

DELHI TECHNOLOGICAL UNIVERSITY
(FORMERLY DELHI COLLEGE OF ENGINEERING)

BACHELOR OF TECHNOLOGY
IN
INFORMATION TECHNOLOGY

PRS PROJECT
ON
HOSPITAL MANAGEMENT SYSTEM



IT202- DATABASE MANAGEMENT SYSTEMS

SUBMITTED BY:

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SUBMITTED TO:

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PROBLEM STATEMENT

The Hospital Management System is designed for any hospital to replace their existing manual paper-based system. This system can store and control the information of both the staffs and patients of the hospital.

The client approached us asking to design a database management system for their hospital which would be easy to operate, ensures proper storage and easy retrieval of information. He wanted a database which could store the information of all the staffs of the hospital-their employee code, names, designation, salary, date of birth, date of joining, contact number, city, email id and the ID of the department to which they belong.

Further he wanted the system to store the information of doctors separately so that it would be easy to retrieve the information related to their working hours while the personal information remains among the staff information. He wanted to store the following information for the doctors- their ID, name, department, highest qualification, working hours and consultation fee.

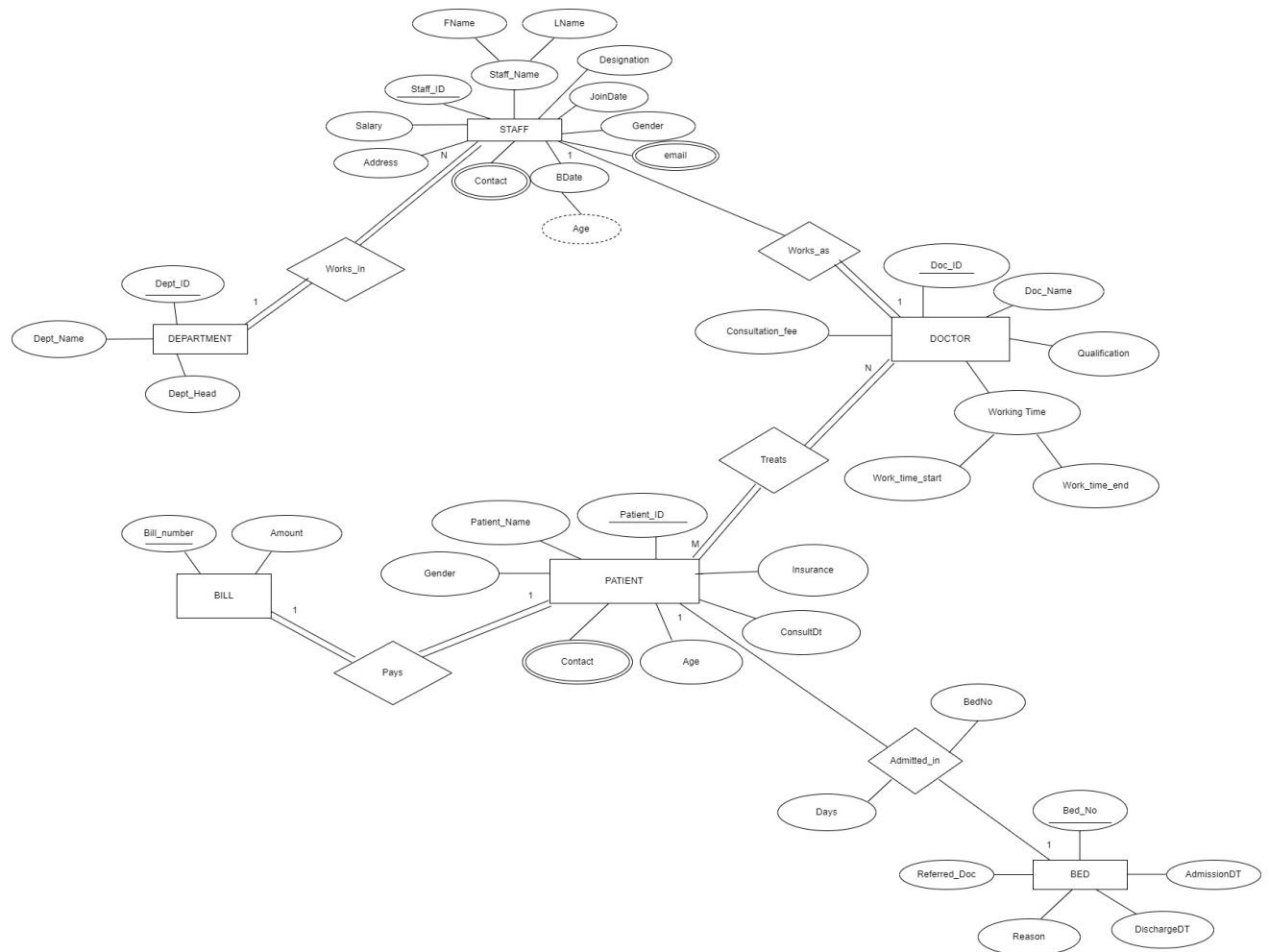
Then he wanted a separate table to store the details of every department such as the department IDs, their corresponding name and the staff who heads the department.

