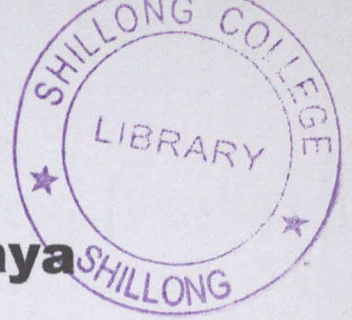


SHILLONG COLLEGE

Shillong-793001, Meghalaya



Project on

"Clinic Management System"

Submitted for the partial fulfillment for the award of the degree of Bachelor of
Computer Applications

By

J.Meiasanlang Khyriem

Roll No: P1400017

Regn No: 14529 of 2013-14

Department of Computer Science and Applications

Shillong College, Shillong-793001



NORTH EASTERN HILL UNIVERSITY

Certified that this is a bonafide of the project

Entitled

“Clinic Management System ”

Submitted for the partial fulfillment for the award of the degree of Bachelor of
Computer Applications

Submitted:

By

J.Meiasanlang Khyriem

Roll No: P1400017

Regn No: 14529 of 2013-14

GUIDE

Mrs. A. Mitri

HEAD OF DEPARTMENT

Mrs. A. Mitri

EXAMINER

Burt

Viva voce held on

Department of Computer Science and Applications

Shillong College, Shillong-793001

Contents

- Synopsis.
 - Introduction.
 - Requirements.
- Analysis phase.
 - Proposed System.
 - Existing System.
- Design Phase.
 - Database Design
 - ER diagram.
 - Data flow diagram
- Source Code.
- Sample Input/output.
- Conclusion.
- *Bibliography*

SYNOPSIS

“Clinic Management System”

Introduction

This system will coordinate and integrate all the activities involving in management and running of a Clinic. This System is build to computerize the manual operation in a clinic. The primary purpose is to digitalize patient record so as to make Data retrieval easy and efficient. By using this system the clinic history of a patient can also be backup and be protected for confidentiality.

This system will maintain the detail that is submitted by the patient to the clinic and it will also maintain the diagnosis, treatment and the prescription given to every patient. The System will all keep a medical history of a patient so that it will be easy for future treatment of the patient.

Requirements

Software requirements

- Developing Tools: Netbeans IDE v8.0.
- Operating System: Windows XP/7/8.
- Front-end Tools: jsp, Javascript
- Servers: GlassFish Server/Apache Tomcat Server.
- Back-end Tools: PostgreSQL.

Hardware Requirements

- R.A.M Minimum 1GB .
- Hard Disk 100MB or higher.
- Processor Intel Pentium @ 1GHz or faster

Analysis Phase

Proposed System:

- The proposed **system** is a technology based solution to manage the ever-expanding volume of patients, health information, and also for harnessing the latest in information technology for the benefit of patients and doctors in the clinic.
- Every patient who visits the clinic has to get registered prior to getting any consultation, treatment or investigations done.
 - Registration of patients involves accepting certain general and demographic information about the patient.
 - The patient is allocated a unique Registration number. The Patient Registration Number will remain same for his/her all subsequent visits to the clinic.

All information available here are in real time and any enquiry about the patient is on actual status since the data is constantly updated.

Existing System:

Disadvantages

- At present, a clinic maintains the detail of every patient manually. Entering the details of a patient in the register book and the clinical history in the patient's ticket.
- Re-register the subsequent visits of a patient to the clinic is done manually.
- Retrieving record from the register book takes a lot of time.
- Checking the previous clinical history of a patient is not possible.

Design Phase

Database Design

Login table:

<u>Username</u>	Password
Varchar(20)	Varchar(20)

Registration table:

First name	Last Name	Gender	Dob	Address	<u>Registration no</u>	Registration date
Varchar(30)	Varchar(30)	Char	date	Varchar(40)	Varchar(10)	date

Investigation table:

<u>I_rno (foreign key)</u>	Weight	Height	<u>Bmi</u>	diagnose
Varchar(10)	Integer	Integer	Integer	Varchar(10)

Prescription table:

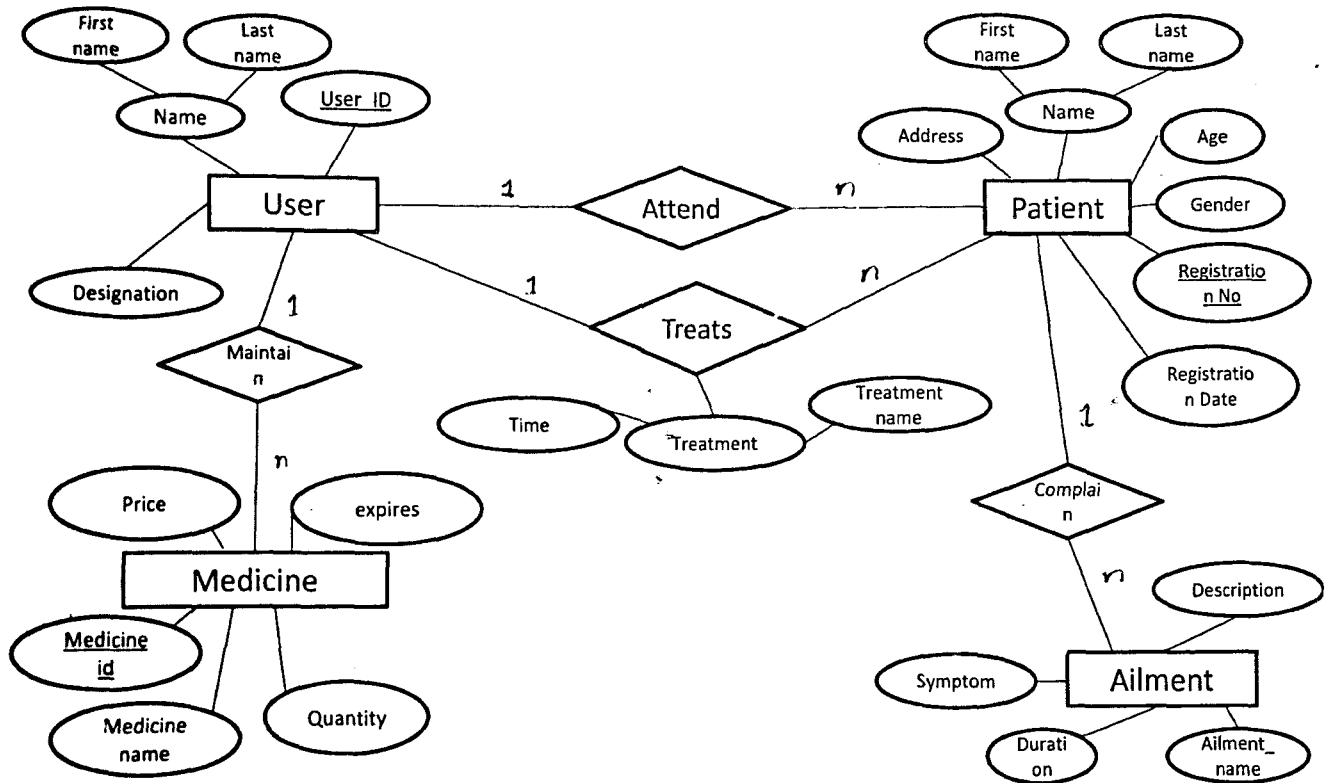
<u>P_rno</u>	<u>P_medicine</u>	P_quantity	dosage
Varchar(10)	Varchar(30)	Integer	Varchar(3)

