

HOSPITAL MANAGEMENT SYSTEM

UI DESIGN AND DATABASES

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GUI Design

The IDE's GUI Builder makes it possible to build professional-looking GUIs without an intimate understanding of layout managers. We can lay out our forms by simply placing components where we want them. I used JFrame to design interfaces of the system in java NetBeans IDE. Eleven interfaces have included in this system. Splash window, Login Window, Main Window, Patient, Doctor, Staff, Medicine Information, Payment Information, Manage Channel, Hospital Information and Login are the Interfaces of this Hospital Management System.

01. Splash Window



02.Login Window



03.Main Window



04.Patient Details Window

Patient Details

Search

Patient ID

Patient Name

Age

Gender

Room Number

Contact Number

Disease

Add

Clear

Update

Delete

Exit

PATIENTID	PATIENTNAME	AGE	GENDER	ROOMNUMBER	CONTACTNUMBER	DISEASE
123	Y.E.Hasinika	23	Female	22	774562389	High blood Press...
124	U.H. Lakshani	45	Female	4	774562222	Cholesterol
125	T.H. Perera	35	Male	4	774578905	allergic
126	T.G. Siriwardhana	67	Male	5	787578967	Eye disease
127	T.G. Herath	87	Male	10	787578967	Eye disease

05.Doctor Details Window

Doctor Details

Search

Doctor ID

Doctor Name

Specialization

Working Time

Room Number

Contact Number

Qualifications

Add

Clear

Update

Delete

Exit

DOCTERID	DOCTERNAME	SPECIALIZATION	WORKINGTIME	ROOMNUMBER	CONTACTNUMB...	QUALIFICATIONS
124	Dr.Gayani Samar...	Surgery	10.00-12.00 a.m.	13	775443367	MBBS
120	Dr.Tihan Gamage	Surgery	12.00-4.00 p.m.	10	775343360	MBBS Master in s...
121	Dr.Tihan Gamage	Surgery	12.00-4.00 p.m.	10	775343360	MBBS Master in s...
125	Dr.Chanu Perera	Psychiatry	1.00-5.00 p.m.	14	773434567	MBBS Master in ...
127	Dr.Vidura Umaya...	Surgery	7.00-12.00 a.m.	16	775343789	MBBS

06.Staff Details Window

Staff Details

Search

Staff ID

Staff Name

Occupation

Working Time

Room Number

Contact Number

Qualifications

Add
Clear
Update
Delete
Exit

STTAID	STAFFNAME	OCCUPATION	WORKINGTIME	ROOMNUMBER	CONTACTNUMB...	QUALIFICATIONS
234	G.Madhavi Perera	Nurse	10.00 - 12.00 a.m.	5	764532457	Bechelor of Scien...
235	C.E. Suresh	Nurse	1.00 - 2.00 p.m.	6	764578565	Bechelor of Scien...
236	F.L. Hansika	Nurse	6.00 - 8.00 p.m.	6	764523453	Bechelor of Scien...
237	C.S. Perera	Nurse	1.00 - 2.00 a.m.	7	774568565	Bechelor of Scien...
238	R.S. Gamage	Nurse	8.00 - 12.00 a.m.	10	774564567	Bechelor of Scien...

07.Medicine Information Window

Medicine Information

Search

Medicine ID

Medicine Name

Medicine Price

Quantity

Production Date

Expiration Date

Other Information

Add
Clear
Update
Delete
Exit

MEDICINEID	MEDICINENAME	MEDICINEPRICE	QUANTITY	PRODUCTDATE	EXPIREDATE	OTHERINFORMA...
1	Vitamin C	2	50000	2021-07-21	2023-07-20	Upcoming Two St...
2	Vitamin E	2	600000	2021-07-09	2022-11-30	Upcoming One St...
3	Pirton	3	750000	2021-07-09	2022-11-30	Stock is not enough
4	Panadol	5	780000	2021-07-15	2022-10-12	Upcoming One St...
5	Panadol syrup	780	9000	2021-07-15	2022-08-14	Upcoming One St...

