Electronic Medical Record Keeping System Source Code

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MyHealth® System

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Source Code

Accountant.php

```
<?php
include("includes.php");
include("header.php");
include("body_start.php");
?>
<h1>Accountants</h1>
  The MyHealth System recognizes an organization's need for proper billing and payment
processing. Accountants primary goals include running billing reports, processing payments,
and verifying account balances. After authentication, accountant users will see the options
to do Billing Reports, Process Payments, and Verify Account Balance. <br /> <br />
<a href='billingreports.php'>Billing Reports</a><br />
<a href='processpayments.php'>Process Payments</a><br />
<a href='verifyaccountbalance.php'>Verify Account Balance</a><br/>br/>
<?php
include("body_end.php");
include("footer.php");
?>
```

Auditor.php

```
<?php
include("includes.php");
include("header.php");
include("body start.php");
?>
<h1>Auditors</h1>
  Auditors access the organization's billing records and expenses to see current and recent
activity. They are allowed to look but not modify any existing transactions or payments that
does not compromise patient confidentiality. Auditors also verify the pharmacological stock
matches purchase and prescription records. After authentication, the auditing user will see
options to do a Billing Audit or a Pharmacy Audit. <br /> <br />
<a href='billingaudit.php'>Billing Audit</a><br />
<a href='pharmacyaudit.php'>Pharmacy Audit</a><br />
<?php
include("body_end.php");
include("footer.php");
?>
```

Authenticate.php

```
<?php
$trigger = "true";
include("includes.php");
define('SALT_LENGTH', 9);</pre>
```

```
function generateHash($plainText, $salt = null)
{
  if (\$salt === null)
  {
     $salt = substr(md5(uniqid(rand(), true)), 0, SALT_LENGTH);
  }
  else
  {
     $salt = substr($salt, 0, SALT_LENGTH);
  }
  return $salt . sha1($salt . $plainText);
}
$username = md5($_POST['username']);
$password = $_POST['password'];
$_SESSION['username'] = $_POST['username'];
if ($_SESSION['username'] == null || $_SESSION['username'] == "")
{
    $_SESSION['loginerror']="Enter a username.";
    $_SESSION['login']="false";
    SESSION_write_close();
    header("Location: index.php");
    exit();
}
$$\frac{1}{2}$ = "select uid, password from users where username = '\frac{1}{2}\text{username';";}
```

```
$result = mysql_query($sql) or die("Error in string: $sql. ".mysql_error());
if (mysql_num_rows($result) > 0)
{
  $row = mysql_fetch_row($result);
  $salt = substr($row[1],0,SALT_LENGTH);
  $userpass = substr($row[1],SALT_LENGTH);
  if ($row[1] == generateHash($password,$salt))
  {
   $_SESSION['uid'] = $row[0];
   $_SESSION['login']="true";
   SESSION_write_close();
   header("Location: index.php");
   exit();
  }
  else
  {
   $_SESSION['loginerror']="Incorrect password.";
   $_SESSION['login']="false";
   SESSION_write_close();
   header("Location: index.php");
   exit();
 }
}
else
```

```
$_SESSION['loginerror']="Incorrect username.";

$_SESSION['login']="false";

SESSION_write_close();
header("Location: index.php");
exit();
}
```

Billingaudit.php

```
<?php
include("includes.php");
include("header.php");
include("body_start.php");
?>
<h1>Billing Audits</h1>
```

Accessing expense data will be business expenses that the hospital incurs that is applicable to auditing. The billing audit screen will show all of the line items, their corresponding billable amount, and the amount a customer has paid toward the balance. This screen can be sorted by line item type or by date. This list will be read only.

```
<?php
```

\$sql = "SELECT p.FNAME,p.LNAME, TYPE_OF_EXPENSE, AMOUNT, DATE_REQUESTED,
a.FNAME, a.LNAME, COMMENTS FROM

```
PHYSICIANS p, ACCOUNTANTS a, HOSPITAL EXPENSES
WHERE REQUESTED_BY=p.SSN AND FILLED_BY=a.SSN;";
$result = mysql_query($sql) or die("Error in string: $sql. ".mysql_error());
$numrows=mysql_numrows($result);
if ($numrows>0)
{?>
<h1> Hospital Expenses to Date: </h1>
 NameExpense Type</
td>AmountDate Requested
Approved ByComments
<?
for($i=0;$i<$numrows;$i++)
{
$rname = mysql_result($result,$i,0)." ".mysql_result($result,$i,1);
$fname = mysql_result($result,$i,5)." ".mysql_result($result,$i,6);
$f1 = mysql_result($result,$i,2);
$f2 = mysql_result($result,$i,3);
$f3 = mysql result($result,$i,4);
$f4 = mysql result($result,$i,7);
echo "$rname$f1$f2$f3$fname</
td> $f4";
}
}
$sql = "SELECT f.FNAME,f.LNAME, TYPE_OF_EXPENSE, AMOUNT, DATE_REQUESTED,
a.FNAME, a.LNAME, COMMENTS FROM
FACILITY STAFF f, ACCOUNTANTS a, HOSPITAL EXPENSES
WHERE REQUESTED_BY=f.SSN AND FILLED_BY=a.SSN;";
```

```
$result = mysql_query($sql) or die("Error in string: $sql. ".mysql_error());
$numrows=mysql_numrows($result);
if($numrows>0)
{
for($i=0;$i<$numrows;$i++)
{
$rname = mysql_result($result,$i,0)." ".mysql_result($result,$i,1);
$fname = mysql_result($result,$i,5)." ".mysql_result($result,$i,6);
$f1 = mysql_result($result,$i,2);
$f2 = mysql_result($result,$i,3);
$f3 = mysql_result($result,$i,4);
$f4 = mysql_result($result,$i,7);
echo "$rname$f1$f2$f3$fname</
td> $f4";
}
echo"";
}
include("body_end.php");
include("footer.php");
?>
```