Next, he wanted to store the information related to the patients who visit the hospital- their ID, names, gender, contact, age, the doctor they consult, date of consultation and whether or not they have an insurance.

Further if the patient is admitted, then he wished to store the details of the bed such as the bed number allocated to the patient, the doctor who referred him/her, for what reason he/she was admitted, the dates of admission and discharge and total days of admission.

Finally he wished to store the payment details of the patient such as the bill number and the total amount paid.

ENTITY-RELATIONSHIP (ER) DIAGRAM



SCHEMAS

STAFF

<u>Staff_ID</u>	FName	LName	Designation	Gender	BDate	Contact
Email	Address	Salary	JoinDate	Department_ID		

DEPARTMENT

<u>Dept_ID</u>	Dept_Name	Dept_Head
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DOCTOR

<u>Doc_ID</u>	Doc_Name	Dept	Qualification	Contact	Work_time_start
Work_time_end	Consultation_fee				

PATIENT

<u>Patient_ID</u>	Patient_Name	Gender	Contact	Age
Doctor_ID	ConsultDt	Insurance		

ADMITTED_IN

<u>Patient_ID</u>	BedNo	Days
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BED

<u>Bed_No</u>	PID	PName	Referred_Doc	AdmissionDT
DischargeDT	Reason			

BILL

Patient_ID	Patient_Name	Doc_ID	Amount	<u>Bill_Number</u>
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POPULATED TABLES

STAFF:

156 • `select * from staff;`

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Result Grid											
Filter Rows:											
Edit: Export/Import: Wrap Cell Content:											
Staff_ID	FName	LName	designation	Gender	BDate	Contact	email	Address	Salary	JoinDate	Department_ID
EM1001	Parveen	Shah	Receptionist	F	1996-05-13	997132456	parveens@gmail.com	Noida	17000	2017-06-12	DPT1001
EM1007	Rihan	John	Receptionist	M	1994-03-21	775489672	rihanjohn123@yahoo.com	Gurgaon	21000	2015-08-03	DPT1001
EM1010	Joya	Selin	Receptionist	F	1994-12-15	999765274	selinaajoya89pk@gmail.com	New Delhi	19300	2016-09-16	DPT1001
EM1215	Meenakshi	Kumar	Senior Receptionist	F	1990-10-10	953726651	meenakshikv@yahoo.com	Chennai	26000	2010-04-02	DPT1001
EM1342	Rupesh	Seth	Administrator	M	1985-01-01	779654325	rupeshseth1445@gmail.com	Gujarat	32000	2010-01-13	DPT1005
EM1352	Rupali	Mishra	Junior Manager	F	1994-08-04	998365721	rupalimishra@yahoo.com	Bhopal	35000	2016-06-10	DPT1005
EM2000	Seema	Jain	Senior Manager	F	1988-03-03	998376662	jainseemakaushik@gmail.com	Lucknow	37500	2014-05-12	DPT1005
EM2005	Ritvik	Jain	Senior Executive	M	1990-10-05	777936555	ritvikkumarmalhotra@gmail.com	Bhopal	32000	2011-03-10	DPT1010
EM2010	Suhana	Khadar	Accounts Executive	F	1997-05-05	736542287	suhu123@yahoo.com	Vishakapatnam	27500	2020-08-12	DPT1010
EM2999	Rishabh	Kumar	Senior Accountant	M	1993-02-19	374655362	rishikumarap@gmail.com	New Delhi	30000	2010-06-02	DPT1010
EM3001	Devika	Banerjee	Senior Nurse	F	1980-08-03	887277762	banerjeedevisa889@gmail.com	Kolkata	35000	2009-05-12	DPT1015
EM3005	Sourabh	Shah	Nurse	M	1988-04-15	775468319	sourabhshah@yahoo.com	Lucknow	29000	2012-05-05	DPT1015
EM3009	Deepanjali	Mishra	Nurse	F	1994-10-02	888748576	deepanjalimishra809@yahoo.c...	Noida	27500	2015-03-04	DPT1015
EM3820	Shiv	Malhotra	Lab Technician	M	1984-10-05	887473654	shivmalhu@gmail.com	Vadodara	30000	2009-12-09	DPT1020
EM3990	Sania	Mehta	Lab Technician	F	1992-07-18	877654736	saniamehta678@gmail.com	Bhopal	27500	2013-04-17	DPT1020
EM4000	Bipin	Rawat	Lab Technician	M	1995-03-17	477687652	rawatbipinrawat@yahoo.com	New Delhi	26000	2012-06-29	DPT1020
EM5001	Snehal	Yadav	Physician	M	1990-04-25	747473874	snehalyadav555@gmail.com	Patna	50000	2010-10-10	DPT1025
EM5003	Radhika	Madan	Physician	F	1986-09-26	85564764	madanaradhika888@yahoo.com	Bangalore	52000	2008-09-12	DPT1025
EM5010	Vishwas	Mehta	Physician	M	1980-01-20	387657421	vishwasmehta_566734@gmail....	Mumbai	55000	2008-05-13	DPT1025
EM5200	Ila	Sunil	Surgeon	F	1988-05-15	377645745	sunellilally@gmail.com	Pune	50000	2014-05-12	DPT1030
EM5225	Shraddha	Gavaskar	Surgeon	F	1994-04-12	877465735	shraddgavaskar345@yahoo.com	Allahabad	50000	2016-07-14	DPT1030
EM5660	Bharati	Yadav	Physician	F	1996-04-14	844657872	yadavbharatitanuja@gmail.com	Patna	48500	2014-06-16	DPT1035
EM5664	Krishna	Rawat	Physician	M	1990-04-15	374987443	krishnarawat155@yahoo.com	Lucknow	50000	2010-03-15	DPT1035
EM6000	Vishnu	Prabhakar	Physician	M	1984-03-13	444987652	prabhavishnu@gmail.com	Cochin	52000	2011-07-18	DPT1040
EM6210	Vipulitha	Mehta	Physician	F	1995-11-11	884758665	mehtavipulitha506@gmail.com	Nagpur	49000	2016-04-12	DPT1040
EM6420	Mahesh	Bhatt	Physician	M	1990-07-13	887658492	maheshbhattp@yahoo.com	Patna	48000	2014-01-11	DPT1045
EM6500	Sneha	Vineesh	Physician	F	1995-04-12	999756743	snehavineesh666@gmail.com	Trivandrum	46000	2019-05-13	DPT1045
EM6666	Ravi	Taneja	Physician	M	1993-02-02	988476537	tannuravitaneja@yahoo.com	Chandigarh	50000	2009-04-23	DPT1050
EM6669	Rahul	Srivastav	Physician	M	1995-06-08	988296537	rahulsi55463@ygmil.com	Porbandar	50000	2011-04-27	DPT1050
EM6670	Rohini	Lekhi	Physician	F	1988-03-29	909476537	lekhirohiniabc45@yahoo.com	Hyderabad	54000	2009-07-20	DPT1050

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PATIENT:

```
152 • select * from patient;
```