Medicine Table:

<u>M_id</u>	M_name	M_quantity	M_batchno	M_manufacture	M_expiry
Varchar(10)	Varchar(20)	Varchar(20)	Varchar(20)	Date	date



E.R Diagram:



Data flow Diagram

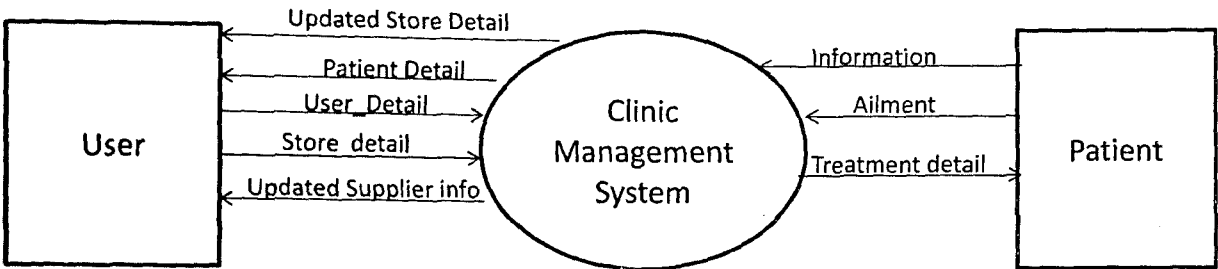


Fig: Level 0 DFD

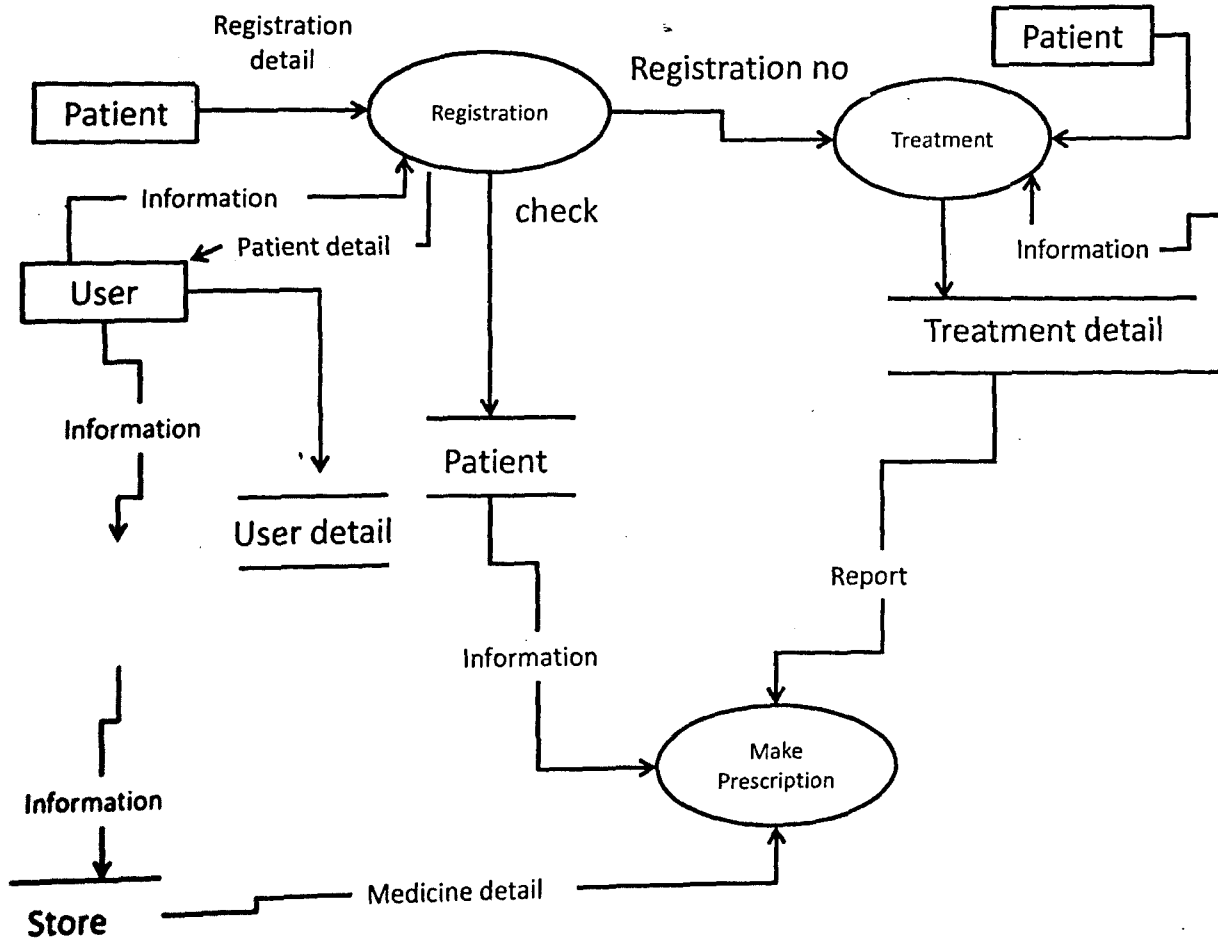


Fig: Level 1 DFD

CODING

Index.jsp

```
<%@page contentType="text/html" pageEncoding="UTF-8"%>
<%@taglib prefix="c" uri="http://java.sun.com/jsp/jstl/core"%>
<jsp:useBean id="vali" class="Beans.loginvalidate"/>
<jsp:setProperty name="vali" property="*" />
<!DOCTYPE html>
<html>
  <head>
    <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
    <link href="css/logincss.css" type="text/css" rel="stylesheet">
    <title>Login page</title>
  </head>
  <body>
    <div style="height: 100%;width:80%;margin: 2px auto;padding: 10px;" >
      <table width="100%" bgcolor="#000000">
        <tr><td><br><hr color="black"></td></tr>
      </table>
      <br>
      <font face="Arial" size="7" color="#000000">Welcome</font>
      <br><br><br><br>
      <center>
        <font face="Arial" color="#000000" size="5">LOGIN</font>
        <br>
        <div>
          <br>
          <form action="index.jsp" method="post">

            <%--hidden input--%>
            <input type="hidden" name="lh" value="true">

            <%--username input--%>
            <input type="text" name="user" placeholder="Enter Username..."
value="{param.user}" class="round"/><br>
            <c:if test="{param.lh && !vali.userValid}" var="vl1">
              <font face="Arial" size="2">*Enter Username</font>
            </c:if>

            <%--Password Input--%>
```

```
<br><input type="password" name="pass" placeholder="Enter Password..."
value="${param.pass}" class="round"/><br>
<c:if test="${param.lh && !vali.passValid}" var="vl2">
  <font face="Arial" size="2">*Enter Password</font>
</c:if>

<%--submit--%>
<c:if test="${param.lh && !vali.checkLogin && !vl1 && !vl2}">
  <br><font face="Arial" size="2">**Invalid Username or Password</font>
</c:if>
<br><br>
<input type="submit" value="LOGIN" class="roundbutton">

<%--submit--%>
<c:if test="${param.lh && vali.checkLogin && !vl1 && !vl2}">
  <jsp:forward page="home.jsp"></jsp:forward>
</c:if>
</form>
</div>
</center>
</div>
</body>
</html>
```

