

Project Report: Healthcare Management System

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Abstract—Healthcare Management system is a web application for the hospital which manages doctors and patients. This system integrated into hospitals or clinics for managing several operations while increasing their efficiency.

Index Terms—PHP,MYSQL

I. INTRODUCTION

Healthcare Management System is mainly a system that can help to maintain any hospital activities properly and easily. Moreover, the healthcare management system can be used as clinical software. Also, it helps to keep records and monitor the activities of any hospital. Healthcare Management System is powerful, flexible, and easy to use and is designed and developed to deliver real conceivable benefits to hospitals.

II. MODULES

The entire project mainly consists of 3 modules, which are

- 1.Admin module
- 2.User module
- 3.Doctor module

A. ADMIN MODULE:

1.Dashboard: In this section, admin can view the Patients, Doctors, Appointments and New queries.

2.Doctors: Admin can add doctor's specialization and manage doctors (Add/Update).

3.Users: Admin can view users detail (who take online appointment) and also have right to delete irrelevant user.

4.Patients: Admin can view patient's details.

5.Appointment History: Admin can view appointment history.

6.Contact us Queries: Admin can view queries which are sent by users.

7.Doctor Session Logs: Admin can see login and logout time of doctor.

8.User Session Logs: Admin can see login and logout time of user.

9.Reports: Admin can view reports of patients in particular periods.

10.Patient Search: Admin can search patient with the help of patient name and mobile number.

B. USER MODULE:

1.Dashboard: Patients can view the his/her profile, Appointments and Book Appointment.

2.Book Appointment: Patient can book his/her appointment.

3.Appointment History: Patients can see his/her own appointment history.

4.Medical History: Patients can see his/her own appointment history.

C. DOCTOR MODULE:

1.Dashboard: Doctor can view his/her own profile and online appointments.

2.Appointment History: Doctor can see patient's appointment history.

3.Patients: Doctor can manage patients (Add/Update).

4.Search: Doctor can search patient with the help of patient name and mobile number.

III. ENTITY RELATIONSHIP DIAGRAM

E-R (Entity-Relationship) Diagram is used to represent the relationship between entities in a table. ER diagrams represent the logical structure of databases. ER Diagram represents relationship between two database tables.

This ER Diagram represents the model of Healthcare Management System Entity. The entity relationship diagram of Healthcare Management System shows all the visual instrument of database tables and the relations between patient, Nurses, Hospitals, Medicines etc. It used structure data and to define the relationships between structured data group of Healthcare Management System functionalities

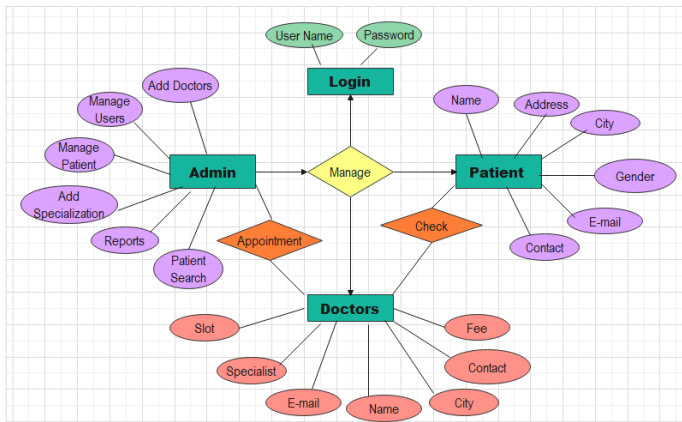


Fig. 1. ER DIAGRAM OF HEALTHCARE MANAGEMENT SYSTEM

IV. REQUIREMENTS

Technology Implemented: Apache Server

Language Used: PHP

Database: MySQL

User Interface Design:

- HTML
- AJAX
- JQUERY
- JAVASCRIPT

Web Browser: Mozilla, Google Chrome, OPERA

Software: XAMPP Server

V. PROJECT CODE

Here I'm adding Some code which are used in Index page,Contact Form, Dashboard, Book Appointment, Appointment History in this project.

```

1 <!DOCTYPE HTML>
2 <html>
3   <head>
4     <title>Healthcare Management System/</title>
5     <link href="css/style.css" rel="stylesheet" type="text/css" media="all" />
6     <link href="http://fonts.googleapis.com/css?family=Open+Sans" rel="stylesheet" type="text/css">
7     <link rel="stylesheet" href="css/responsiveSlides.css">
8     <script src="http://ajax.googleapis.com/ajax/libs/jquery/1.8.3/jquery.min.js"></script>
9     <script src="js/responsiveSlides.min.js"></script>
10
11    // You can also use $(window).load(function() {
12    $(function () {
13
14
15      // Slideshow 1
16      $(#slide1).responsiveSlides({
17        maxwidth: 1000,
18        speed: 600
19      });
20    });
21    </script>
22  </head>
23  <body>
24    <!--start-wrap-->
25
26    <!--start-header-->
27    <div class="header">
28      <div class="wrap">
29        <!--start-logo-->
30        <div class="logo">
31          <a href="index.html" style="font-size: 30px;">Healthcare Management System/<a>
32          </div>
33          <!--end-logo-->
34          <!--start-top-nav-->
35