Billingreports.php

```
<?php
include("includes.php");
include("header.php");</pre>
```

```
include("body start.php");
?>
<h1>Billing Menu</h1>
On this screen, accounting users will enter the customers ID, which is their SSN, into the
lookup box
and see a report of all of the customer's charges in a line by line form. These screens are
read-only.
<br><br><
<form name='bills' action='billingreports.php' method='post'>
<input type='text' name='custid' size='20' value='Enter Customer ID'> <input</pre>
type='submit' value='Find Billing Report'>
<br><br><
    <?php
$custid=$ POST['custid'];
$sql = "select DATE OF CHARGE, AMT DUE, PAID, COMMENTS, FNAME, LNAME from
PATIENTS, ACCOUNTS_PAYABLE where ssn=pssn and ssn = '$custid';";
$result = mysql_query($sql) or die("Error in string: $sql. ".mysql_error());
$numrows = mysql numrows($result);
if ($numrows>0)
{
$fname = mysql_result($result,$i,4);
$lname = mysql_result($result,$i,5);
?>
<h1> <? echo "$fname $lname";?></h1>
<?
echo " Date of Charge</
td>Amount BilledAmount PaidPayment Information</
tr>";
for($i=0;$i<$numrows;$i++)
{
```

```
$f1 = mysql_result($result,$i,0);

$f2 = mysql_result($result,$i,1);

$f3 = mysql_result($result,$i,2);

$f4 = mysql_result($result,$i,3);

echo "$f1$f2$f3$f4</r></ra>;

echo " ";

}

echo"";

}

include("body_end.php");

include("footer.php");

?>
```

Body_end.php

```
<?php

?>
  </div>
  <div id="body_footer">
  <?php
include("body_footer.php");
?>
  </div>
```

Body_footer.php

```
<?php
// place for body's footer
?>
```

Body_header.php

```
<?php
// place for main pages header information
?>
```

Body_start.php

```
<?php

?>
<div id="body_header">
<?php
```

```
include("body_header.php");
?>
    </div>
    <div id="menu">
    <?php
include("menu.php");
?>
    </div>
    <div id="content">
```

Createaccount.php

```
<?php
$trigger='true';
include("includes.php");
include("header.php");
include("body_start.php");

?>
<div id='accountcreation'>
<h1>Create an Account</h1>
<form name='createaccount' action='validateaccount.php' method='post'>

First Name:<br/>
<input type='text' name='firstname' style='width: 150px;' value='<?php echo
$_SESSION['firstname'] ?>'> <br>
```

```
Middle Name: (Optional) < br>
<input type='text' name='middlename' style='width: 100px;' value='<?php echo</pre>
$ SESSION['middlename'] ?>'><br>
Last Name: <br>
<input type='text' name='lastname' style='width: 150px;' value='<?php echo</pre>
$ SESSION['lastname'] ?>'><br>
<hr>
Desired Username: (jsmith, etc.) <br>
<input type='text' name='username' style='width: 120px;' value='<?php echo</pre>
$ SESSION['username'] ?>'><br>
Password: <br>
<input type='text' name='password1' style='width: 150px;' value='<?php echo</pre>
$_SESSION['password1'] ?>'><br>
Re-type Password: <br>
<input type='text' name='password2' style='width: 150px;' value='<?php echo</pre>
$ SESSION['password2'] ?>'><br>
<hr>
Phone Number: <br>
<input type='text' name='phone' style='width: 115px;' value='<?php echo</pre>
$ SESSION['phone'] ?>'><br>
E-mail Address: <br>
<input type='text' name='email' style='width: 200px;' value='<?php echo</pre>
$_SESSION['email'] ?>'><br>
<hr>
<em>Anti-bot check</em><br>
Enter one of the following colors: <strong>red</strong>, <strong>green</strong>,
<strong>yellow</strong>, or <strong>blue</strong>.<br><br>
<em><?php displayCaptcha(); ?></em><br>
<input type='text' name='address' style='width: 150px;'><br>
<hr>
<input type='submit' value='Create Account'> <a href='index.php'>Cancel</
a><hr><hr>
```

```
</form>
</div>
<?php
include("body_end.php");
include("footer.php");
function displayCaptcha()
{
  pick = rand(5,12);
 if ($pick == 5)
 {
   echo "What color are pine needles?";
   $_SESSION['captcha'] = "green";
 }
 if ($pick == 6)
  {
   echo "What color is the sky?";
   $_SESSION['captcha'] = "blue";
 }
 if ($pick == 7)
 {
   echo "What color is the sun?";
   $_SESSION['captcha'] = "yellow";
 }
```

```
if ($pick == 11)
{
    echo "What color is a second place ribbon/award?";
    $_SESSION['captcha'] = "red";
}
if ($pick == 12)
{
    echo "What color is a first place ribbon/award?";
    $_SESSION['captcha'] = "blue";
}
}
```

Customersupport.php

```
<?php
include("includes.php");
include("header.php");
include("body_start.php");
?>
<h1>Customer Support</h1>
Enter in customer ID to get customer profile.
```

```
<br>
<form name='add' action='customersupport.php' method='post'>
<? $cust=$ POST['custid'];
$addrow = $_POST['addRow'];
if ($addrow=="Add")
{
$apptDate = $_POST['addApp'];
$time = $_POST['time'];
$sql = "SELECT MAX(visitid) FROM PATIENT_VISIT";
$result=mysql_query($sql) or die("Error in select max routine");
$vid = mysql_result($result,0,0);
$vid=$vid+1;
$sql = "SELECT FNAME, LNAME from PATIENTS where ssn=$cust;";
$result=mysql_query($sql) or die("Error in add routine".mysql_error());
$fname = mysql_result($result,0,0);
$Iname = mysql_result($result,0,1);
$$ql = "INSERT INTO PATIENT VISIT(PSSN,DATE OF VISIT,TIME,VISITID) VALUES
('$cust','$apptDate', '$time',$vid);";
$result=mysql_query($sql) or die("Error in insert routine".mysql_error());
}
$delrow = $_POST['del'];
if ($delrow!="")
{
$$ql = "DELETE FROM PATIENT_VISIT WHERE VISITID=$delrow;";
$result=mysql_query($sql) or die("Error in delete routine".mysql_error());
}?>
```

```
<input type='text' name='custid' size='20' value='<? echo "$cust";?>'> <input</pre>
type='submit' value='Find'>
<br>
<?php
$custid=$_POST['custid'];
$sql = "select FNAME, LNAME, DATE_OF_VISIT, time, visitid from PATIENTS,PATIENT_VISIT
where ssn=pssn and ssn = '$custid';";
$result = mysql_query($sql) or die("Error in string: $sql. ".mysql_error());
$numrows = mysql numrows($result);
if ($numrows>0)
{
echo "</br>";
echo " Frist NameLast
Name
Appointment DateTimeDelete?";
for($i=0;$i<$numrows;$i++)
{
$f1 = mysql result($result,$i,0);
$f2 = mysql_result($result,$i,1);
$f3 = mysql_result($result,$i,2);
$f4 = mysql_result($result,$i,3);
$f5 = mysql_result($result,$i,4);
echo "<tr><td><f1</td><td><f2</td><td><f3</td><td><f4</td><td><tinput
type='submit' name='del' value=$f5></input>";
}
echo"";
```

