

Data Base Management System Project Report

Hospital Management System



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ACKNOWLEDGMENT:

We are thankful to Almighty Allah that by His grace we have been successful. We are presenting our Hospital Management System. We have tried our best to take all relevant and necessary topics into our consideration so that this project may become comprehensive.

This is our 4th Semester Project. We have tried our level best & developed it using Java and SQLPlus. We have been assigned to make a management system. We tried to observe the coding and its outlook on Net Beans. We would like to thank our lab engineer Ma'am Salas Akbar and also our course instructor Ma'am Asma Irfan for her guidance and for giving us time from her busy schedule.

We earnestly hope that this project will provide all the necessary information required by the user to fulfil his/her inspiration. However, suggestion and feedbacks for improvements will be thankfully welcomed & acknowledged.

ABSTRACT:

Using our application Hospital Management System, which is a powerful tool that can be used to easily register our patient, appoint a patient, can manage staffs and patient using C.R.U.D operations, check for room availability and can allot the rooms as well to the patient and other basic functionalities of our Hospital Management System. The unique features associated with this includes a basic G.U.I plus an easy process to check or add patient to your system. The applications security is fortified by giving the administrations account so they can observe your information. Maintaining a database as vast as ours and searching patients, doctor, nurse, receptionist and room details that can fetch information easily. For this project, we saw observe from different websites from which we could have grasped the idea and main functionalities of this type of system. The applications demonstrates that it is possible to use this type of system and apply it to a scattered information to make it a simple and an understandable management system.

INTRODUCTION:

In the world of software development there lots of improvement in the area of Architectural design and principles. The philosophies and implementation details are changing as the people guiding the development of the application. In this fantastic and yet sometimes complex world of software development there are some tried and true architecture patterns and software development guidelines employed by most architects. Also your

design must have an ability to turn towards innovation instead of lending itself to common practices. Desktop Applications are one such area where architects must lean on their creative side and hope that their solutions are still successful. In this report we will explain an exciting voyage down the road of Desktop Applications. From requirements to use cases, to database design, to component frameworks, to user interfaces, we will cover each and every aspect of system design required to build an application with collaborative Desktop Applications. The reason we selected Hospital Management System is everybody walking down the street has some idea about hospitals and local clinics. The objective of this project is to develop a hospital system where employees can manage the details of the staff and patients, allot the rooms to the patients, check for room availability.

Our hospital management system is a desktop application where patients can register themselves and check for the doctors according to their needs. The selected doctors may be appointed by the receptionist. At checkout time, the bill will be charged to the patient accordingly. At that time, more information will be needed to complete the transaction, such as, the patient will be asked to fill or select a billing address.

SYNOPSIS:

How do the world's biggest Hospital Management System get managed by a very few amount of employees? By using these kind of management systems! That makes it easy for the user to manage the system by singlehandedly check the availability of staffs, rooms and manage the record by using CRUD operations.

ANALYSIS:

Our "Hospital Management System" mainly deals with automating the tasks of maintaining and recording the staffs and patients and keeping the record of previous and new patients, staffs etc. This process includes the activities such as managing of patient, doctor, nurse, receptionist and room details, maintenance of transactions, availability of staffs and rooms etc.

It is a tedious job to maintain all these details manually. Hence we opted to automate the Hospital Management System. It mainly include three users. Administrator, Receptionist and Doctor. The Administrator has the privileges to maintain and check records, admin can also see the patient records and also gives access to the receptionist in the Databases of the Management System. He or She is concerned with registration of

receptionist, inserting of staffs. The receptionist has the right to make and clear the transactions, Doctor has their right to view their upcoming appointments.