Home.jsp

```
<%@page import="java.text.*"%>
<%@page import="java.util.Date" %>
<%@page contentType="text/html" pageEncoding="UTF-8"%>
<%@taglib prefix="c" uri="http://java.sun.com/jsp/jstl/core"%>
<!DOCTYPE html>
<html style="height:100%">
  <head>
    <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
    <script src="script/source.js"></script>
    <script src="script/homescrpt.js"></script>
    <link href="css/homecss.css" type="text/css" rel="stylesheet">
    <title>Home page</title>
  <%
    String name=request.getParameter("user");
    if(name==null)
    {
      response.sendRedirect("index.jsp");
    }
    else
    {
      session.setAttribute("suser", name);
    }
  %>
<body style="height: 100%" >
  <div style="width:80%;margin: 2px auto;border: 1px solid #008dde;padding: 10px;" >
    <table width="100%" bgcolor="#000000">
      <tr>
        <td>
          <font face="Arial" color="#ffffff" style="font-size: 20px">
            You are now Logged in as <u><%= session.getAttribute("suser")%></u>
          </font>
```

```

<div style="float: right;">
    <a href="logout.jsp" target="_TOP" title="logout">
    </a>
</div>
</td>
</tr>
</table>
    <br><br>
    <font face="arial">
    <ul id="tabs">

        <li><a href="#registration" >Registration</a></li>
        <li><a href="#investigation">Investigation</a></li>
        <li><a href="#patientreport">Patient Report</a></li>
        <li><a href="#medicine">Medicine</a></li>
        <li><a href="#medicine_se">Medicine Search</a></li>
    </ul>
</font>
    <div id="registration" class="tab-section">
        <br><br>

        <jsp:include page="registration.jsp"></jsp:include>

    </div>
    <div id="investigation" class="tab-section">
        <br><br><br>
        <jsp:include page="investigation.jsp"></jsp:include>
    </div>
    <div id="patientreport" class="tab-section">
        <br><br><br><br><br>
        <jsp:include page="patientreport.jsp"></jsp:include>
    </div>
    <div id="medicine" class="tab-section">
        <br><br><br><br><br>
        <jsp:include page="medicine.jsp"></jsp:include>
    </div>
    <div id="medicine_se" class="tab-section">
        <br><br><br><br><br>
        <jsp:include page="medicine_search.jsp"></jsp:include>
    </div>
<br><br>

```



```
</div>
</body>
<%}%>
</html>
```

Registration.jsp

```
<%--Registration page--%>
<%@taglib prefix="c" uri="http://java.sun.com/jsp/jstl/core" %>
<%@page contentType="text/html" pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>
  <head>
    <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
    <script src="script/registration.js"></script>
    <title>JSP Page</title>
  </head>
  <%--check Session--%>
  <%
    if(session.getAttribute("suser")==null)
    {
      response.sendRedirect("index.jsp");
    }
    else {
  %>
  <body>
```

```

<br><br>
<font face="Arial" size="2px">
<form action="" id="f1">
  <fieldset style="border: 1px solid #008dde">
    <legend><b>Patient's Info</b></legend>
      <table>
        <tr>
          <td><b>Name</b></td>
          <td></td>
        </tr>

        <tr>
          <td>First Name: </td>
          <td>
            <input type="text" name="pfname" id="fn"/>
            <label class="hide" id="fnameerror"><font color="red"> **Please
enter First name</font>
            </label>
          </td>
        </tr>

        <tr>
          <td>Last Name:
          </td>
          <td>
            <input type="text" name="plname" id="ln"/>
            <label class="hide" id="lnameerror"><font color="red"> **Please
enter Last name</font>
            </label>
          </td>
        </tr>

        <tr>
          <td><b>Gender</b></td>
          <td>
            <input type="radio" name="pgender" value="male" id="ma-le">
Male
            <input type="radio" name="pgender" value="female"> Female
            <label class="hide" id="gendererror"><font color="red"> **Please
Choose Gender</font>
            </label>

```

```

        </td>
    </tr>

    <tr>
        <td><b>Date Of Birth </b>(dd/mm/yyyy):
        </td>
        <td>
            <input type="text" name="pdob" id="pdob">
            <label class="hide" id="doberror"><font color="red"> **Please
Enter correct date format </font>
            </label>
        </td>
    </tr>
    <tr>

        <td><b>Address:</b>
        </td>
        <td>
            <textarea name="paddress" style="height: 50px ; width: 200px"
id="address"></textarea>
        </td>
    </tr>
    <%--Address error message--%>
    <tr>
        <td></td>
        <td>
            <label class="hide" id="addresserror"><font color="red"> **Please
Enter Address</font>
            </label>
        </td>
    </tr>
</table>

</fieldset>
<br><br>
<center>
    <%--div to display result--%>
    <div id="result"></div>
    <input type="submit" value="Submit">
    <input type="button" value="Clear" id="clearfield">
</center>
</form>

```

```
</font>
</body>
<%}%>
</html>
```

Investigation.jsp

```
<%@page import="java.sql.*"%>
<%@page contentType="text/html" pageEncoding="UTF-8"%>
<!DOCTYPE html>
```

```

<html>
<head>
  <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
  <script src="script/investigation.js"></script>
  <title>investigation page</title>
</head>
<%--check session--%>
<%
  if(session.getAttribute("suser")==null)
  {
    response.sendRedirect("index.jsp");
  }
  else
  {
    %>
</body>
  <font face="Arial" size="2px">
  <div style="float: right">
    <%--Check from database--%>
    <form id="form_search">
      Check Registration By: <br>
      <input type="radio" name="stype" value="fname" id="fname"> First Name
      <input type="radio" name="stype" value="rno" id="rno"> Registration number
      <div id="1" class="hide">
        <br>
        <input type="text" name="fname" placeholder="first name" id="fnameval">
        <input type="button" value="Check" id="checkfname">
      </div>
      <div id="2" class='hide'>
        <br>
        <input type="text" name="rno" placeholder="Registration no" id="rnoval">
        <input type="button" value="Check" id="checkrno">
      </div>
    </form>
  </div>
  <br><br>
  <%--Display the search details--%>
  <div id="display">
  </div>

  <br><br>
  <fieldset>

```

```

<%--Investigation--%>
<br>
<table>
  <tr><td>Registration number: </td>
    <td>
      <input type='text' id='rno2' name="rno">
      <label id='rnoerror' class='hide'>**Please enter Registration No</label>
    </td>
  </tr>
  <tr><td></td><td></td></tr>
  <tr><td>Height: </td>
    <td>
      <input type="text" name="height" id="height" placeholder="in Inches">
      <label id='heighterror' class='hide'>**Please enter Height</label>
    </td>
  </tr>
  <tr><td></td><td></td></tr>
  <tr><td>Weight:</td>
    <td>
      <input type="text" name="weight" id="weight" placeholder="in Kilograms">
      <label id='weighterror' class='hide'>**Please enter Weight</label>
    </td>
  </tr>
  <tr><td></td><td></td></tr>
  <%--<tr><td></td><td><input type="button" value="Calculate"
id="calculatebmi"></td></tr>