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153
```

Result Grid

Filter Rows:

Edit:

Export/Import:

Wrap Cell Content:

	Patient_ID	Patient_Name	Gender	Contact	Age	Doctor_ID	ConsultDt	insurance
▶	1000036	Shalini Sharma	F	169910954	54	EM5003	2020-10-02	No
	1000075	Vishwas Singh	M	985580065	35	EM6420	2020-09-11	Yes
	1024535	Veer Kumar Singh	M	985576465	45	EM6500	2020-08-13	Yes
	1028475	Veer Rajwant Singh	M	985583465	35	EM5001	2020-02-13	No
	1876500	Soni Srivastav	M	877765847	30	EM5664	2020-07-04	Yes
	1878234	Suhas Malhotra	M	800765847	28	EM5010	2020-04-18	Yes
	2106105	Sirisha Joshi	F	286029880	29	EM6210	2020-01-10	Yes
	2106475	Shivangi Joshi	F	286027480	24	EM5225	2020-10-09	Yes
	2776475	Shivani Padukone	F	786557480	28	EM6210	2020-12-06	Yes
	5007003	Mahesh Yadav	M	748828732	40	EM5200	2020-01-15	No
	5467003	Madhur Yadav	M	748810632	32	EM5660	2020-01-01	No
	5467653	Shivam Malhotra	M	748875632	32	EM6669	2020-09-10	No
	9000365	Priyank Sharma	M	169975554	30	EM6670	2020-04-17	Yes
	9087365	Priyanka Sinha	F	109975864	35	EM6666	2020-05-14	No
✱	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

ADMITTED_IN:

```
154 • select * from admitted_in;
```

```
155
```

Result Grid

Filter Rows:

Edit:

Export/Import:

	Patient_ID	BedNo	Days
▶	1000036	104	3
	1000075	107	2
	2106105	111	4
	2776475	115	5
	5007003	102	1
•	NULL	NULL	NULL

BED:

```
155 • select * from bed;
```

Result Grid			Filter Rows:	<input type="text"/>	Edit:				Export/Import:			Wrap Cell Content:	
	Bed_No	PID	Pname	Referred_Doc	AdmissionDT	DischargeDT	reason						
▶	102	5007003	Mahesh Yadav	Sunil	2020-01-15	2020-01-16	Arm Injury						
	104	1000036	Shalini Sharma	Radhika	2020-10-05	2020-10-08	Surgery						
	107	1000075	Vishwas Singh	Sneha	2020-09-11	2020-09-13	Viral Fever						
	111	2106105	Sirisha Joshi	Vipulitha	2020-02-13	2020-02-17	Delivery						
	115	2776475	Shivani Padukone	Vipulitha	2020-12-13	2020-12-18	Delivery						
*	NULL	NULL	NULL	NULL	NULL	NULL	NULL						


BILL:


153 • `select * from bill;`




154



155

Result Grid



 Filter Rows:

Edit:   

Export/Import:  

	Patient_ID	Patient_name	Doc_ID	Amount	bill_number
▶	1000075	Vishwas Singh	EM6420	3000	B109109957
	1000036	Shalini Sharma	EM5003	153500	B909987657
	1876500	Soni Srivastav	EM5664	1000	E002272981
	1878234	Suhas Malhotra	EM5010	1500	E093334451
	1024535	Veer Kumar Singh	EM6500	500	P209100918
	1028475	Veer Rajwant Singh	EM5001	500	P271090429
	2106105	Sirisha Joshi	EM6210	104500	Q001764071
	2776475	Shivani Padukone	EM6210	105500	Q100344666
	2106475	Shivangi Joshi	EM5225	1000	Q111304070
	9087365	Priyanka Sinha	EM6666	500	S703102871
	5467003	Madhur Yadav	EM5660	1000	T776221050
	5007003	Mahesh Yadav	EM5200	51000	T986311653
	5467653	Shivam Malhotra	EM6669	500	U705527950
	9000365	Priyank Sharma	EM6670	1000	U777799900
*	NULL	NULL	NULL	NULL	NULL