Database.php

```
<?php

$dbhost = "svn.serverwench.com";

$dbuser = "emrks";

$dbpass = "emrks77";

$db = "emrksdb";

$dbconnection = mysql_connect($dbhost, $dbuser, $dbpass) or die ("Unable to connect");

mysql_select_db($db) or die ("Unable to select database");</pre>
```

Facilitystaff.php

```
<?php
include("includes.php");
include("header.php");
include("body_start.php");
?>
<h1>Facility Staff</h1>
```

One of the most important priorities for any medical facility is the cleanliness of its rooms. Facility staff primary goals are to clean rooms soon after being vacated, make sure equipment is the proper location, and find equipment that has been requested. After authentication, the facility staff will see options to look up rooms that need cleaning, retrieve equipment move requests, and find equipment location.

Rooms That Need Cleaning

Rooms that are assigned the need for cleaning with a description of the type of cleaning (equipment, floors, bedding, etc) shall be kept in an updated list that is easily marked off by staff as they are done with completion of cleaning. On this screen, the facility staff will be able to see the rooms that need cleaning. After service has been rendered, the user will select the room completion option or select the an option to detail why a room is not clean. Such circumstances may be: the room has a leaky room, the bathroom sink is broken, a floor tile is cracked, etc. Once the room has been repaired, the user will select the room completion option to notify the system of a room available.

 Retrieve Equipment Move Requests
>

Medical staff need equipment and materials to be in a room. The request specifies the equipment and to the room to which it should be moved. The screen will be an ordered list of equipment move requests. The list will be a first come, first serve order. Once the request has been completed, the facility user will choose the request completed option and then next request will be shown.

>Find Equipment Location

An online look up system shall be implemented to allow staff to look up equipment location quickly at any network accessible location. This screen will ask for the major equipment ID or equipment name and display a list of equipment and its location. This screen is read only.

```
<?php
include("body_end.php");
include("footer.php");
?>
```

Footer.php

```
</div>
</center>
</BODY>
</HTML>
```

Header.php

```
<?php
if ($pagetitle == "")
    $pagetitle = "Default title";
?>
<HTML>
```

```
<HEAD>
k rel="stylesheet" type="text/css" href="screen.css" media="screen" />
k rel="stylesheet" type="text/css" href="print.css" media="print" />
<TITLE><?php echo $pagetitle ?></TITLE>
</HEAD>
<BODY>
<center>
<div id='mainbody'>
```

Includes.php

```
<?php
session_start();

if ((($_SESSION['username'] == null || $_SESSION['username'] == "") && $trigger != "true")

{
     $_SESSION['loginerror']="You are not logged in.";
     $_SESSION['login']="false";
     SESSION_write_close();
     header("Location: index.php");
     exit();
}

include("database.php");
?>
```

Index.php

```
<?php
$pagetitle = "Electronic Medical Record Keeping System";
$trigger = "true";
include("includes.php");
include("login.php");
$trigger = "false";
?>
```

Login.php

```
<?php
include("includes.php");
if ($_SESSION['login'] == "true")
{
   header("Location: myaccount.php");
}
include("header.php");</pre>
```

```
if ($_SESSION['login'] == null || $_SESSION['login'] == "false" || $_SESSION['login'] ==
{
?>
<div id='mainbodylogin'>
<form name='loginform' action='authenticate.php' method='post'>
<div id='loginbox'>
<div id='loginerror'>
<?php
echo $_SESSION['loginerror'];
$_SESSION['loginerror'] = "";
?>
</div>
<div id='userfield1'>Username: </div><div id='userfield2'><input type='text'</pre>
name='username' style='width: 150px;' value='<?php echo $_SESSION['username'] ?
>'></div>
<div id='passfield1'>Password: </div><div id='passfield2'><input type='password'</pre>
name='password' style='width: 150px;'></div>
<div id='createfield'><a href='createaccount.php'>Create an account.</a></div>
<div id='loginsubmit'><input type='submit' value='Login'></div>
</form>
</div>
<?php
}
elseif ($_SESSION['login'] == "true")
{
  include("myaccount.php");
}
else
```

```
{
    session_destroy();
}
include("footer.php");
?>
```

Logout.php

```
<?php
include("includes.php");

//include("header.php");
session_destroy();
session_start();

$_SESSION['loginerror'] = "Your session has ended.";

$_SESSION['login'] = "false";
header("Location: index.php");
?>

<?php

//include("footer.php");
?>
```