```

```

<div id="displaybmi">
</div>--%>
<tr><td>Diagnose</td><td><input type="text" id="diagnosename"></td></tr>
<tr><td></td><td></td></tr></table>
<input type="button" id="submitinvestigation" value="submit">

```

```

</fieldset>

```

```

<fieldset>

```

```

  <legend>Prescription</legend>

```

```

  <table><tr>

```

```

    <%--medicine Row--%>

```

```

    <td>Medicine: </td>

```

```

    <td>

```

```

<%

```

```

  //medicine option 1

```

```

  Connection c=null;

```

```

Statement stmt=null;
try{
    Class.forName("org.postgresql.Driver");
    c =
DriverManager.getConnection("jdbc:postgresql://localhost:5432/Clinic","postgres",
"xmeia06");
    stmt = c.createStatement();
    ResultSet rs = stmt.executeQuery("select * from medicine;");%>
<select id="select_m_1" style="width:147px">
    <option></option>
    <%
        while(rs.next()){%>
            <option><%=rs.getString(2)%></option>
            <%}%>
    </select>
    <%
        }
        catch(Exception e){}
    %>

</td>
    </tr>
    <tr><td>Quantity:</td><td><input type="text" size="5"
id="quantity1"></td></tr>
    <tr><td>Dosage:</td><td><input type="text" id="dosage"></td><tr>
    </table>
    <input type="button" value="Submit" id="prescriptionsubmit">
</fieldset>
</font>
</body>
<%}%>
</html>

```

Patientreport.jsp

```
<%@page contentType="text/html" pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>
  <head>
    <script src="script/patientreport.js"></script>
    <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
    <title>JSP Page</title>
  </head>
  <body>
    <input type="text" id="reportid" placeholder="Régistration no.">
    <input type="button" value="GO" id="submitreport">
    <br><br>
    <div id="displayreport"></div>
  </body>
</html>
```

Medicine.jsp

```
<%@page contentType="text/html" pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>
  <head>
    <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
    <script src="script/medicine.js"></script>
    <title>JSP Page</title>
  </head>
  <body>
    <font face="arial" size="2px">
      <form id="medicineform">
        <fieldset>
          <legend>Medicine Entry</legend>
          <table>
            <tr><td>Medicine Name: </td><td><input type="text" name="mname"
id="mname"></td></tr>
            <tr><td>Quantity: </td><td><input type="text" name="mquan"
id="mquan"></td></tr>
            <tr><td>Batch no: </td><td><input type="text" name="mbatchno"
id="mbatchno"></td></tr>
            <tr><td>Date of Manufacturing (dd/mm/yyyy): </td><td><input type="text"
name="mmanu" id="mmanu"></td></tr>
```

```

        <tr><td>Expiry date (dd/mm/yyyy): </td><td><input type="text"
name="mexp" id="mexp"></td></tr>
        <tr><td></td><td><input type="submit" value="Submit"><input type="reset"
value="Clear"></td></tr>
    </table>
</fieldset>
</form>
<div id="mediresult"></div>
<br><br>
</font>
</body>
</html>

```

MedicineSearch.jsp

```

<%--medicine search interface--%>
<%@page contentType="text/html" pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>
    <head>
        <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
        <script src="script/medicine_search.js"></script>
        <title>JSP Page</title>
    </head>
    <body>
        <font face="arial" size="2px">
        <div style="float: right">
            <input type="button" id="viewallmedi" title="List All Stored Medicine"
value="ViewAll">
        <br>
        </div>

```

```

    Medicine name: <input type="text" id="s_mediname"> <input type="button"
value="search" id="searchmedi">
    <br><br><br><hr><br><br>
    <div id="displaymedi"></div>
    <br>

    <%--Edit Medicine data--%>
    <div id='editmedicine' class='hide'>
        <input type='button' id='m_e_option1' value="Edit">
        <input type='button' id='m_e_option2' value="Delete">
        <div id="edit_medi_page" class="hide">
            <br>
            <input type="text" placeholder="Medicine ID" id="mid_edit"> <input type="text"
placeholder="Column No" id="colno"> <input type="text" placeholder="New value"
id="newdata">
            <input type="button" value="OK" id="edit_medi">
        </div>
        <div id="del_medi_page" class="hide">
            <br>
            <input type="text" placeholder="Medicine ID" id="mid_delete">
            <input type="button" value="OK" id="delete_medi">
        </div>

    </div>
    <%--<div style="float:right">
        <input type="button" id="clearall" value="Clear fields">
    </div>--%>
    </font>
</body>
</html>

```

Logout.jsp

```

<%@page contentType="text/html" pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>
    <head>
        <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
        <title>JSP Page</title>
    </head>
    <body>
        <%
            session.setAttribute("suser", null);

```

```
        session.invalidate();
        response.sendRedirect("index.jsp");
    %>
</body>
</html>
```

Jsp page that access databases.

Allmedicine.jsp

```
<%--list all available medicine--%>
<%@page import="java.sql.ResultSet"%>
<%@page import="java.sql.DriverManager"%>
<%@page import="java.sql.Statement"%>
<%@page import="java.sql.Connection"%>
<style>
    .heading{
        display:table-row;
        font-weight: bold;
        text-align: center;
    }
    .row
    {
        display:table-row;
    }
    .cell{
        display: table-cell;
        border:solid;
        border-width: thin;
```

```

padding:5px;
}
</style>
<%
Connection c=null;
Statement stmt=null;
try{
Class.forName("org.postgresql.Driver");
c =
DriverManager.getConnection("jdbc:postgresql://localhost:5432/Clinic","postgres",
"xmeia06");
stmt = c.createStatement();
ResultSet rs = stmt.executeQuery("select * from medicine;");%>
<div class="heading">
<div class="cell">
<p>Medicine ID</p>
</div>
<div class="cell">
<p>Medicine Name</p>
</div>
<div class="cell">
<p>Medicine Quantity</p>
</div>
<div class="cell">
<p>Medicine Batch No</p>
</div>
<div class="cell">
<p>Manufacturing Date</p>
</div>
<div class="cell">
<p>Expiry Date</p>
</div>
</div>
<%
while(rs.next()){%>
<div class="row">
<div class="cell">
<%=rs.getString("m_id")%>
</div>
<div class="cell">
<%=rs.getString("m_name")%>
</div>

```

```

        <div class="cell">
            <%=rs.getString("m_quan")%>
        </div>
        <div class="cell">
            <%=rs.getString("m_batchno")%>
        </div>
        <div class="cell">
            <%=rs.getString("m_manufacture")%>
        </div>
        <div class="cell">
            <%=rs.getString("m_expiry")%>
        </div>
    </div>
    <%
    }
    c.close();
    stmt.close();
    }
    catch(Exception e){
        out.println("ERROR");
        out.println(e);
    }
%>

```

Check.jsp

```

<%@page import="java.sql.*" %>
<style>
    .heading{
        display:table-row;
        font-weight: bold;
        text-align: center;
    }
    .row
    {
        display:table-row;
    }
    .cell{

