INTERNATIONAL JOURNAL
FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

A Reliable tool for Hospital Administration System

Govardhana.G[1], Dr. R. Chinnaiyan[2]

[1.]*PG Scholar , Department of MCA, New Horizon College of Engineering (Autonomous), VTU , Bangalore*
[2.]*Professor , Department of MCA, New Horizon College of Engineering (Autonomous), VTU , Bangalore*

Abstract: A reliable tool for hospital administration system application will give information to access for the users in an efficient manner without time consuming. It contains individual information regarding inpatients, outpatients, doctors, and rooms and billing information. As soon as information registered, they can modify and search as well. Rooms and doctors will be allocate for the patient within the field without referring to the other context to add. Billing will be generating automatically when the patient details will be filled by the administrator.
Keywords: Hospital , Information, Doctors , Patients, Admin, Billing

I. INTRODUCTION

A reliable tool for hospital administration system application will give information to access for the users in an efficient manner without time consuming. It contains individual information regarding inpatients, outpatients, doctors, rooms and billing information. As soon as information registered, they can modify and search as well. Rooms and doctors will be allocate for the patient within the field without referring to the other context to add. Billing will be generating automatically when the patient details will be filled by the administrator. This Application is a tool, which is used to stored and access the hospital related information whenever and wherever the information needed.

II. PROBLEM DESCRIPTION

The application works by the administrator the procedure is, He/she need to Register to get permission to login as He/She login to the index page which leads o access room, doctors, inpatients and out patients forms. An each form will have similar objectives like register and retrieve purpose so the user need to registers doctors and rooms details before allotting for the particular patients.

III.PROPOSED METHODOLOGY

In the Existing system hospital Administration System maintains the critical information manually. Retrieval of patient is very difficult. To find the details of particular patient information is very inconvenient and time taking process. Patient information is maintained in records which takes lot of time for doctor to analyse.A Reliable Tool For Hospital Administration System control over the information of the patient. All the details of the patient, disease, allotted doctors and rooms medicines are stored in the database which doesn't lead to data damage or data duplication.

IV.FRONT-END - NET BEANS

It is a software development platform written in Java. The Net Beans Platform allows applications to be developed from a set of modular software components called modules. Applications based on the Net Beans Platform, including the Net Beans integrated development environment (IDE), can be extended by third party developers. The Net Beans IDE is primarily intended for development in Java, but also supports other languages, in particular PHP, C/C++ and HTML5. Net Beans is cross-platform and runs on Microsoft Windows, Mac OS X, Linux, Solaris and other platforms supporting a compatible JVM. The Net Beans Team actively supports the product and seeks feature suggestions from the wider community.

Every release is preceded by a time for Community testing and feedback. The Net Beans Platform is a framework for simplifying the development of Java Swing desktop applications.

The Net Beans IDE bundle for Java SE contains what is needed to start developing Net Beans plug-in and Net Beans Platform based applications; no additional SDK is required. Applications can install modules dynamically.

Any application can include the Update Centre module to allow users of the application to download digitally signed upgrades and new features directly into the running application. Reinstalling an upgrade or a new release does not force users to download the entire application again. The platform offers reusable services common to desktop applications, allowing developers to focus on the logic specific to their application.

International Journal for Research in Applied Science & Engineering Technology (IJRASET)
ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 6.887
Volume 6 Issue II, February 2018- Available at www.ijraset.com

V. BACK-END- MYSQL

MySQL is one of the most exciting programs first created and marketed for large main frame computers and mini computers over more than 10 years. MySQL relational database management system has improved full featured SQL based database system.

VI. PL/SQL (PROCEDURE LANGUAGE/SQL):

PL/SQL is an extension of SQL. The SQL statements seen so far are primitive and could be used to provide outputs for simple operations. When the operations become complex, it becomes inevitable to combine these statements in producing the result. So, MySQL introduces the procedural language PL/SQL, which helps in building a program that could be compiled and executed. PL/SQL block can contain any number of SQL statements integrated with flow of control statements.

Thus PL/SQL combines the data manipulating power of SQL with flow of control statements integrated with of control statements. Thus PL/SQL combines the data manipulating power of SQL with date processing power of procedural language.