Medicalhistory.php

```
<?php
include("includes.php");
include("header.php");
include("body_start.php");
?>
<h1>Patient Medical History</h1>
<br>Physicians and Nurses may use this screen to retrieve patient history. <br><br>
Enter patient social security number to retrieve patient history.
<br><br><
<form name='history' action='medicalhistory.php' method='post'>
<input type='text' name='custid' size='20' value='Enter Customer ID'> <input</pre>
type='submit' value='Find Patient History'>
<br><br><
     <?php
$custid=$_POST['custid'];
if ($custid != "" && $custid > 0)
{
      $sql = "select pv.HEIGHT, pv.WEIGHT, pv.BLOOD_P, pv.DATE_OF_VISIT,
pv.COMMENTS, p.FNAME, p.LNAME, p.MINIT, pv.DSSN, pv.NSSN from PATIENTS as
p ,PATIENT_VISIT as pv where p.ssn=pv.pssn and p.ssn = '$custid' ORDER BY
DATE_OF_VISIT DESC;";
      $result = mysql_query($sql) or die("Error in string: $sql. ".mysql_error());
      $numrows = mysql_numrows($result);
      if ($numrows>0)
      {
```

```
$fname = mysql result($result,$i,5);
            $Iname = mysql_result($result,$i,6);
            $minit = mysql_result($result,$i,7);
            ?>
            <h1> <? echo "$fname $minit. $lname";?></h1>
            <?
            echo "<table style='border-width=1px;border-spacing:1px;;border-
style:solid;border-color:black;'> <tr bgcolor=lightgray style='font-
weight:bold;'>Date of VisitPhysicianNurse<td
rowspan=2>DetailsHeightWeightBlood
Pressure";
            for($i=0;$i<$numrows;$i++)
            {
                  $height = mysql_result($result,$i,0);
                  $weight = mysql result($result,$i,1);
                  $blood p = mysql result($result,$i,2);
                  $dateofvisit = mysql_result($result,$i,3);
                  $comments = mysql_result($result,$i,4);
                  $doctor = mysql result($result,$i,8);
                  $nurse = mysql result($result,$i,9);
                  $$q|2 = "select CONCAT(FNAME,' ',MINIT,' ',LNAME) from PHYSICIANS
where ssn = '$doctor';";
                  $sql3 = "select CONCAT(FNAME,' ',MINIT,' ',LNAME) from NURSES
where ssn = '$nurse';";
                  $result2 = mysql_query($sql2) or die("Error in string: $sql2.
".mysql error());
                  $result3 = mysql_query($sql3) or die("Error in string: $sql3.
".mysql_error());
                  $doctor = mysql result($result2,0,0);
                  $nurse = mysql_result($result3,0,0);
                  echo " <strong>$dateofvisit</strong></
```

```
echo "
             }
             echo"";
      }
      else
      {
             echo "Patient history for ID# $custid not found!";
      }
}
elseif ($custid == "" && $custid <= 0)
{
}
else
{
}
include("body_end.php");
include("footer.php");
?>
```

Menu.php

<?php

```
if ($_SESSION['login'] == "true")
{
?>
<a href="accountant.php">Accountant</a><br>
<a href="auditor.php">Auditor</a><br>
<a href="customersupport.php">Customer Support</a><br>
<a href="facilitystaff.php">Facility Staff</a><br>
<a href="physician.php">Physician</a><br>
<a href="nurse.php">Nurse</a><br>
<a href="receptionist.php">Receptionist</a><br>
<a href="pharmacist.php">Pharmacist</a><br>
<a href="patient.php">Patient</a><br>
<br><br><
<a href="logout.php">Logout</a><br>
<?php
}
?>
```

Myaccount.php

```
<?php
include("includes.php");
include("header.php");</pre>
```

```
include("body_start.php");

?>
  <h1>Main Menu</h1>
Select a menu item from the left.<br />
  <br />
  <b>Developers note:</b> Users will only see options for which they have access.
  <?php

include("body_end.php");
include("footer.php");
?>
```

Nurse.php

```
<?php
include("includes.php");
include("header.php");
include("body_start.php");
?>
<h1>Nurses</h1>
```


Nurses are responsible for the well-being and early seeing of the patients. As such they will have access to the patients files to prep them before being seen by a doctor or physician. Nurses also enter details about their interactions with patients. After authentication, nurses will be able to do patient record retrieval and do a patient visitation detail submission.

```
<br><br><a href='medicalhistory.php'>View Patient Medical History</a><br/><a href='submitvisit.php'>Enter Patient Visit Details</a><br/><?php

include("body_end.php");
include("footer.php");
?>
```

Patient.php

<hr>

```
<?php
include("includes.php");
include("header.php");
include("body_start.php");

?>
<h1>Patients </h1>
Patients are the primary focus of this hospital. They are the ones tended to and need to the primary focus of this hospital. They are the ones tended to and need to the primary focus of this hospital. They are the ones tended to and need to the primary focus of this hospital. They are the ones tended to and need to the primary focus of this hospital. They are the ones tended to and need to the primary focus of this hospital. They are the ones tended to and need to the primary focus of this hospital. They are the ones tended to and need to the primary focus of this hospital.
```

Patients are the primary focus of this hospital. They are the ones tended to and need to have access to their own files but no one else's. They also should be able to see their files online and to schedule/cancel appointments online, pay bills etc.
br>

```
<a href='patienthistory.php'>View Medical History</a><br/><a href='patientscheduling.php'>Schedule an appointment</a><br/>
```

```
<?php
include("body_end.php");
include("footer.php");
?>
```

Patienthistory.php

```
<?php
include("includes.php");
include("header.php");
include("body_start.php");

?>
<h1>Patient Medical History</h1>
<br>
<br>
<br>
Patient may use this screen to retrieve patient history. <br>
```