```



```
display: table-cell;
border:solid;
border-width: thin;
padding:5px;
}
</style>
<%
if(request.getParameter("s_val")==null)
{
    out.print("NULL");
}
else{
    String va1=request.getParameter("s_val");
    String va2=(String)request.getParameter("s_opt");
    int i=0;
    if(va2.equals("rno")){
        Connection c=null;
        Statement stmt=null;
        ResultSet rs;
        try{
            Class.forName("org.postgresql.Driver");
            c =
DriverManager.getConnection("jdbc:postgresql://localhost:5432/Clinic","postgres",
"xmeia06");
            stmt = c.createStatement();
            rs = stmt.executeQuery("select * from registration where rno='"+va1+"'");%>
<div class="heading">
    <div class="cell">
        <p>First Name</p>
    </div>
    <div class="cell">
        <p>Last Name</p>
    </div>
    <div class="cell">
        <p>Gender</p>
    </div>
    <div class="cell">
        <p>Date Of Birth</p>
    </div>
    <div class="cell">
        <p>Address</p>
    </div>
```

```

    <div class="cell">
        <p>Registration No</p>
    </div>
    <div class="cell">
        <p>Registration Date</p>
    </div>
</div>
<%while(rs.next())
{%>
<div class="row">
    <div class="cell">
        <%=rs.getString("pfname")%>
    </div>
    <div class="cell">
        <%=rs.getString("plname")%>
    </div>
    <div class="cell">
        <%=rs.getString("gender")%>
    </div>
    <div class="cell">
        <%=rs.getString("dob")%>
    </div>
    <div class="cell">
        <%=rs.getString("address")%>
    </div>
    <div class="cell">
        <%=rs.getString("rno")%>
    </div>
    <div class="cell">
        <%=rs.getString("rdate")%>
    </div>
</div>
<%
}
c.close();
stmt.close();
}
catch(Exception e){
    out.println("ERROR");
    out.println(e);
}

```

```

    }
    if(va2.equals("fname")){
        Connection c=null;
        Statement stmt=null;
        ResultSet rs;
        try{
            Class.forName("org.postgresql.Driver");
            c =
DriverManager.getConnection("jdbc:postgresql://localhost:5432/Clinic","postgres",
"xmeia06");
            stmt = c.createStatement();
            rs = stmt.executeQuery("select * from registration where pname='"+va1+"';");%>
            <div class="heading">
                <div class="cell">
                    <p>First Name</p>
                </div>
                <div class="cell">
                    <p>Last Name</p>
                </div>
                <div class="cell">
                    <p>Gender</p>
                </div>
                <div class="cell">
                    <p>Date Of Birth</p>
                </div>
                <div class="cell">
                    <p>Address</p>
                </div>
                <div class="cell">
                    <p>Registration No</p>
                </div>
                <div class="cell">
                    <p>Registration Date</p>
                </div>
            </div>
            <%
while(rs.next()){%>
            <div class="row">
                <div class="cell">
                    <%
                        out.print(rs.getString("pname"));
                    %>

```

```

</div>
<div class="cell">
    <%=rs.getString("pname")%>
</div>
<div class="cell">
    <%=rs.getString("gender")%>
</div>
<div class="cell">
    <%=rs.getString("dob")%>
</div>
<div class="cell">
    <%=rs.getString("address")%>
</div>
<div class="cell">
    <%=rs.getString("rno")%>
</div>
<div class="cell">
    <%=rs.getString("rdate")%>
</div>
</div>
<%
}
c.close();
stmt.close();
}
catch(Exception e){
    out.println("ERROR");
    out.println(e);
}
}
}
%>

```

Deletemedicine.jsp

```
<%--Delete row from database--%>
<%@page import="java.sql.*"%>
<%
    String mid=request.getParameter("mid");
    Connection c=null;
    Statement stmt=null;
    ResultSet rs;
    try{
        Class.forName("org.postgresql.Driver");
        c =
DriverManager.getConnection("jdbc:postgresql://localhost:5432/Clinic","postgres",
"xmeia06");
        stmt = c.createStatement();
        //if(col.equals("2")){
            String s="delete from medicine where m_id='"+mid+"'";
            rs=stmt.executeQuery(s);
            out.print("Deleted");
            c.close();
            stmt.close();
        //}
    }
    catch(Exception e){
        out.print("Row Deleted");
    }
%>
```

Editmedicine.jsp

```
<%@page import="java.sql.*"%>
<%
    String mid=request.getParameter("mid");
    String col=request.getParameter("col");
    String newdata=request.getParameter("newdata");
    Connection c=null;
    Statement stmt=null;
    try{
        Class.forName("org.postgresql.Driver");
        c =
DriverManager.getConnection("jdbc:postgresql://localhost:5432/Clinic","postgres",
"xmeia06");
        stmt = c.createStatement();
        if(col.equals("2")){
            String colname="m_name";
            String s="update medicine set "+colname+"='"+newdata+"' where m_id='"+mid+"'";
            stmt.executeUpdate(s);
            out.print("Data Updated");
            c.close();
            stmt.close();
        }
        if(col.equals("3")){
            String colname="m_quan";
            String s="update medicine set "+colname+"='"+newdata+"' where m_id='"+mid+"'";
            stmt.executeUpdate(s);
            out.print("Data Updated");
            c.close();
            stmt.close();
        }
        if(col.equals("4")){
```

```

String colname="m_batchno";
String s="update medicine set "+colname+"="+newdata+" where m_id="+mid+"";
stmt.executeUpdate(s);
out.print("Data Updated");
c.close();
stmt.close();
}
if(col.equals("5")){
String colname="m_manufacture";
String s="update medicine set "+colname+"="+newdata+" where m_id="+mid+"";
stmt.executeUpdate(s);
out.print("Data Updated");
c.close();
stmt.close();
}
if(col.equals("6")){
String colname="m_expiry";
String s="update medicine set "+colname+"="+newdata+" where m_id="+mid+"";
stmt.executeUpdate(s);
out.print("Data Updated");
c.close();
stmt.close();
}
}
catch(Exception e){
out.print(e);
}
}
%>

```

Register.jsp

```
<%@page import="java.sql.*" %>
<%@page import="java.text.*"%>
<%@page import="java.util.Date" %>
<%--Store Registration detail into a database--%>
<%
    if(request.getParameter("va1")==null)
    {
        out.print("NULL");
    }
    else
    {
        String v1=request.getParameter("va1");
        String v2=request.getParameter("va2");
        String v3=request.getParameter("va3");
        String v4=request.getParameter("va4");
        String v5=request.getParameter("va5");
        String v6=request.getParameter("va6");
        DateFormat df=new SimpleDateFormat("dd-MM-yy");
        String FormattedDate=df.format(new Date());
        Connection c=null;
        Statement stmt=null;
        try{
```

```

        Class.forName("org.postgresql.Driver");
        c =
DriverManager.getConnection("jdbc:postgresql://localhost:5432/Clinic","postgres",
"xmeia06");
        stmt = c.createStatement();
        String s="insert into registration
values(""+v1+"",""+v2+"",""+v3+"",""+v4+"",""+v5+"",""+v6+"",""+FormattedDate+"")";
        stmt.executeUpdate(s);
        out.print("Registered");
        c.close();
        stmt.close();
    }
    catch(Exception e){
        out.println("ERROR");
        out.println(e);
    }
}
%>

```

Report.jsp

```

<%--Generate report --%>
<%@page import="java.sql.*"%>
<style>
    .heading{
        display:table-row;
        font-weight: bold;
        text-align: center;
    }
    .row
    {
        display:table-row;
    }
    .cell{
        display: table-cell;
        border:solid;
        border-width: thin;
        padding:5px;
    }