```

Fig. 2.

```

1 <?php
2 include_once('hms/include/config.php');
3 if(isset($_POST['submit']))
4 {
5     $name=$_POST['fullname'];
6     $email=$_POST['email'];
7     $mobilenno=$_POST['mobilenno'];
8     $description=$_POST['description'];
9     $query=mysqli_query($con-"insert into tblcontactus(fullname,email,contactno,message) value('$name','$email','$mobilenno','$description')");
10     echo "<scriptalert('Your information sucesfully submitted');</script>";
11     echo "<scriptwindow.location.href = contact.php</script>";
12 }
13 }
14 }
15 }
16 }
17 </DOCTYPE HTML>
18 <html>
19 <head>
20 <title>HMS | Contact us</title>
21 <link href="css/style.css" rel="stylesheet" type="text/css" media="all" />
22 <link href="http://fonts.googleapis.com/css?family=Roboto+Sans" rel="stylesheet" type="text/css">
23 </head>
24 <body>
25 <!-- start-wrap-->
26
27 <!-- start-header-->
28 <div class="header">
29 <div class="wrap">
30 <!-- start-logo-->
31 <div class="logo">
32 <a href="index.html" style="font-size: 30px;">Healthcare Managemnt system</a>
33 </div>
34 <!-- end-logo-->
35 <!-- start-hom-nav-->

```

Fig. 3.

```

1 <?php
2 session_start();
3 //error_reporting(0);
4 include('include/config.php');
5 include('include/checklogin.php');
6 check_login();
7
8 //
9
10 //DOCTYPE html
11 <html lang=en>
12 <head>
13 <title>User | Dashboard</title>
14
15 <link href='http://fonts.googleapis.com/css?family= lato:300,400,400italic,600,700|Roboto:300,400,500,600,700|CrespoRound:400italic' rel='stylesheet' type='text/css' />
16 <link rel='stylesheet' href='vendor/bootstrap/css/bootstrap.min.css' />
17 <link rel='stylesheet' href='vendor/font-awesome/css/font-awesome.min.css' />
18 <link rel='stylesheet' href='vendor/themes/icons/themify-icons.min.css' />
19 <link href='vendor/animate.css/animate.min.css' rel='stylesheet' media='screen' />
20 <link href='vendor/perfect-scrollbar/perfect-scrollbar.min.css' rel='stylesheet' media='screen' />
21 <link href='vendor/sauthery/authery.min.css' rel='stylesheet' media='screen' />
22 <link href='vendor/touchspin/jquery.bootstrap-touchspin.min.css' rel='stylesheet' media='screen' />
23 <link href='vendor/select2/select2.min.css' rel='stylesheet' media='screen' />
24 <link href='vendor/bootstrap-datepicker/bootstrap-datepicker.standalone.min.css' rel='stylesheet' media='screen' />
25 <link href='vendor/bootstrap-timerpicker/bootstrap-timerpicker.min.css' rel='stylesheet' media='screen' />
26 <link rel='stylesheet' href='assets/css/styles.css' />
27 <link rel='stylesheet' href='assets/css/plugin.css' />
28
29 </head>
30 <body>
31
32 <div id='app'>
33 <?php include('include/sidebar.php')>>
34 <div class='main-content'>

```

Fig. 4.

```

1 <?php
2 session_start();
3 //error_reporting(0);
4 include('include/config.php');
5 include('include/checklogin.php');
6 check_login();
7
8 if(isset($_POST['submit']))
9 {
10 $specialization=$_POST['doctorspecialization'];
11 $doctorid=$_POST['doctor'];
12 $userid=$_SESSION['id'];
13 $fees=$_POST['fees'];
14 $sopdate=$_POST['update'];
15 $stime=$_POST['apptime'];
16 $userstatus=$_
17 $docstatus=$_
18 $query=mysqli_query($con,"insert into appointment(
19 doctorspecialization,doctorid,userid,consultingfees,appointmentdate,appointmenttime,userstatus,doctorstatus) values('$specialization','$
20 doctorid','$userid','$fees','$sopdate','$stime','$userstatus','$docstatus')");
21 if($query)
22 {
23     echo "<script>alert('Your appointment successfully booked');</script>";
24 }
25 }
26 </DOCTYPE html>
27 <html lang=en>
28 <head>
29 <title>User | Book Appointment</title>
30
31 <link href="http://fonts.googleapis.com/css?family=Lato:300,400,italic,600,700|Pawley:300,400,500,600,700|Cretive&subset=Latin&subset=
32 rel="stylesheet" type="text/css" />
33 <title>User | Book Appointment</title>
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35 </head>
36 <body>
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39 </html>
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Fig. 5.