VII. IMPLEMENTATION

OS   : Windows 7/8   Language   : Java
Front end   : Net Beans   Back end   : MySQL
Web Server   : Xampp Apache Tomcat server

VIII. 1. LOGIN MODULE

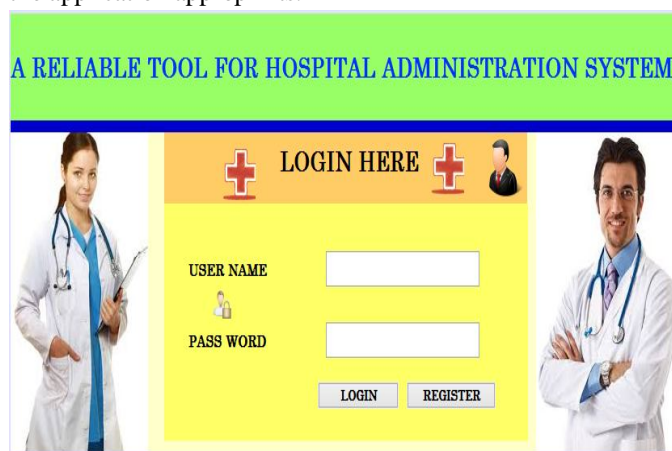Login will helps the user to access the application approprints.

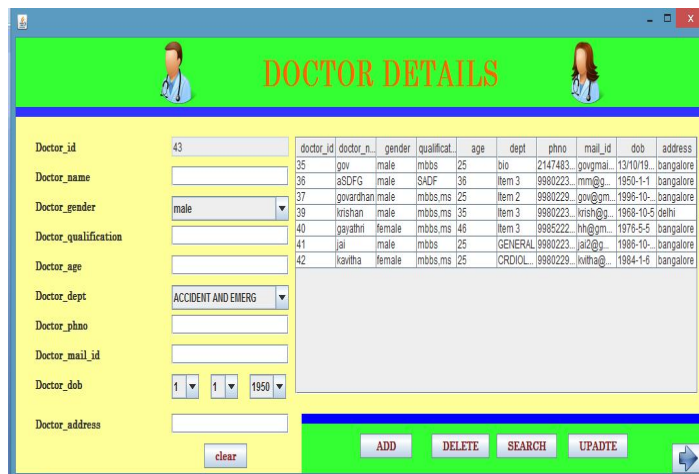
Figure1: LOGIN MODULE

A. Patient Details

The patient details will be registered and retrieved whenever need to access. Validation will be done in order to store accurate information.

Figure2: IN PATIENT DETAILS

B. Doctors Details

The Doctor details will be registered and retrieved whenever need to access and allocate for the patients. Validation will be done in order to store accurate information.

Figure 3: Doctor Details:

C. Billing Details

Billing details can be stored and retrieved by the user when patient registration is done. It will show particular charges, consultation fee and total amount for that patient.

Figure 4: Reports for Patient Billing

IX.SAMPLE CODING:1. LOGIN FORM:

```
private void jButton1ActionPerformed(java.awt .event. Action Event evt) {
String user=jTextField1.getText();
String pwd= new String (jPasswordField1.getPassword());
Prepared Statement ps;
try {
Class. for Name("com. mysql. jdbc. Driver");
Connection con=DriverManager.getConnection("jdbc:mysql://localhost:3306/hospital","root","");
Statement stmt=con. Create Statement();
ps = con. prepare Statement("SELECT `username`, `password` FROM `login` WHERE `username` = ? AND `password` = ?");
ps.setString(1, jTextField1.getText());
ps.setString(2, String.valueOf(jPasswordField1.getPassword()));
ResultSet result = ps.executeQuery();
if(result.next()){
```

International Journal for Research in Applied Science & Engineering Technology (IJRASET)
ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 6.887
Volume 6 Issue II, February 2018- Available at www.ijraset.com

```
System.out.println("login successful");
JOptionPane.showMessageDialog(null,"login successfull");
this.dispose();
Index_Hospital I=new Index_Hospital();
I.setVisible(true); }
else{
JOptionPane.showMessageDialog(null, "wrong!username or password");
}}
catch (Exception e){
JOptionPane.showMessageDialog(this, e.getMessage());}}
```