```

```

</style>
<%
String id=request.getParameter("data");
Connection c=null;
Statement stmt=null;
ResultSet rs=null;
try{
Class.forName("org.postgresql.Driver");
c =
DriverManager.getConnection("jdbc:postgresql://localhost:5432/Clinic","postgres",
"xmeia06");
stmt = c.createStatement();
String s="select * from registration INNER JOIN investigation ON rno=i_rno and
rno="+id+"";
rs = stmt.executeQuery(s);
while(rs.next())
{
out.print("Patient Firstname:"+rs.getString("pfname")+"<br>");
out.print("Patient Lastname:"+rs.getString("plname")+"<br>");
}
c.close();
stmt.close();
}
catch(Exception e){
out.println("ERROR");
out.println(e);
}
%>

```

Searchmedicine.jsp

```

<%--Search for Meidcine--%>
<%@page import="java.sql.*"%>
<style>
.heading{
display:table-row;
font-weight: bold;
text-align: center;
}
.row

```

```

{
    display:table-row;
}
.cell{
    display: table-cell;
    border:solid;
    border-width: thin;
    padding:5px;
}
</style>
<%
String va1=request.getParameter("s_mediname");
Connection c=null;
Statement stmt=null;
try{
    Class.forName("org.postgresql.Driver");
    c =
DriverManager.getConnection("jdbc:postgresql://localhost:5432/Clinic","postgres",
"xmeia06");
    stmt = c.createStatement();
    ResultSet rs = stmt.executeQuery("select * from medicine where
m_name='"+va1+"'");%>
    <div class="heading">
        <div class="cell">
            <p>Medicine ID</p>
        </div>
        <div class="cell">
            <p>Medicine Name</p>
        </div>
        <div class="cell">
            <p>Medicine Quantity</p>
        </div>
        <div class="cell">
            <p>Medicine Batch No</p>
        </div>
        <div class="cell">
            <p>Manufacturing Date</p>
        </div>
        <div class="cell">
            <p>Expiry Date</p>
        </div>
    </div>

```



```
<%
while(rs.next()){%>
<div class="row">
  <div class="cell">
    <%=rs.getString("m_id")%>
  </div>
  <div class="cell">
    <%=rs.getString("m_name")%>
  </div>
  <div class="cell">
    <%=rs.getString("m_quan")%>
  </div>
  <div class="cell">
    <%=rs.getString("m_batchno")%>
  </div>
  <div class="cell">
    <%=rs.getString("m_manufacture")%>
  </div>
  <div class="cell">
    <%=rs.getString("m_expiry")%>
  </div>
</div>
<%
}
c.close();
stmt.close();
}
catch(Exception e){
  out.println("ERROR");
  out.println(e);
}
%>
```

Storemedicine.jsp

```
<%--
Document : storemedicine
```

Created on : 30 Mar, 2016, 2:01:48 PM

Author : VAIO

```
--%>
<%@page import="java.sql.DriverManager"%>
<%@page import="java.sql.Statement"%>
<%@page import="java.sql.Connection"%>
<%
    String mid=request.getParameter("mid");
    String mname=request.getParameter("mname");
    String mquan=request.getParameter("mquan");
    String mbatchno=request.getParameter("mbatchno");
    String mmanu=request.getParameter("mmanu");
    String mexp=request.getParameter("mexp");
    //out.print(mname+mquan+mbatchno+mmanu+mexp);
    Connection c=null;
    Statement stmt=null;
    try{
        Class.forName("org.postgresql.Driver");
        c =
DriverManager.getConnection("jdbc:postgresql://localhost:5432/Clinic","postgres",
"xmeia06");
        stmt = c.createStatement();
        String s="insert into medicine
values('"+mid+"','"+mname+"','"+mquan+"','"+mbatchno+"','"+mmanu+"','"+mexp+"')";
        stmt.executeUpdate(s);
        out.print(mname);
        c.close();
        stmt.close();
    }
    catch(Exception e){
        out.println("ERROR");
        out.println(e);
    }
%>
```

SubmitInvestigation.jsp

```
<%@page import="java.sql.*" %>
<%
    String v1=request.getParameter("rno");
    String v2=request.getParameter("height");
    String v3=request.getParameter("weight");
    String v4=request.getParameter("bmi");
    String v5=request.getParameter("diagnose");
    Connection c=null;
    Statement stmt=null;
    try{
        Class.forName("org.postgresql.Driver");
        c =
DriverManager.getConnection("jdbc:postgresql://localhost:5432/Clinic","postgres",
"xmeia06");
        stmt = c.createStatement();
        String s="insert into investigation values('"+v1+"','"+v2+"','"+v3+"','"+v4+"','"+v5+"')";
        stmt.executeUpdate(s);
        out.print(v4);
        c.close();
        stmt.close();
    }
    catch(Exception e){
        out.println("ERROR");
        out.println(e);
    }
%>
```

Submitpres.jsp

```
<%@page import="java.sql.*"%>
<%
    String rno=request.getParameter("rno");
    String medi=request.getParameter("medicine");
    String quan=request.getParameter("quantity");
    int quantity=Integer.parseInt(quan);
    String dosage=request.getParameter("dosage");
    out.print(rno+medi+quan+dosage);
    Connection c=null;
    Statement stmt=null;
    try{
        Class.forName("org.postgresql.Driver");
        c =
DriverManager.getConnection("jdbc:postgresql://localhost:5432/Clinic","postgres",
"xmeia06");
        stmt = c.createStatement();
        String s="insert into prescription
values('"+rno+"','"+medi+"','"+quantity+"','"+dosage+"')";
        stmt.executeUpdate(s);
        out.print("Prescription Detail Stored Successfully");
        c.close();
        stmt.close();
    }
    catch(Exception e){
        out.println("ERROR");
        out.println(e);
    }
}%>
```

Javascript files

Homescript.js

```
$(function(){
    $('.tab-section').hide();
    $('.hide').hide();
    $('#tabs a').bind('click', function(e){
        $('#tabs a.current').removeClass('current');
        $('.tab-section:visible').hide();
        $(this.hash).show();
        $(this).addClass('current');
        e.preventDefault();
    }).filter(':first').click();
});
```

Investigation.js

```
$(function(){
    //check form
    $('#fname').click(function(){
        //display correct input
        $('#2').hide();
        $('#1').show();
        $('#checkfname').click(function(){
            var s_opt = $("input[name='stype']:checked").val();
            var fname=$('#input#fnameval').val();
            var datastring='s_opt='+s_opt+'&s_val='+fname;
            $.ajax({
                type: "POST",
                url: "database/check.jsp",
                data:datastring,
                success: function(result){
                    $('#display').html(result).fadeIn(100);
                }
            });
        });
    });
    $('#rno').click(function(){
        //display correct input
        $('#2').show();
    });
});
```

```

$('#1').hide();
$('#checkrno').click(function(){
    var s_opt = $("input[name='stype']:checked").val();
    var rno=$('#input#rnoval').val();
    var datastring='s_opt='+s_opt+'&s_val='+rno;
    $.ajax({
        type: "POST",
        url: "database/check.jsp",
        data: datastring,
        success: function(result){
            $('#display').html(result).fadeIn(100);
        }
    });
});
});
//submit investigation
$('#submitinvestigation').click(function(e){
    e.preventDefault();
    //validate registration no
    var rno=$('#input#rno2').val();
    if(rno=="")
    {
        $('#label#rnoerror').show();
        $('#input#rno').focus();
        return false;
    }
    else
    {
        $('#label#rnoerror').hide();
    }
    //Height validation
    var height=parseFloat($('#input#height').val());
    var heightvali=$.isNumeric(height);
    if(!heightvali)
    {
        $('#label#heighterror').show();
        $('#input#height').focus();
        return false;
    }
    else
    {
        $('#label#heighterror').hide();
    }