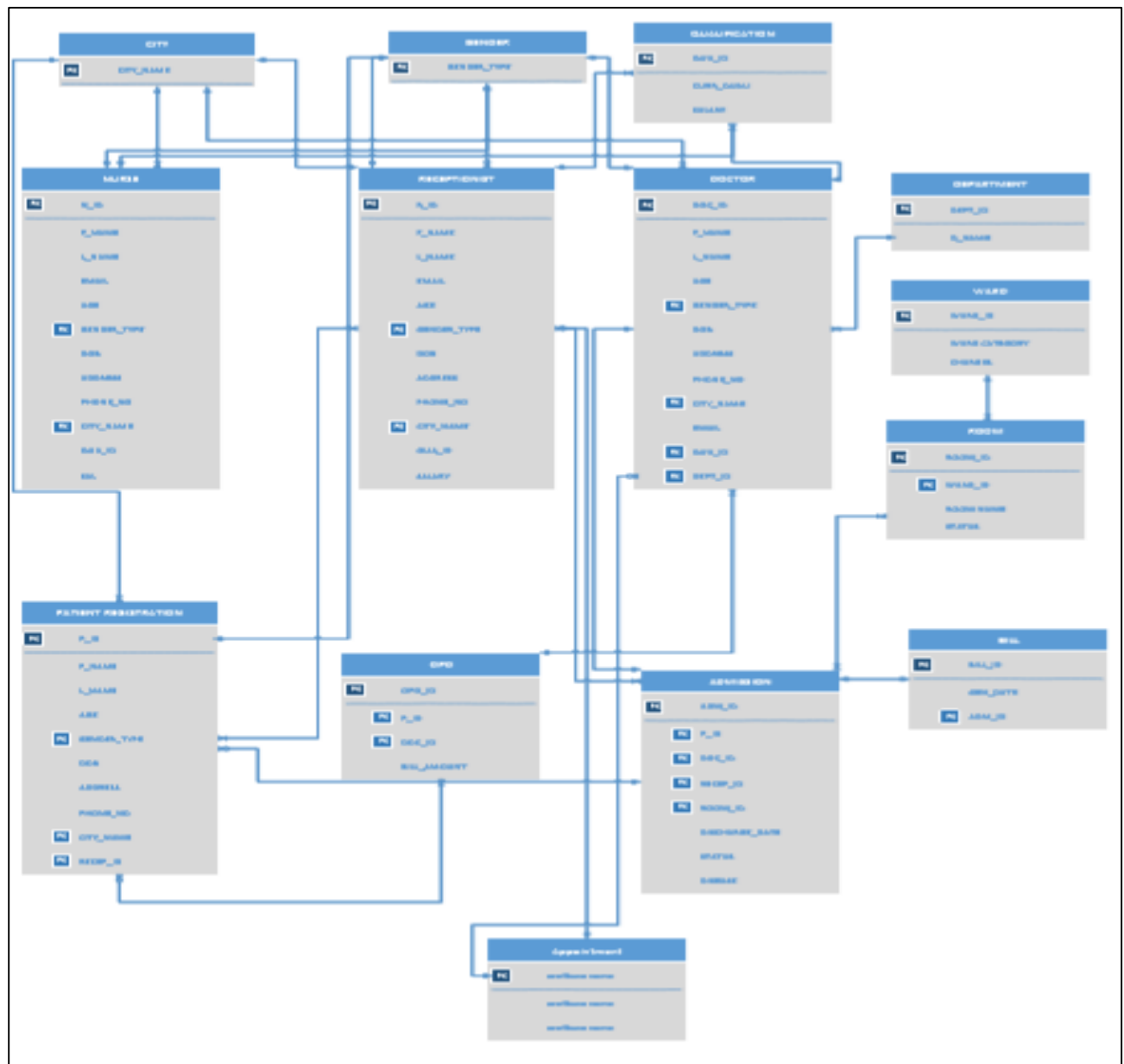
OBJECTIVES OF THE OUR SYSTEM:

- To give rights to the admin.
- To make the application user friendly.
- To acquire up to date details about system.
- To know the status of the doctors and rooms about their availability. To generate the reports as per the management requirements.
- To provide maximum services to the users of the system.
- To ensure the security and reliability of the system.