08.Payment Information Window

Payment Information

Search

Patient ID

Patient Name

Room Charge

Service Charge

Discharge Date

Other Details

PATIENTID	PATIENTNAME	ROOMCHARGE	SERVICECHARGE	TOTALCHARGE	DISCHARGEDATE	OTHERDETAILS
1	Saduni kaushalya	2000	3400	5400	2021-07-14	Payed
2	Y.N. Ranasinha	4500	7800	12300	2021-07-01	Payed
3	D.S. Gunathilaka	8500	10800	19300	2021-07-10	Payed
4	U.W. Hansa	2500	5600	8100	2021-07-22	Payed
5	I.N. kavinda	5000	5700	10700	2021-07-14	Payed

09.Manage Channels Window

Manage Channels

Search

Patient ID

Patient Name

Channel Number

Doctor ID

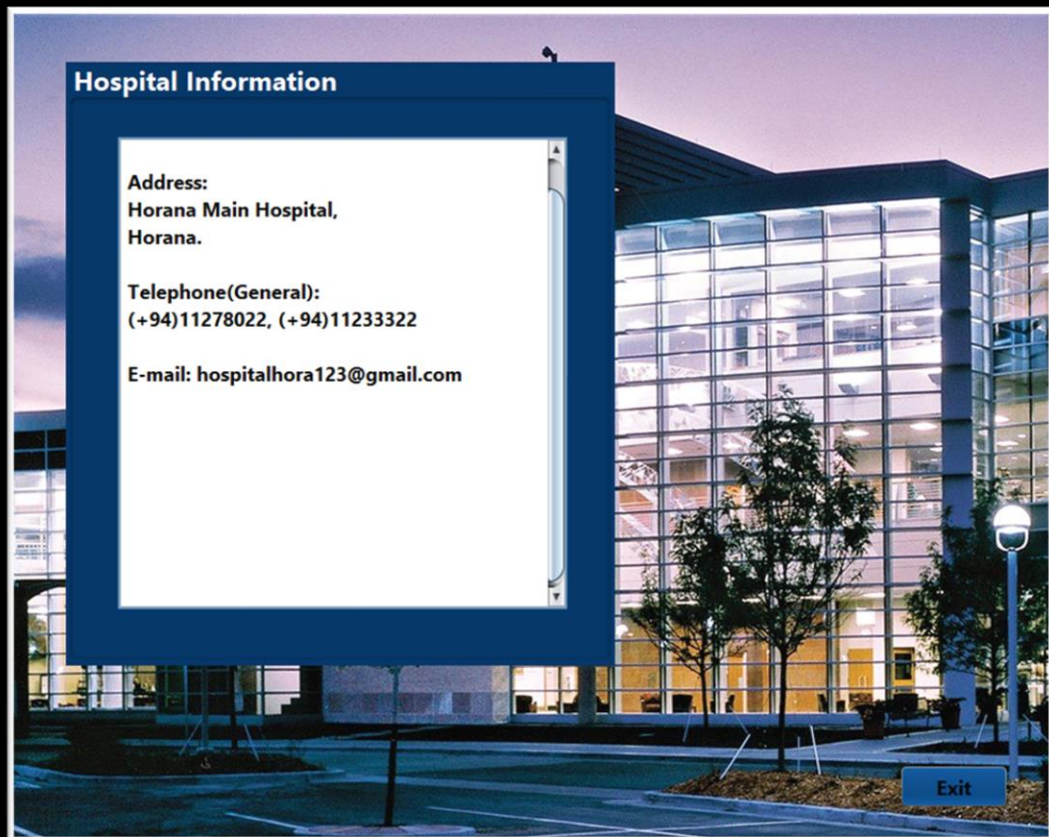
Doctor Name

Room Number

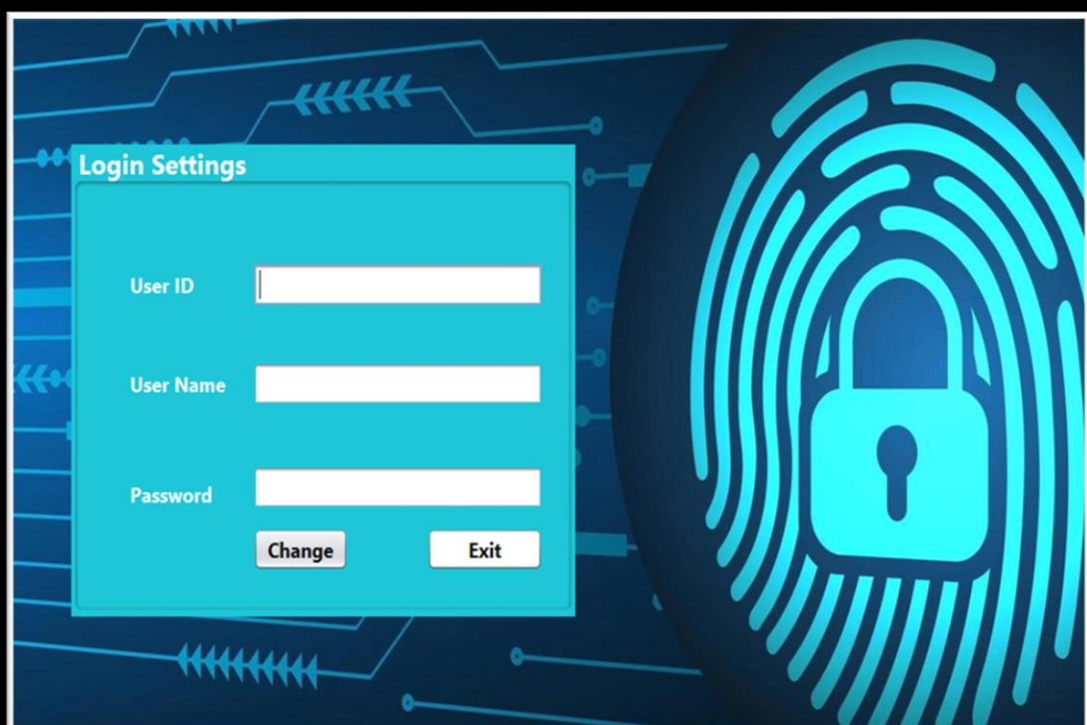
Channel Date

PATIENTID	PATIENTNAME	CHANNELNUMB...	DOCTORID	DOCTORNAME	ROOMNUMBER	CHANNELDATE
1	Y.S. Disanayaka	1	12	Dr.Yasas Siriwar...	10	2021-07-31
2	Y.N. Gamage	2	15	Dr.Gayani Gunath...	10	2021-08-04
3	C.N. Gunawardha...	3	15	Dr.Gayani Gunath...	10	2021-08-04
4	S.G. Thakshila	4	12	Dr.Yasas Siriwar...	10	2021-08-19
5	S.J. Prathiba	5	12	Dr.Yasas Siriwar...	10	2021-07-22