```

```

    }
    //weight validation
    var weight=parseFloat($('input#weight').val());
    var weightvali=$.isNumeric(weight);
    if(!weightvali)
    {
        $('label#weighterror').show();
        $('input#weight').focus();
        return false;
    }
    else
    {
        $('label#weighterror').hide();
    }
    //calculate BMI
    var heightinM2=(height*0.025)*(height*0.025);
    var bmi=Math.round(weight/heightinM2).toFixed(2);
    //get diagnose name
    var diagnosename=$('#diagnosename').val();
    var
datastring1='rno='+rno+'&height='+height+'&weight='+weight+'&bmi='+bmi+'&diagnose=
'+diagnosename;

$.ajax({
    type: "POST",
    url: "database/submit_investigation.jsp",
    data: datastring1,
    success: function(){
        alert("Investigation details Submitted");
    }
});
});
$('#prescriptionsubmit').click(function(e){
    e.preventDefault();
    //get selected dropdown values
    var select_m_1=$('#select_m_1').val();
    //get quantity
    var q1=$('#quantity1').val();
    //dosage
    var dosage=$('#dosage').val();
    var rno=$('#input#rno2').val();

```

```

var
datastring='rno='+rno+'&medicine='+select_m_1+'&quantity='+q1+'&dosage='+dosage;
$.ajax({
    type: "POST",
    url: "database/submit_pres.jsp",
    data: datastring,
    success: function(result){
        alert(result);
    }
});
});
});

```

Medicine.js

```

$(function(){
    //Medicine Entry
    $('#medicineform').submit(function(e){
        e.preventDefault();
        var mname=$('#input#mname').val();
        var mquan=$('#input#mquan').val();
        var mbatchno=$('#input#mbatchno').val();
        var mmanu=$('#input#mmanu').val();
        var mexp=$('#input#mexp').val();
    });
});

```

```

var m_id=mname.charAt(0)+{ Math.floor((Math.random()*100000)+1));
var
datastring='mid='+m_id+'&mname='+mname+'&mquan='+mquan+'&mbatchno='+mbatch
no+'&mmanu='+mmanu+'&mexp='+mexp;
$.ajax({
  type: "POST",
  url: "database/storemedicine.jsp",
  data: datastring,
  success: function(result){
    $('#mediresult').html("Medicine "+result+ "Added Successfully");
  }
});
});
});

```

Medicine search.js

//Medicine Entry Edit

```

/*$(function(){
  $('#delmedi').click(function(){
    $('#deletediv').show();

```

```

    $('#editdiv').hide();
  });
  $('#editmedi').click(function(){
    $('#deletediv').hide();
    $('#editdiv').show();
  });
});*/

```

```

$(function(){
  //list all medicine stored in the DataBase
  $('#viewallmedi').click(function(){
    var a="";
    $.ajax({
      type: "POST",
      url: "database/allmedicine.jsp",
      data:a,
      success: function(result){
        $('#displaymedi').html(result).fadeIn(100);
        $('#editmedicine').show();
      }
    });
  });
});

```

```

//List only medicine with specific name
$('#searchmedi').click(function(e){
  e.preventDefault();
  var s_mediname=$('#input#s_mediname').val();
  if(s_mediname=="")
  {
    alert("Please Enter medicine Name");
  }
  var datastring='s_mediname='+s_mediname;
  $.ajax({
    type: "POST",
    url: "database/searchmedicine.jsp",
    data:datastring,
    success: function(result){
      //alert(result);
      $('#displaymedi').html(result).fadeIn(100);
      $('#editmedicine').show();
    }
  });
});

```

```

    });
});
//Edit medicine data
//options
$('#m_e_option1').click(function(){
    $('#edit_medi_page').show();
    $('#del_medi_page').hide();
});
$('#m_e_option2').click(function(){
    $('#del_medi_page').show();
    $('#edit_medi_page').hide();
});

//option 1(edit)
$('#edit_medi').click(function(){
    var mid=$('#mid_edit').val();
    var col=$('#colno').val();
    var newdata=$('#newdata').val();
    var datastring='mid='+mid+'&col='+col+'&newdata='+newdata;
    $.ajax({
        type: "POST",
        url: "database/editmedicine.jsp",
        data: datastring,
        success: function(result){
            alert(result);
            var a="";
            $.ajax({
                type: "POST",
                url: "database/allmedicine.jsp",
                data:a ,
                success:function(result){
                    $('#displaymedi').html(result).fadeIn(100);
                    $('#input#s_mediname').val("");
                    //$('#editmedicine').hide();
                    $('#mid_edit').val("");
                    $('#colno').val("");
                    $('#newdata').val("");
                    $('#input#mid_delete').val("");
                }
            });
        }
    });
});

```

```

});

//option 2(delete)
$('#delete_medi').click(function(){
    var mid=$('#input#mid_delete').val();
    var datastring='mid='+mid;
    $.ajax({
        type: "POST",
        url: "database/deletemedicine.jsp",
        data: datastring,
        success: function(result){
            alert(result);
            var a="";
            $.ajax({
                type: "POST",
                url: "database/allmedicine.jsp",
                data:a,
                success:function(result){
                    $('#displaymedi').html(result).fadeIn(100);
                    $('#input#s_mediname').val("");
                    //$('#editmedicine').hide();
                    $('#mid_edit').val("");
                    $('#colno').val("");
                    $('#newdata').val("");
                    $('#input#mid_delete').val("");
                }
            });
        }
    });
});

/*$('#clearall').click(function(){
    $('#displaymedi').hide();
    $('#input#s_mediname').val("");
    $('#editmedicine').hide();
    $('#mid_edit').val("");
    $('#colno').val("");
    $('#newdata').val("");
    $('#input#mid_delete').val("");
});*/
});

```

Patientreport.js

```
$(function(){  
  $('#submitreport').click(function(e){  
  
    e.preventDefault();  
    var id=$('#reportid').val();  
    var data='data='+id;  
    $.ajax({  
      type: "POST",  
      url: "database/report.jsp",  
      data: data,  
      success: function(result){  
        $('#displayreport').html(result).fadeIn(100);  
      }  
    });  
  });  
});
```