An online viewing system will be set up with authorization that the patient can review their own medical history and medical files. Patient history will include all relevant medical history data. Relevant medical history includes: blood pressure, cholesterol, height, weight, surgeries, date of visit, prescribed medicine, notes, and allergies.

```
<?php
$custid=$_SESSION['uid'];
if ($custid != "" && $custid > 0)
{
```

```
$sql = "select pv.HEIGHT, pv.WEIGHT, pv.BLOOD P, pv.DATE OF VISIT,
pv.COMMENTS, p.FNAME, p.LNAME, p.MINIT, pv.DSSN, pv.NSSN from PATIENTS as
p ,PATIENT VISIT as pv where p.ssn=pv.pssn and p.ssn = '$custid' ORDER BY
DATE_OF_VISIT DESC;";
      $result = mysql_query($sql) or die("Error in string: $sql. ".mysql_error());
      $numrows = mysql numrows($result);
      if ($numrows>0)
      {
            $fname = mysql result($result,$i,5);
            $lname = mysql result($result,$i,6);
            $minit = mysql result($result,$i,7);
            ?>
            <h1> <? echo "$fname $minit. $lname";?></h1>
            <?
            echo "<table style='border-width=1px;border-spacing:1px;;border-
style:solid;border-color:black;'> <tr bgcolor=lightgray style='font-
weight:bold;'>Date of VisitPhysicianNurse<td
rowspan=2>DetailsHeightWeightBlood
Pressure";
            for($i=0;$i<$numrows;$i++)
            {
                  $height = mysql_result($result,$i,0);
                  $weight = mysql result($result,$i,1);
                  $blood p = mysql result($result,$i,2);
                   $dateofvisit = mysql result($result,$i,3);
                   $comments = mysql_result($result,$i,4);
                  $doctor = mysql_result($result,$i,8);
                   $nurse = mysql_result($result,$i,9);
                  $sql2 = "select CONCAT(FNAME,' ',MINIT,' ',LNAME) from PHYSICIANS
where ssn = '$doctor';";
                  $sql3 = "select CONCAT(FNAME,' ',MINIT,' ',LNAME) from NURSES
```

```
where ssn = '$nurse';";
                 $result2 = mysql_query($sql2) or die("Error in string: $sql2.
".mysql_error());
                 $result3 = mysql_query($sql3) or die("Error in string: $sql3.
".mysql_error());
                 $doctor = mysql_result($result2,0,0);
                 $nurse = mysql_result($result3,0,0);
                 echo " <strong>$dateofvisit</strong></
td> <strong>Dr. $doctor</strong> <strong>$nurse</strong><td
rowspan=2> $comments$height$weight
$blood_p";
                 echo "
           }
           echo"";
     }
     else
     {
           echo "Patient history for ID# $custid not found!";
     }
}
elseif ($custid == "" && $custid <= 0)
{
}
else
{
}
include("body_end.php");
include("footer.php");
?>
```

Patientscheduling.php

```
<?php
include("includes.php");
include("header.php");
include("body_start.php");

?>
<h1>Patient Scheduling</h1>
        Patients will, with proper authentication, be able to view their upcoming appointments and request to modify them to cancel/reschedule according to time-slots available with their doctor/physician. Upon approval they will receive an email, mail, or telephone call notifying them of the changes.
<br/>

include("body_end.php");
include("footer.php");
?>
```

Pharmacist.php

```
include("includes.php");
include("header.php");
include("body_start.php");
?>
<h1>Pharmacists</h1>
```

Pharmacists are responsible for the administration of drugs with proper forms given by a doctor. As doctors fill out prescriptions (online or by paper) the pharmacists are allowed to check and see prescriptions for patients and give out the medicine as needed. Pharmacists will also need to update inventory when new shipments arrive.

```
<br><br><a href='rxcheck.php'>View Patient Prescriptions</a><br/><a href='rxinventory.php'>View Inventory</a><br/><?php
include("body_end.php");
include("footer.php");</pre>
```

Pharmacyaudit.php

```
<?php
include("includes.php");
include("header.php");</pre>
```

```
include("body_start.php");
?>
<h1>Pharmacy Audits</h1>
```

\$f1 = mysql_result(\$result,\$i,2);

Accessing and tracking prescriptions and pharmacological stock. The pharmacy audit screen will show, for each pharmacological item, the pharmacy's purchased amount, the current inventory amount, and the amount prescribed. The audit user will be able to view an entire history of a pharmacological item by selecting it from the list. This history will show chronologically the inventory levels, including purchases, prescriptions, or expirations.

```
<?php
$sql = "SELECT p.FNAME,p.LNAME, TYPE_OF_EXPENSE, AMOUNT, DATE_REQUESTED,
a.FNAME, a.LNAME, COMMENTS FROM
PHARMACISTS p, ACCOUNTANTS a, HOSPITAL EXPENSES
WHERE REQUESTED BY=p.SSN AND FILLED BY=a.SSN;";
$result = mysql_query($sql) or die("Error in string: $sql. ".mysql_error());
$numrows=mysql_numrows($result);
if ($numrows>0)
{?>
<h1> Pharmacy Expenses to Date: </h1>
 NameExpense Type</
td>AmountDate Requested
Approved ByComments
<?
for($i=0;$i<$numrows;$i++)
{
$rname = mysql_result($result,$i,0)." ".mysql_result($result,$i,1);
$fname = mysql_result($result,$i,5)." ".mysql_result($result,$i,6);
```

```
$f2 = mysql_result($result,$i,3);

$f3 = mysql_result($result,$i,4);

$f4 = mysql_result($result,$i,7);

echo "$f3$f3$f3$f3$f3$f1$f3$f3$f1$f1$f2$f3$f3$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f1$f
```

Physician.php

```
<?php
include("includes.php");
include("header.php");
include("body_start.php");
?>
<h1>Physicians</h1>
```


Physicians include doctors and pediatricians. They are responsible, along with nurses, for caring for the patients. As the doctors see patients they will have access to patient medical history and be responsible for electronically logging the details of the most previous patient visit. However, they will not have access to things such as patient financial information. Physicians will enter patient visit details after the visitation has ended.

```
<br><br><
```

```
<a href='medicalhistory.php'>View Patient Medical History</a><br/>
<a href='submitvisit.php'>Enter Patient Visit Details</a><br/>
<?php

include("body_end.php");
include("footer.php");
?>
```