```

1 <?php
2 session_start();
3 error_reporting(0);
4 include('include/config.php');
5 include('include/changelogin.php');
6 check_login();
7 if(isset($_GET['cancel'])){
8     {
9         mysql_query("Econ 'update appointment set userStatus='0' where Id = '".$_GET['id']."'");
10         $SESSION['msg']="Your appointment canceled !";
11     }
12 }
13 <?
14 <!DOCTYPE html>
15 <html lang="en">
16 <head>
17 <title>User | Appointment History</title>
18 <link href="https://fonts.googleapis.com/css?family=Lato:300,400,400italic,600,700|Rayway:300,400,500,600,700|CretesRound:400italic"
19 rel="stylesheet" type="text/css" />
20 <link rel="stylesheet" href="vendor/bootstrap/css/bootstrap.min.css">
21 <link rel="stylesheet" href="vendor/fontawesome/css/font-awesome.min.css">
22 <link rel="stylesheet" href="vendor/ohmdfy/icom/ohmdfy/icom.min.css">
23 <link rel="stylesheet" href="vendor/animate.css/animate.min.css" rel="stylesheet" media="screen">
24 <link href="vendor/perfect-scrollbar/perfect-scrollbar.min.css" rel="stylesheet" media="screen">
25 <link href="vendor/authify/authify.min.css" rel="stylesheet" media="screen">
26 <link href="vendor/bootstrap-touchspin/jquery.bootstrap-touchspin.min.css" rel="stylesheet" media="screen">
27 <link href="vendor/jquery/jquery.min.css" rel="stylesheet" media="screen">
28 <link href="vendor/bootstrap-datepicker/bootstrap-datepicker.min.css" rel="stylesheet" media="screen">
29 <link href="vendor/bootstrap-clipboard/bootstrap-clipboard.min.css" rel="stylesheet" media="screen">
30 <link rel="stylesheet" href="assets/css/plugins.css">
31 <link rel="stylesheet" href="assets/css/themes/theme-1.css" id="skin-color" />
32 </head>
33 <body>

```

Fig. 6.

VI. PROJECT OUTPUT



Fig. 7. Home Page

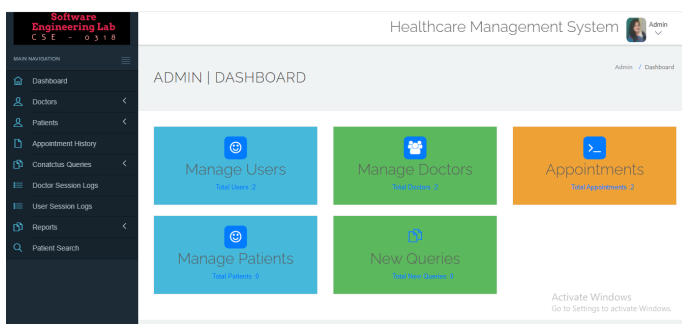


Fig. 8. Admin Dashboard

VII. CONCLUSION AND FUTURE WORK

This system makes easy management of healthcare for the patients as well as doctors. The design of this project is pretty simple and the user won't find it difficult to understand, use and navigate. An advanced Healthcare management system allows medical organization to become more productive and improve competitiveness.

In future, I want to add more features in this Project. Like, Payment Gateway, Video calling between doctor and patient where patient can tell his/her problem easily.

ACKNOWLEDGMENT

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REFERENCES

- [1] Thangaraj, M., Ponmalar, P. P., & Anuradha, S. (2015, December). Internet Of Things (IOT) enabled smart autonomous hospital management system-A real world health care use case with the technology drivers. In 2015 IEEE International Conference on Computational Intelligence and Computing Research (ICCIC) (pp. 1-8). IEEE.
- [2] Barnas, K. (2011). ThedaCare's business performance system: Sustaining continuous daily improvement through hospital management in a lean environment. The Joint Commission Journal on Quality and Patient Safety, 37(9), 387-AP8.