Registration.js

```
$(function(){
$('#f1').submit(function(event){
    event.preventDefault();
    //first name validation
    var fname=$("#input#fn").val();
    if(fname=="")
    {
        $("#label#fnameerror").show();
        $("#input#fn").focus();
        return false;
    }
    else
    {
        $("#label#fnameerror").hide();
    }
    //Last name validation
    var lname=$("#input#ln").val();
    if(lname=="")
    {
        $("#label#lnameerror").show();
        $("#input#ln").focus();
        return false;
    }
    else
    {
        $("#label#lnameerror").hide();
    }
    //Gender Validation
    var gender = $("#input[name='pgender']:checked").val();
    if(gender==null){
        $("#label#gendererror").show();
        $("#input#ma-le").focus();
    }
}
```

```

    return false;
}
else
{
    $("label#gendererror").hide();
}
//dob validate
var dateformat = /^(0?[1-9]|[12][0-9]|3[01])([\/\-](0?[1-9]|1[012])([\/\-]\d{4})$/;
var date_val=$("input#pdob").val();
if(date_val.match(dateformat))
{
    var seperator=date_val.split('/');
    if(seperator.length>1)
    {
        var splitdate=date_val.split('/');
    }
    var dd = parseInt(splitdate[0]);
    var mm = parseInt(splitdate[1]);
    var yy = parseInt(splitdate[2]);
    var ListofDays = [31,28,31,30,31,30,31,31,30,31,30,31];
    if (mm==1 || mm>2)
    {
        if(dd>ListofDays[mm-1])
        {
            $("label#doberror").show();
        }
    }
}
if(mm==2)
{
    var lyear = false;
    if ( (!yy % 4) && yy % 100) || !(yy % 400))
    {
        lyear = true;
    }
    if ((lyear==false) && (dd>=29))
    {
        $("label#doberror").show();
    }
    if ((lyear==true) && (dd>29))
    {
        $("label#doberror").show();
    }
}

```

```

    }
  }
  $("#label#doberror").hide();
}
else
{
  $("#label#doberror").show();
  $("#input#pdob").focus();
  return false;
}
//Address Validation
var address=$('#address').val();
if(address=="")
{
  $("#label#addresserror").show();
  $("#address").focus();
  return false;
}
else
{
  $("#label#addresserror").hide();
}
//generate random registration number
var randomid=fname.charAt(0)+{
Math.floor((Math.random()*100000)+1))+lname.charAt(0);
//ajax submit
var dataString='va1='+fname+'&va2='+lname+'&va3='+gender+'&va4='+
+date_val+'&va5='+address+'&va6='+randomid;
$.ajax({
  type: "POST",
  url: "database/register.jsp",
  data: dataString,
  success: function(result){
    $('#result').html("<u>"+fname+"</u> is now "+result+"<br>Patient's Registration
no : "+randomid).fadeIn(1000);
  }
});

/*$('#printbuttonregis').click(function(){
$.ajax({
  type: "POST",
  url: "printregis.jsp",

```

```

        data: dataString,
        success: function(){
            alert(dataString);
        }
    });
    });*/
    });
    //Clear button function
    $('#clearfield').click(function(e){
        $("input#fn").val("");
        $("input#ln").val("");
        $("input#ma-le").focus();
        $("input#pdob").val("");
        $('#result').hide();
        $('#address').val("");
    });
    });

```

Homeccss.css

```

.list{
    display:inline;
    font-size: 9px;
}
.leftalign{
    text-align: center;
    float:left;
    display: inline-block;
    color:#000000;
    font-size: 48px;
}
#tabs {
    margin: 0;
    overflow: hidden;
    padding: 0;
    position:relative;
    top:1px;
    z-index: 1;
}

```

```
#tabs li{
  display: inline;
  margin: 0;
  padding: 0;
  float: left;
}
#tabs li a {
  display: block;
  padding: 2px 10px;
  //border-left: 1px solid #ffffff;
  text-align: center;
  text-decoration: none;
  background-color: #ffffff;
  color:#000000;
  height: 25px;
  font-size:9px;
  font-size-adjust: 1;
}
.tab-section {
  background:#ffffff;
  padding: 10px;
  color:#000000;
}
#tabs li a.current {
  border-bottom: 2px solid #008dde;
  color:#008dde;
}
#tabs li a:hover{
  color: #008dde;
}
a{
  text-decoration: none;
}
```

Login.css

/*

To change this license header, choose License Headers in Project Properties.

To change this template file, choose Tools | Templates

and open the template in the editor.

*/

/*

Created on : 6 Jan, 2016, 6:37:14 PM

Author : Dell

*/

.round

{

```
height: 35px;
width: 300px;
border-top-left-radius: 3px;
border-top-right-radius: 3px;
border-bottom-left-radius: 3px;
border: none;
background-color: #dde0d4;
}
.roundbutton
{
height: 40px;
width: 300px;
border-top-left-radius: 5px;
border-top-right-radius: 5px;
border-bottom-left-radius: 5px;
border-bottom-right-radius: 5px;
border-style: none;
background-color: #008dde;
color: #ffffff;
font-size: small;
font-family: 'Arial';
}
```

SAMPLE OUTPUT/INPUT

localhost:3080/cms_g/



Search

100%



Welcome

LOGIN

LOGIN

Fig: Login Page

You are now Logged in as meia[Registration](#) [Investigation](#) [Patient Report](#) [Medicine](#) [Medicine Search](#)

Patient's Info

Name

First Name:

Meia

Last Name:

shan

Gender

☒ Male ☐ Female

Date Of Birth (dd/mm/yyyy):

12/12/1990

Address:

Shillong

Submit

Clear

Fig:Registration page



t8080/cms_g/index.jsp

Search

100% + -

Registration Investigation Patient Report Medicine Medicine Search

First Name	Last Name	Gender	Date Of Birth	Address	Registration No	Registration Date
Meia	Shan	male	1990-12-12	asndnnsd	M1037S	2016-03-31

Check Registration By:
☒ First Name ☐ Registration number

Meia

Registration number:

Height: in Inches

Weight: in kilograms

Diagnose

Prescription

Medicine:

Quantity:

Dosage:

Fig: Investigation page

localhost:9000/crm_g/index.jsp

Search

100% + -

You are now Logged in as meia



Registration Investigation Patient Report Medicine Medicine Search

Medicine Entry

Medicine Name:	medicine
Quantity:	13
Batch no:	12653752
Date of Manufacturing (dd/mm/yyyy):	05/03/2015
Expiry date (dd/mm/yyyy):	04/06/1992
	Submit Clear

Medicine medicine Added Successfully

Fig: Medicine entry page

localhost:8080/cms_g/index.jsp

You are now Logged in as meia

Registration Investigation Patient Report Medicine Medicine Search

- Medicine name:

Medicine ID	Medicine Name	Medicine Quantity	Medicine Batch No	Manufacturing Date	Expiry Date
m11367	medicine1	1	12345	2015-02-05	2016-02-05
m61339	medicine2	10	54321	2015-01-15	2016-02-05
m84671	medicine3	10	7890	2015-03-05	2017-03-05
m95079	medicine4	15	0987	2015-03-05	2017-03-05
m48362	medicine	13	12653752	2015-03-05	1992-06-04

Medicine ID: Column No: New value:

cms_g/index.jsp?investigation

Fig: Medicine Search page

Conclusion

In conclusion this software can reduce the work load of a daily data entry in a clinic and also reduce unnecessary human errors which is encountered day by day . In addition clinical task like registration, medicine entry, diagnose, patient report and patient records are all automated and easy. With this system, billing, clinic inventory and accounting management can be more precise and reliable.

Further development can also be include in this system by adding more module to make this system more user friendly as possible

Bibliography

- *CodeRanch . com*
- *Stackoverflow . com*
- *O'Reilly Java Server Pages*
- *W3schools . com*