10. Hospital Information Window



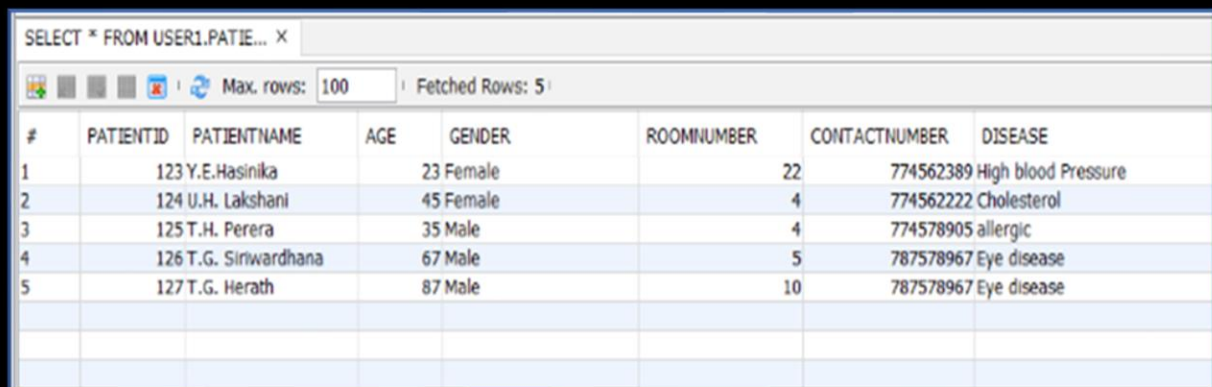
11.Login Settings Window



Data Modelling

Java DB is a fully transactional, secure, standards-based database server, written entirely in Java, and fully supports SQL, JDBC API, and Java EE technology. The Java DB database is packaged with the GlassFish application server, and is included in JDK 6 as well. This system has Seven databases relevant to the hospital management system. I create databases using MySQL database in NetBeans IDE. Patient Details, Doctor Details, Staff Details, Medicine Information, Payment Information, Manage Channels and Login are the databases that I created for Hospital Management System.

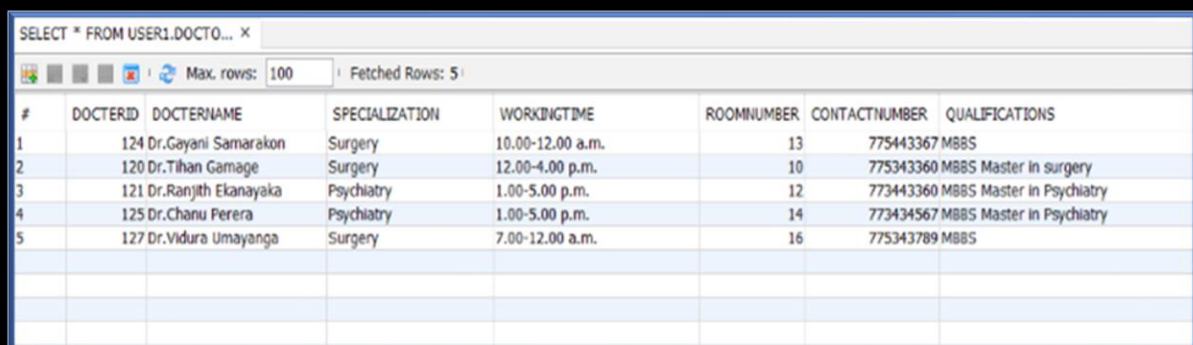
01.Patient Details



The screenshot shows a database query result in NetBeans IDE. The query is "SELECT * FROM USER1.PATIE...". The result is a table with 8 columns: #, PATIENTID, PATIENTNAME, AGE, GENDER, ROOMNUMBER, CONTACTNUMBER, and DISEASE. There are 5 rows of data displayed.

#	PATIENTID	PATIENTNAME	AGE	GENDER	ROOMNUMBER	CONTACTNUMBER	DISEASE
1	123	Y.E.Hasinika	23	Female	22	774562389	High blood Pressure
2	124	U.H. Lakshani	45	Female	4	774562222	Cholesterol
3	125	T.H. Perera	35	Male	4	774578905	allergic
4	126	T.G. Siriwardhana	67	Male	5	787578967	Eye disease
5	127	T.G. Herath	87	Male	10	787578967	Eye disease

02.Doctor Details



The screenshot shows a database query result in NetBeans IDE. The query is "SELECT * FROM USER1.DOCTO...". The result is a table with 8 columns: #, DOCTERID, DOCTERNAME, SPECIALIZATION, WORKINGTIME, ROOMNUMBER, CONTACTNUMBER, and QUALIFICATIONS. There are 5 rows of data displayed.