Print.css

```
body
{
    background-color: white;
}

#mainbody
{
    border-width: 0px;
    border-style: solid;
    border-color: black;
    position: relative;
    text-align: left;
    width: 760px;
    height: 90%;
    text-size: 12pt;
```

```
background-image: url('images/logo1.jpg');
  background-repeat: no-repeat;
  background-position: top left;
}
#mainbodylogin
{
  border-width: 0px;
  border-style: solid;
  border-color: black;
  position: relative;
  text-align: left;
  width: 760px;
  height: 100%;
  text-size: 12pt;
  background-color: white;
  background-image: url('images/logo2.jpg');
  background-repeat: no-repeat;
  background-position: left center;
}
#loginbox
{
  position: absolute;
  top: 50%;
  margin-left: 15em;
  margin-top: -5em;
  width: 250px;
```

```
text-align: right;
  border-width: 0px;
  border-style: solid;
  border-color: black;
  padding: 10px;
}
#loginerror
{
 color: red;
 font-weight: bolder;
 font-size: 10pt;
 font-family: arial;
}
#userfield1
{
 float: left;
 text-align: right;
 text-size: 10pt;
 font-family: arial;
}
#userfield2
{
 text-align: right;
 text-size: 10pt;
 font-family: arial;
```

```
}
#passfield1
{
 float: left;
 text-align: right;
 text-size: 10pt;
 font-family: arial;
}
#passfield2
{
 text-align: right;
 text-size: 10pt;
 font-family: arial;
}
#createfield
{
 float: left;
 text-align: right;
 font-size: 8pt;
 margin-top: 7px;
 font-family: arial;
}
#submitlogin
{
```

```
width: 55px;
  float: right;
  text-align: right;
}
#body_header {
/* background: #EEEEEE; */
 position: absolute;
 top: 0px;
 left: 1px;
 width: 620px;
 height: 100px;
}
#menu {
/* background: #EEEEEE; */
 display:none;
 position: absolute;
 top: 170px;
 left: 0px;
 width: 0=1px;
 height: 500px;
 padding-left: 7px;
}
#content {
/* background: #fff; */
 position: absolute;
```

```
top: 100px;
 left: 1px;
 width: 760px;
 height: 500px;
 padding-left: 15px;
 padding-top: 15px;
 padding-bottom: 15px;
}
#body_footer {
/* background: #DDDDDD; */
 position: absolute;
 top: 500px;
 left: 0px;
 width: 760px;
 height: 100px;
 text-align: center;
}
#copyright
 position: relative;
 bottom: 0px;
 text-align: center;
 width: 100%;
}
```

Processpayments.php

```
<?php
include("includes.php");
include("header.php");
include("body_start.php");
?>
<h1>Process Payments</h1>
Here is where the accounting user will bring up a customer account and apply a processed
payment, or submit in the comments the reasons
why a payment failed.
<br><br><
<form name='getrecords' action='processpayments.php' method='post'>
<input type='text' name='custid' value='Enter Customer ID.'> <input type='submit'</pre>
value='Find Customer Account'>
<br><br><
<?php
$custnum=$_POST['custid'];
$sql = "select DATE_OF_CHARGE,AMT_DUE, PAID,DATE_PAID, COMMENTS, PAY_ID,
FNAME, LNAME, MINIT from PATIENTS, ACCOUNTS_PAYABLE where ssn=pssn and ssn =
'$custnum';";
$result = mysql_query($sql) or die("Error in string: $sql. ".mysql_error());
$num=mysql_numrows($result);
if ($num>0)
{
$fname = mysql_result ($result,0,6);
$Iname = mysql_result ($result,0,7);
```

```
$minit = mysql result ($result,0,8);
?>
<h2><? echo "$Iname, $fname $minit.";?> </h2>
<?
echo " Date of Charge</
td>Amount BilledAmount PaidDate PaidPayment
InformationSelect One";
for($i=0;$i<$num;$i++)
{
$f1 = mysql_result($result,$i,0);
$f2 = mysql_result($result,$i,1);
$f3 = mysql_result($result,$i,2);
$f4 = mysql_result($result,$i,3);
$f5 = mysql_result($result,$i,4);
$f6 = mysql_result($result,$i,5);
echo "$f1$f2$f3$f4$f5</
td><input type='radio' name='WhichPayment' value='$f6' ></input>";
}
echo"";
}
?>
<br><br></br></br></br>
Enter payment amount: ($120.59, $12824.23, etc)<br>
<input type='text' name='payment' size='20'> <br>
Enter payment type: (check, Visa, cash, etc.) < br>
<input type='text' name='payment type' size='10'><br>
```

```
<textarea rows='5' name='comments' cols='50'>Enter comments here.</textarea><br>
<input type='submit' name='Process' value='Submit Processed Payment'>
<br><br><
<?
$button = $_POST['Process'];
if ($button == 'Submit Processed Payment');
{
$amt_paid=$_POST['payment'];
$comments=$_POST['payment_type'].". ".$_POST['comments'];
$id=$_POST['WhichPayment'];
$$\sql = "UPDATE ACCOUNTS_PAYABLE SET PAID='\$amt_paid', DATE_PAID=CURDATE(),
COMMENTS='$comments' WHERE PAY_ID='$id';";
$result = mysql_query($sql) or die("Error in string: $sql. ".mysql_error());
}
?>
     <?php
include("body_end.php");
include("footer.php");
?>
```

Receptionist.php

```
<?php
include("includes.php");
include("header.php");
include("body_start.php");
?>
```

Receptionists

Receptionists are responsible for maintaining the scheduling of patients with the nurses and physicians. They should be allowed to update the scheduling but not see things such as patient medical history. Receptionists sometimes will need to handle patient payment requests. Receptionists, after logging in, will be able to access a screen which will allow them to enter a patient's SSN or MYID which will grant them an easy access view of the patient's schedule.

9.1 Patient Scheduling

Receptionists are able to access a patient's schedule after entering the patient's SSN or MYID into a lookup box and submitting it. They are then able to update their requests for them if necessary. If the patient has electronically requested an update the receptionist is responsible for allowing the change and notifying the patient and personnel necessary. As requests come in the receptionist will be able to confirm or deny the updated change. After either is selected the patient will be notified via email and telephone to let the patient know what decision they made and why.