A. Doctor Form
```
public void email_vlidation(){
if(!(Pattern.matches("^[a-zA-Z0-9]+[@]{1}+[a-zA-Z0-9]+[.]{1}+[a-zA-Z0-9]+$",d_mail_id.getText()))){
JOptionPane.showMessageDialog(null,"please enter the valid email_Id");}}
public void genid(){
try{
String sql="select max(right(doctor_id,3)) as no from doctor";
con=DriverManager.getConnection("jdbc:mysql://localhost:3306/hospital","root","");
pst=con.prepareStatement(sql);
rs=pst.executeQuery();
while(rs.next()){
if(rs.first()==false){
d_id.setText("1");}
else{
rs.last();
int auto_no=rs.getInt(1)+1;
String no=String.valueOf(auto_no);
int noLong=no.length();
for(int a=0;a<3-noLong;a++){
no=no;}
d_id.setText(no);}}}
catch(Exception e){
JOptionPane.showMessageDialog(null, e);}}
boolean tableClick=false;
Connection con;
PreparedStatement pst;
Statement st;
ResultSet rs;
JTextField ppp;
JTable Jtable;
private void update_table(){
try{
String sql="select * from doctor";
con=DriverManager.getConnection("jdbc:mysql://localhost:3306/hospital","root","");
pst=con.prepareStatement(sql);
rs=pst.executeQuery();
table_display.setModel(DbUtils.resultSetToTableModel(rs));}
catch(Exception e){
JOptionPane.showMessageDialog(null,e);}}
```

```
public void msg(int ch){
if(ch==1)
JOptionPane.showMessageDialog(this, "Please select data from the table before Updating!");
else
JOptionPane.showMessageDialog(this, "Please select data from the table before Deleting!"); }
public void loadTabledata(DefaultTableModel model,JTable tbl,int sa){
int rows = model.getRowCount();
if (rows > 0) {
for (int i = 0; i < rows; i++) {
model.removeRow(0);}}
try{
Class.forName("com.mysql.jdbc.Driver");
Connection con=DriverManager.getConnection("jdbc:mysql://localhost:3306/hospital","root","");
Statement sst=con.createStatement();
ResultSet rrs=null;
switch(sa){
case 1:rrs=sst.executeQuery("select * from doctor");}
ResultSetMetaData metaData = rrs.getMetaData();
int columnCount = metaData.getColumnCount();
while (rrs.next()) {
String[] a=new String[columnCount];
String[]content=a;
for (int i = 0; i < columnCount; i++) {
a[i]=metaData.getColumnName(i+1);
content[i]=rrs.getString(a[i]);}
model.addRow(content);}
}catch(SQLException e){
e.printStackTrace();
}catch (ClassNotFoundException ex) {
Logger.getLogger(doctor.class.getName()).log(Level.SEVERE, null, ex);
}}
```

X. CONCLUSION

The computer provides a great accuracy, speed and increasing volume of data which accelerate the work of that department .Computer is a central element in an organization, despite the fact that the computer is nothing more than a tool for processing data, but its real role is to provide information for decision and for planning and controlling operation In present world , life is going very fast and everybody want a good and correct information in very short time for this we had developed this software program for easily handling. So our aim to develop a proposed system which solved this problem and save the time and gives good facility. We tried our best to develop this software package which solves the problems or difficulties of the current system. From the above study it can be concluded that the 'A RELIABLE TOOL FOR HOSPITAL ADMINISTRATION SYSTEM' is more efficient. Thus, we can say that this system fulfills most of the necessary requirement that is to Record information of an organization. Due to time constraints and other certain limitation we have built our project at a very elementary level but we assure you that the next version of the project will be satisfying all the requirements.

REFERENCES

[1] Java the Complete Reference 9th Edition By-Herbert Schildt, Tata McGraw hill edition-2014
[2] Elmasri and Navathe, Fundamentals of Database system 7th edition.,2015
[3] www.javapoint.com
[4] www.stackoverflow.com
[5] www.youtube.com

INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Call : 08813907089 (24*7 Support on Whatsapp)