#	DOCTERID	DOCTERNAME	SPECIALIZATION	WORKINGTIME	ROOMNUMBER	CONTACTNUMBER	QUALIFICATIONS
1	124	Dr.Gayani Samarakon	Surgery	10.00-12.00 a.m.	13	775443367	M8BS
2	120	Dr.Tihan Gamage	Surgery	12.00-4.00 p.m.	10	775343360	M8BS Master in surgery
3	121	Dr.Ranjith Ekanayaka	Psychiatry	1.00-5.00 p.m.	12	773443360	M8BS Master in Psychiatry
4	125	Dr.Chanu Perera	Psychiatry	1.00-5.00 p.m.	14	773434567	M8BS Master in Psychiatry
5	127	Dr.Vidura Umayanga	Surgery	7.00-12.00 a.m.	16	775343789	M8BS

03.Staff Details

SELECT * FROM USER1.STAFF... X							
Max. rows: 100 Fetched Rows: 5							
#	STTAFID	STAFFNAME	OCUPATION	WORKINGTIME	ROOMNUMBER	CONTACTNUMBER	QUALIFICATIONS
1	234	G.Madhavi Perera	Nurse	10.00 - 12.00 a.m.	5	764532457	Bechelor of Science in Nursing Two years work experience
2	235	C.E. Suresh	Nurse	1.00 - 2.00 p.m.	6	764578565	Bechelor of Science in Nursing
3	236	F.L. Hansika	Nurse	6.00 - 8.00 p.m.	6	764523453	Bechelor of Science in Nursing
4	237	C.S. Perera	Nurse	1.00 - 2.00 a.m.	7	774568565	Bechelor of Science in Nursing
5	238	R.S. Gamage	Nurse	8.00 - 12.00 a.m.	10	774564567	Bechelor of Science in Nursing

04.Medicine Information

SELECT * FROM USER1.MEDIC... X							
Max. rows: 100 Fetched Rows: 5							
#	MEDICINEID	MEDICINENAME	MEDICINEPRICE	QUANTITY	PRODUCTDATE	EXPIREDATE	OTHERINFORMATION
1	1	Vitamin C	2	50000	2021-07-21	2023-07-20	Upcoming Two Stock
2	2	Vitamin E	2	600000	2021-07-09	2022-11-30	Upcoming One Stock
3	3	Piriton	3	750000	2021-07-09	2022-11-30	Stock is not enough
4	4	Panadol	5	780000	2021-07-15	2022-10-12	Upcoming One Stock
5	5	Panadol syrup	780	9000	2021-07-15	2022-08-14	Upcoming One Stock

05.Payment Information

SELECT * FROM USER1.PAYME... X							
		Max. rows: 100		Fetched Rows: 5			
#	PATIENTID	PATIENTNAME	ROOMCHARGE	SERVICECHARGE	TOTALCHARGE	DISCHARGEDATE	OTHERDETAILS
1		1 Saduni kaushalya	2000	3400	5400	2021-07-14	Payed
2		2 Y.N. Ranasinha	4500	7800	12300	2021-07-01	Payed
3		3 D.S.Gunathilaka	8500	10800	19300	2021-07-10	Payed
4		4 U.W. Hansa	2500	5600	8100	2021-07-22	Payed
5		5 I.N. kavinda	5000	5700	10700	2021-07-14	Payed

06.Manage Channels

SELECT * FROM USER1.MANAG... X							
		Max. rows: 100		Fetched Rows: 5			
#	PATIENTID	PATIENTNAME	CHANNELNUMBER	DOCTORID	DOCTORNAME	ROOMNUMBER	CHANNELDATE
1		1 Y.S. Disanayaka		1	12 Dr.Yasas Siriwardhana		10 2021-07-31
2		2 Y.N.Gamage		2	15 Dr.Gayani Gunathilaka		10 2021-08-04
3		3 C.N.Gunawardhana		3	15 Dr.Gayani Gunathilaka		10 2021-08-04
4		4 S.G. Thakshila		4	12 Dr.Yasas Siriwardhana		10 2021-08-19
5		5 S.J. Prathiba		5	12 Dr.Yasas Siriwardhana		10 2021-07-22

07.Login

SELECT * FROM USER1.USER... X

Max rows: 100 Fetched Rows: 1 Matching Rows:

#	USERID	USERNAME	USERPASSWORD
1		admin	

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