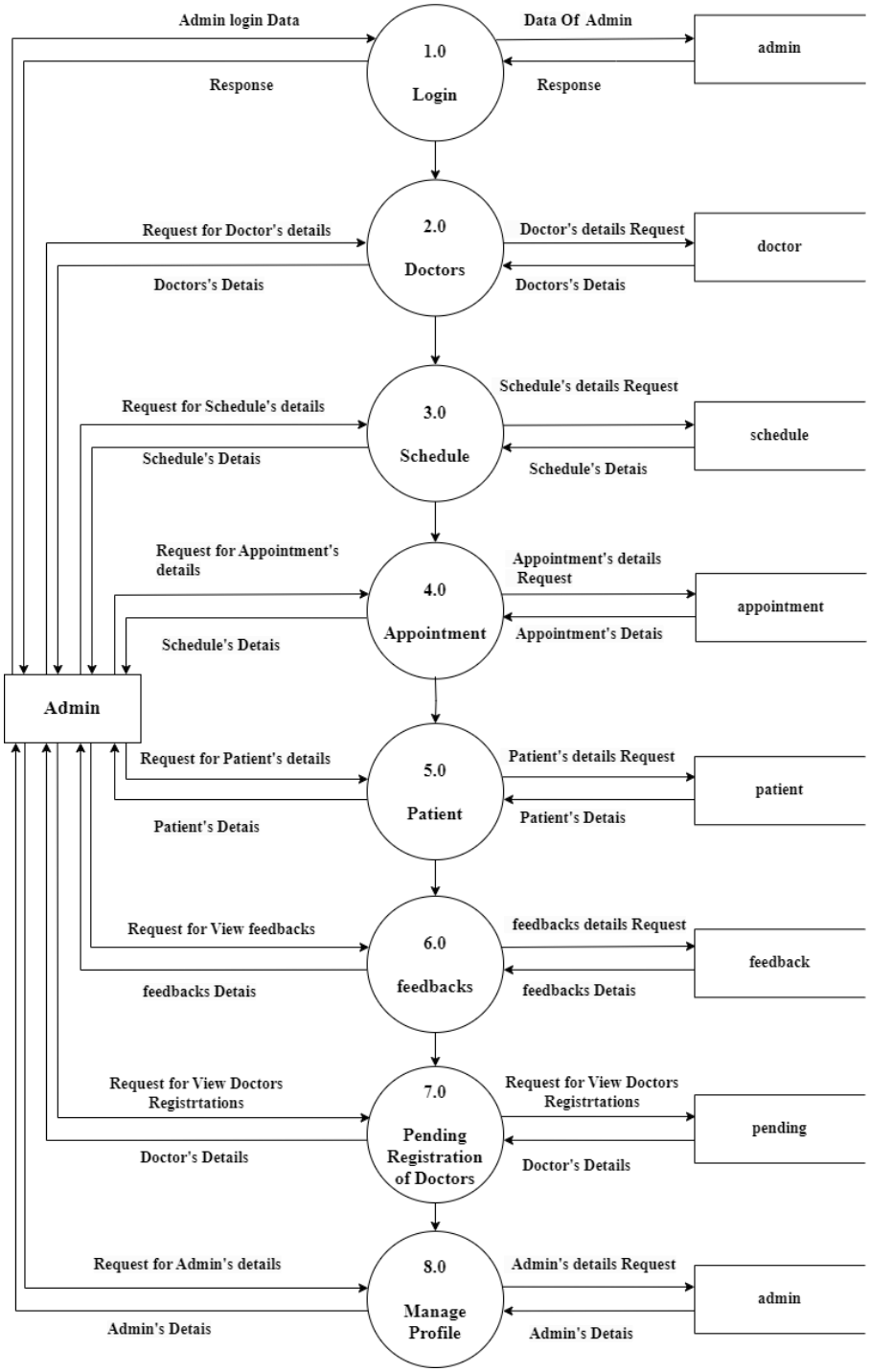
- A Data Flow Diagram(DFD) is a traditional way to visualize the information flows within a system. A neat and clear DFD can depict a good amount of the system requirements graphically.
- It shows how information enters and leaves the system, what changes the information and where information is stored.
- The purpose of DFD is to show the scope and boundaries of a system as a whole.
- It may be used as a communications tool between a system analyst and any person who plays a part in the system that acts as the starting point for redesigning a system.
- It usually begins with a context diagram as level 0 of the DFD diagram, a simple representation of the whole system.
- To elaborate further from that, we drill down to a level 1 diagram with lower-level functions decomposed from the major functions of the system. This could continue to evolve to become a level 2 diagram when further analysis is required.
- Progression to levels 3, 4 and so on is possible but anything beyond level 3 is not very common.

❖ Rule Of Creating DFD :

- All Data Flows must flow to or from a process.
- A process must have at least one input flow and one output flow.
- The input to a process must be sufficient to produce output flows.
- Process must transform data.
- Data cannot flow between two entities.
- Data cannot flow directly from an entity to data store.

SYSTEM : E-Health Care Management System

❖ admin Level-1 DFD :



❖ Doctor Level – 1 DFD :