9.2 Registering Payment

A patient may pay during their visit. The payment must be logged and pended to their account. Payment processing is done by accountants. If a patient is willing to pay during a visit to the hospital they may pay the receptionist. The receptionist is able to log into the system and access a patients billing screen by entering their SSN or MYID. From the billing screen they are able to update pending payments as the balance is adjusted with confirmed payments.

```
<?php
include("body_end.php");
include("footer.php");
?>
```

Rxcheck.php

```
<?php
include("includes.php");
include("header.php");
include("body_start.php");
?>
<h1>Prescription Check</h1>
```

Pharmacists will have limited access to an online page to see if the patient has the requested prescription approved by the doctor or not. The doctor must have administered it, and approved it, then marked a check box to authorize it as a digital signature. The pharmacist will be able to log in and put in the patient's SSN or MYID and be able to pull up their past and current prescription requests along with who administered them, the dosage, the medicine and the digital signature from the prescribing doctor. As prescriptions are filled, inventory is automatically updated as the pharmacist must close out the request for the medicine by either allowing it or denying it.

where p.ssn=pv.pssn and p.ssn = '\$custid' ORDER BY DATE_OF_VISIT DESC;";

```
$result = mysql query($sql) or die("Error in string: $sql. ".mysql error());
      $numrows = mysql numrows($result);
      if ($numrows>0)
      {
             $fname = mysql result($result,$i,5);
             $Iname = mysql_result($result,$i,6);
             $minit = mysql_result($result,$i,7);
             ?>
             <h1> <? echo "$fname $minit. $lname";?></h1>
             <?
            echo "<table style='border-width=1px;border-spacing:1px;;border-
style:solid;border-color:black;'> <tr bgcolor=lightgray style='font-
weight:bold;'>Date of PrescriptionPhysicianPhysician
td>Drug namecolspan=4>Details";
            for($i=0;$i<$numrows;$i++)
             {
                   $drugname = mysql_result($result,$i,2);
                   $dateofvisit = mysql result($result,$i,3);
                   $comments = mysql_result($result,$i,4);
                   $doctor = mysql result($result,$i,0);
                   $pharm = mysql_result($result,$i,1);
                   $sql2 = "select CONCAT(FNAME,' ',MINIT,' ',LNAME) from PHYSICIANS
where ssn = '$doctor';";
                   $sql3 = "select CONCAT(FNAME,' ',MINIT,' ',LNAME) from
PHARMACISTS where ssn = '$pharm';";
                   $result2 = mysql_query($sql2) or die("Error in string: $sql2.
".mysql_error());
                   $result3 = mysql query($sql3) or die("Error in string: $sql3.
".mysql error());
                   $doctor = mysql_result($result2,0,0);
```

```
$pharm = mysql_result($result3,0,0);
               echo " <strong>$dateofvisit</strong></
td> Dr. $doctor$pharm$strong>$drugname</strong></
tr> $comments";
               echo "
          }
          echo"";
     }
     else
     {
          echo "Patient prescriptions for ID# $custid: none found!";
     }
}
elseif ($custid == "" && $custid <= 0)
{
}
else
{
}
include("body_end.php");
```

Rxinventory.php

include("footer.php");

?>

```
include("includes.php");
include("header.php");
include("body_start.php");
?>
<h1>Pharmacological Inventory</h1>
```

Pharmacists will need to maintain an up-to-date inventory. When new stock arrives, it will need to be entered into the system in a spreadsheet type format page online. There will be a page which will tell of current medical stock, if the pharmacist wants to make any changes, and an update section will allow them to increase stock as new stock comes in.

```
<hr><hr><hr>
<form name='rx' action='rxinventory.php' method='post'>
<input type='text' name='drugname' size='20' value='Enter drug name'> <input
type='submit' value='Find Inventory'>
<hr><hr><hr>
    <?php
$drug=$ POST['drugname'];
if ($drug != "")
{
     $sql = "select DRUGS, COST, QUANTITY from DRUGS where DRUGS like '%
$drug%';";
     $result = mysql query($sql) or die("Error in string: $sql. ".mysql error());
     $numrows = mysql_numrows($result);
     if ($numrows>0)
     {
           ?>
    <br/><br/>Drug Name/
td>CostQuantity
```

```
<?
           count = 0;
            for($i=0;$i<$numrows;$i++)</pre>
{
           $dname = mysql_result($result,$i,0);
           $dcost = mysql_result($result,$i,1);
           $dqty = mysql_result($result,$i,2);
echo "$dname$dcost$dqty";
}
?>
<?
     }
}
?>
</form>
<?
include("body_end.php");
include("footer.php");
?>
```

Screen.css

```
body
{
  background-color: white;
```

```
}
#mainbody
{
  border-width: 0px;
  border-style: solid;
  border-color: black;
  position: relative;
  text-align: left;
  width: 760px;
  height: 100%;
  text-size: 12pt;
  background-image: url('images/logo1.jpg');
  background-repeat: no-repeat;
  background-position: top left;
}
#mainbodylogin
{
  border-width: 0px;
  border-style: solid;
  border-color: black;
  position: relative;
  text-align: left;
  width: 760px;
  height: 100%;
  text-size: 12pt;
  background-color: white;
```

```
background-image: url('images/logo2.jpg');
  background-repeat: no-repeat;
  background-position: left center;
}
#loginbox
{
  position: absolute;
 top: 50%;
  margin-left: 15em;
  margin-top: -5em;
  width: 250px;
  text-align: right;
  border-width: 0px;
  border-style: solid;
  border-color: black;
  padding: 10px;
}
#loginerror
  color: red;
 font-weight: bolder;
 font-size: 10pt;
 font-family: arial;
}
```