WORKING:

- Receptionist register the patient detail.
- After adding the patient record receptionist can appoint the doctor to the patient to the OPD first and then doctor views his/her appointments.
- If the patient is to be needed admitted the doctor can call the receptionist to admit the patient.
- After this receptionist allot the room to the patient and can allot the nurse to the specific patient as well.
- When the patient is discharge from the hospital the bill will be generated.
- ADMIN can add delete, view, and search and update hospital staff, rooms and can view the patient information as well.

ERD:



USER GUIDE WITH SCREENSHOTS:

The image displays two screenshots of a Java Swing application running in NetBeans IDE 8.0.2. The application is titled "HospitalManagementSystem - NetBeans" and is running on a Windows 10 desktop.

Top Screenshot: Login Portal

The "Login Portal" window features a blue header bar with a yellow gear icon and the text "10:25:16 PM". Below the header, there is a large cyan rectangular area containing the login form. The form includes a date field showing "2019-05-22", a "Username" label with a text input field, a "Password" label with a text input field, a "Select User" dropdown menu, and a "Login" button.

Bottom Screenshot: ADMIN Portal -- Internal

The "ADMIN Portal -- Internal" window features a blue header bar with a yellow gear icon and the text "Time". Below the header, there is a section titled "ADMIN Portal -- Internal" with a "Back" button. Underneath, there is a section titled "Add Qualification". This section contains a sidebar with four buttons: "Add Qualification", "Add Ward", "Add Room Cate", and "Add Rooms". The main area of the "Add Qualification" section contains a form with the following fields and controls:

- A "Qualification ID" label with a text input field and a "Reset" button.
- A "Current Qualification" label with a text input field and a red asterisk.
- An "Amount Per Qual" label with a text input field and a red asterisk.
- A "Qual-ID" label with a text input field, a "Check" button, and a "Reset" button.
- A table with three columns: "QID", "Cur-Qul", and "Amt-P-Qul".
- "Add" and "Update" buttons at the bottom.

The NetBeans IDE interface shows the "Projects" pane on the left with the "HospitalManagementSystem" project structure, the "Output" pane at the bottom left, and the "Properties" pane on the right.

HospitalManagementSystem - NetBeans IDE 8.0.2

File Edit View Navigate Source Ref

Design Preview [admin_internal_ward]

Time

ADMIN Portal -- Internal

Back

Add Ward

Add Qualification

Add Ward

Add Room Cate

Add Rooms

Ward ID: Reset

Ward Name: *

Cate-ID: Check Reset

WID: WardName:

Add Update

Services: Databases, Web Services, Maven Repositories, Hudson Builders, Task Repositories

Windows: HospitalManagementSystem - NetBeans IDE 8.0.2, Address, ENG 10:48 PM 5/22/2019

HospitalManagementSystem - NetBeans IDE 8.0.2

File Edit View Navigate Source Ref

Design Preview [doctor_mainmenu]

Time

Doctor Portal

Logout

Appointments

D ID: D Name: Null

Patient ID: Appointment ID: *

Get

First Name: Last Name:

Age: Gender:

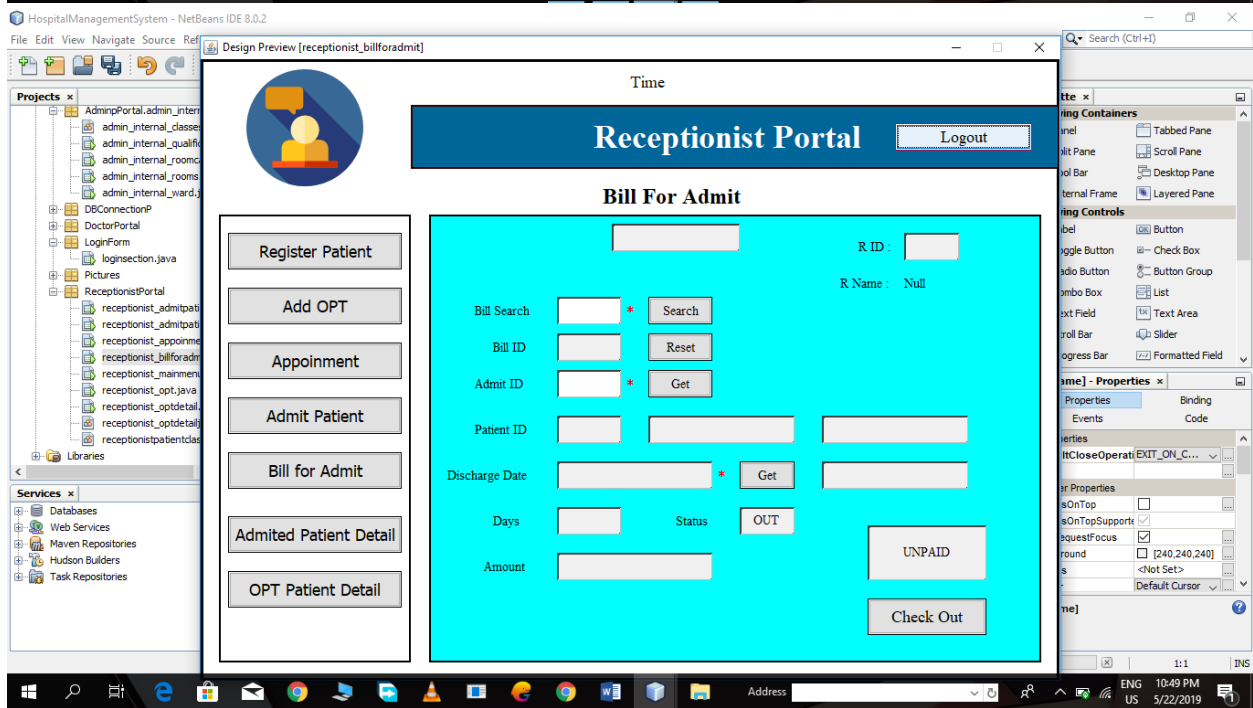
Appointment Date: Status:

Checked

| ApID | PID | PFName | PLName | ApData |
|------|-----|--------|--------|--------|
|------|-----|--------|--------|--------|

Services: Databases, Web Services, Maven Repositories, Hudson Builders, Task Repositories

Windows: HospitalManagementSystem - NetBeans IDE 8.0.2, Address, ENG 10:49 PM 5/22/2019



HospitalManagementSystem - NetBeans IDE 8.0.2

File Edit View Navigate Source Ref

Design Preview [receptionist_optdetail]

Projects

- AdminPortal.admin_inter
- admin_internal_class
- admin_internal_qualif
- admin_internal_roomc
- admin_internal_rooms
- admin_internal_ward
- OBConnectionP
- DoctorPortal
- LoginForm
- loginsection.java
- Pictures
- ReceptionistPortal
- receptionist_adminpat
- receptionist_adminpat
- receptionist_appoinme
- receptionist_billforad
- receptionist_mainmen
- receptionist_optdetail
- receptionist_optdetail
- receptionistpatientdas

Services

- Databases
- Web Services
- Maven Repositories
- Hudson Builders
- Task Repositories

Time

Receptionist Portal

Logout

OPT Details

Register Patient

Add OPT

Appointment

Admit Patient

Bill for Admit

Admitted Patient Detail

OPT Patient Detail

R ID :

R Name : Null

OPT ID * Search Rest

OPTID PRID

Patient First Name Last Name AGE GENDER

Doctor First Name Last Name Check IN

HospitalManagementSystem - NetBeans IDE 8.0.2

File Edit View Navigate Source Ref

Design Preview [admin_addnurse]

Projects

- HospitalManagementSystem
- Source Packages
- AdminPortal
- admin_adddoctor.java
- admin_addingclass.jav
- admin_addnurse.java
- admin_addreceptionis
- admin_details.java
- admin_internal.java
- AdminPortal.admin_det
- AdminPortal.admin_int
- DoctorPortal
- LoginForm
- loginsection.java
- Pictures
- ReceptionistPortal
- Libraries

Services

- Databases
- Web Services
- Maven Repositories
- Hudson Builders
- Task Repositories