#userfield1

```
{
  float: left;
  text-align: right;
  text-size: 10pt;
  font-family: arial;
}
#userfield2
{
  text-align: right;
  text-size: 10pt;
  font-family: arial;
}
#passfield1
  float: left;
  text-align: right;
  text-size: 10pt;
  font-family: arial;
}
#passfield2
{
  text-align: right;
  text-size: 10pt;
  font-family: arial;
}
```

```
#createfield
{
 float: left;
 text-align: right;
 font-size: 8pt;
  margin-top: 7px;
  font-family: arial;
}
#submitlogin
{
 width: 55px;
  float: right;
 text-align: right;
}
#body_header {
/* background: #EEEEEE; */
 position: absolute;
 top: 0px;
 left: 150px;
 width: 620px;
 height: 100px;
}
#menu {
/* background: #EEEEEE; */
```

```
position: absolute;
 top: 170px;
 left: 0px;
 width: 150px;
 height: 500px;
 padding-left: 7px;
}
#content {
/* background: #fff; */
 position: absolute;
 top: 100px;
 left: 150px;
 width: 610px;
 height: 500px;
 padding-left: 15px;
 padding-top: 15px;
 padding-bottom: 15px;
}
#body_footer {
/* background: #DDDDDD; */
 position: absolute;
 top: 500px;
 left: 0px;
 width: 760px;
 height: 100px;
 text-align: center;
```

```
#copyright
{
  position: relative;
  bottom: 0px;
  text-align: center;
  width: 100%;
}
```

Submitvisit.php

```
<br><br><
<?php
$custnum=$_POST['custid'];
$sql = "select DATE_OF_VISIT, HEIGHT, WEIGHT, BLOOD_P, COMMENTS, visitid, FNAME,
LNAME, MINIT from PATIENTS, PATIENT_VISIT where ssn=pssn and ssn = '$custnum' order
by DATE_OF_VISIT desc;";
$result = mysql_query($sql) or die("Error in string: $sql. ".mysql_error());
$num=mysql_numrows($result);
if ($num>0)
{
$fname = mysql_result ($result,0,6);
$Iname = mysql_result ($result,0,7);
$minit = mysql_result ($result,0,8);
?>
<h2><? echo "$Iname, $fname $minit.";?> </h2>
<?
echo " Date of Visit</
td>HeightWeightBlood PressureComments</
td>Select One";
for($i=0;$i<$num;$i++)
{
$f1 = mysql_result($result,$i,0);
$f2 = mysql_result($result,$i,1);
$f3 = mysql_result($result,$i,2);
$f4 = mysql_result($result,$i,3);
$f5 = mysql_result($result,$i,4);
$f6 = mysql_result($result,$i,5);
echo "$f1$f2$f3$f4$f5</
```

```
td><input type='radio' name='WhichAppointment' value='$f6' ></input></
tr>";
}
echo"";
?>
<br><br></br>
Height: <br>
<input type='text' name='height' size='20'> <br>
Weight: <br>
<input type='text' name='weight' size='20'> <br>
Blood Pressure<br>
<input type='text' name='bloodpressure' size='10'><br>
Enter comments: (be detailed.)<br>
<textarea rows='5' name='comments' cols='50'></textarea><br>
<input type='submit' name='process' value='Submit Patient Report'>
<br><br><
<?
}
?>
<?
$button = $_POST['process'];
if ($button == 'Submit Patient Report');
{
$height=$_POST['height'];
$weight=$_POST['weight'];
$bp=$_POST['bloodpressure'];
$comments=$_POST['comments'];
$id=$_POST['WhichAppointment'];
```

```
$sql = "UPDATE PATIENT_VISIT SET ";
if ($height != "")
{
      $sql=$sql."HEIGHT='$height', ";
}
else
{
      $sql=$sql."HEIGHT=HEIGHT, ";
}
if ($weight != "")
{
      $sql=$sql."WEIGHT='$weight', ";
}
else
{
      $sql=$sql."WEIGHT=WEIGHT, ";
}
if ($bp != "")
{
      $sql=$sql."BLOOD_P='$bp', ";
}
else
{
      $sql=$sql."BLOOD_P=BLOOD_P, ";
}
```

```
$sql=$sql." COMMENTS=if(COMMENTS is
null,CONCAT(CURDATE(),':<br>','$comments','<br>',CURDATE(),':<br>','$comments','<br>', WHERE visitid='$id';";
$result = mysql_query($sql) or die("Error in string: $sql. ".mysql_error());
}
?>
</form>
include("body_end.php");
include("footer.php");
?>
```

Validateaccount.php

```
<?php
include("includes.php");
include("header.php");
include("body_start.php");

?>

<?php
include("body_end.php");</pre>
```

```
include("footer.php");
?>
```

Verifyaccountbalance.php

```
<?php
include("includes.php");
include("header.php");
include("body start.php");
<h1>Verify Account Balance</h1>
Accountants will use the system to retrieve the inquirer's balance. By entering into a lookup
box the customer's SSN, the accountant will be able to see the the customer's current
balance.
<hr><hr><hr>
<form name='verifybalance' action='verifyaccountbalance.php' method='post'>
<input type='text' name='custid' size='20' value='Enter Customer ID'> <input</pre>
type='submit' value='Get Account Balance'>
<hr><hr><hr><
  <?php
$custid=$ POST['custid'];
$sql = "select fname,Iname,SUM(AMT DUE) as Debt, SUM(PAID) as Credit,
SUM(AMT_DUE)-SUM(PAID) as Remaining Balance from PATIENTS, ACCOUNTS PAYABLE
where ssn=pssn and ssn = '$custid';";
$result = mysql_query($sql) or die("Error in string: $sql. ".mysql_error());
$numrows = mysql_numrows($result);
if ($numrows>0)
$fname = mysql_result($result,$i,0);
$Iname = mysql_result($result,$i,1);
?>
<h1>
 <? echo "$fname $lname";?>
</h1>
<?
echo " DebtPaid</
td>Remaining Balance";
for($i=0;$i<$numrows;$i++)
$f1 = mysql_result($result,$i,2);
$f2 = mysql result($result,$i,3);
$f3 = mysql_result($result,$i,4);
```