Time

ADMIN Portal

Logout

Add Nurse

Doctor

Receptionist

Nurse

Salary

Details

Internal

Nurse ID Reset * Search

F-Name * DOB *

L-Name * Ph NO *

Age * Get Qualification Select Qual *

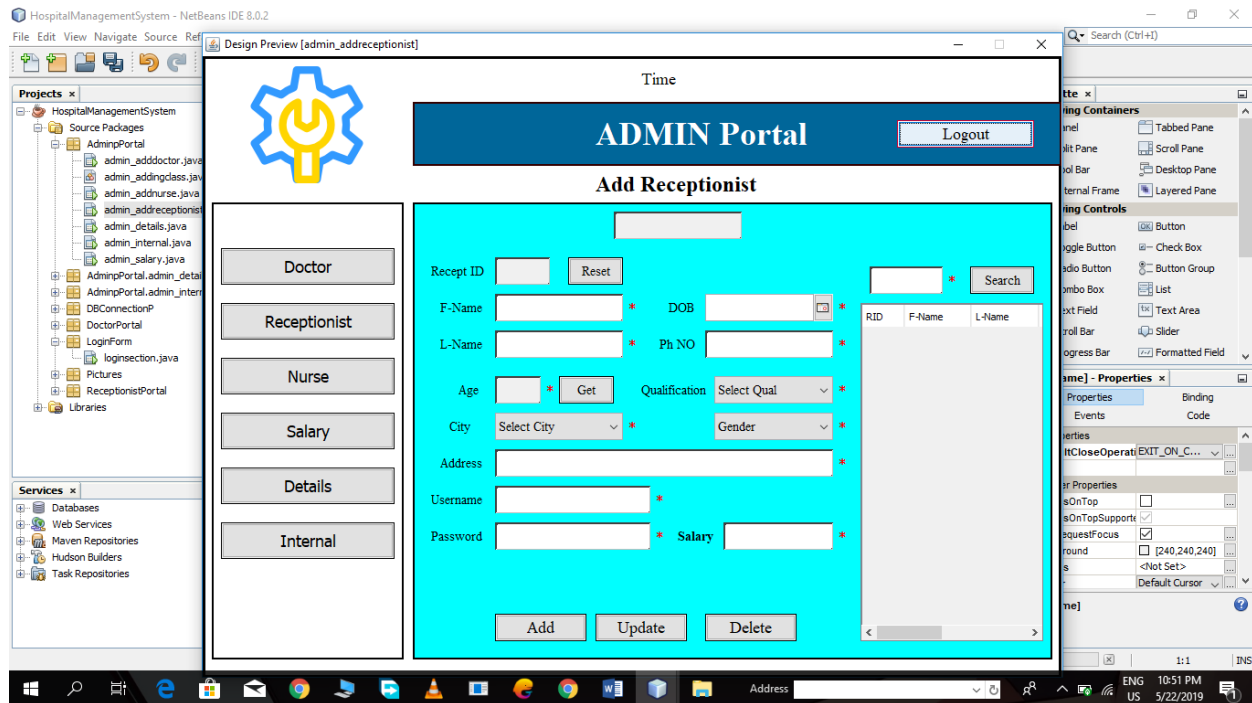
City Select City * Gender *

Address *

Salary *

Add Update Delete

NID F-Name L-Name



FUTURE SCOPE:

The future scope of the project is very vast because the project has no restrictions and limitations that cannot be surpassed, the project can be extended into a big Hospital Management System by increasing number of users and admins for different branches. Amount of users will also be increased by increasing in admins and receptionist at the time of need. The project could be enhanced with the ability to maintain record of the months about the profit and loss of the hospital. The project could be enhanced with the internet facility for the different branches of the same hospital.

CONCLUSION:

This project is to implement the Hospital Management System to the best satisfaction of the patient. The normal process which were followed until recently was to manually find the doctor and then proceed to assign the staffs to each receptionist and patient, which used to cause a lot of inconvenience to both the administrator and the customer as well. Now, we would like to use databases to facilitate this process of smooth with minimal work on the part of both the customer and the administrators involved.