Automated Patient and Doctor data handling system

Presentation - Group - 35





GROUP MEMBERS

REG. NO.

NAME

CONTRIBUTION

21BAI10181

21BAI10249

21BAI10291

21BAI10396

21BAI10414

VINAMRA RAWAT

MANSI KULSHRESTHA

MITALI IRPATGIRE

ANURODH PANCHOLI

SHRINGI VYAS

Back-End & Research

Front-End & Back- End

Content & Research work

Front- end

Database & storage system

DRAWBACKS OF THE EXISTING MODEL

- 1. Incomplete or non-standardized data and lost forms in transit between departments.
- 2. To prevent the loss of vital information, a thorough auditing process is necessary.
- 3. Additionally, multiple copies of the same information exist in different data stores, which could result in inconsistencies in the data.
- 4. Access to a patient's medical history was a tedious task.
- 5. Needs a lot of paperwork.

Objective

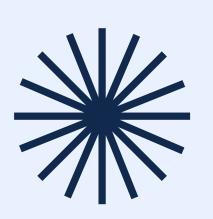
- It is going to help both doctors and patients stay updated with their follow-up
- It is going to help build a better means for storing and retrieving data.
- This will also help institutions achieve patient satisfaction and increase revenue.
- It is going to ease the burden on the overburdened staff.
- It is going to increase the overall efficiency of the healthcare facility.
- It is going to streamline organizational tasks.
- It will help you automate daily tasks.
- It is going to help you provide timely patient care.

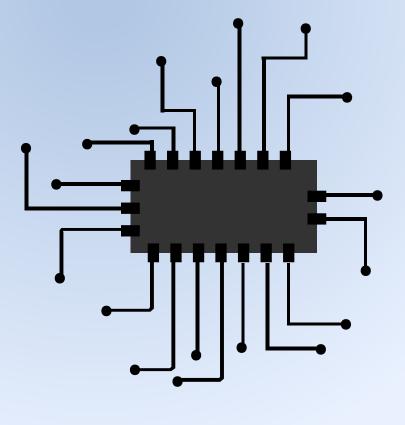


This automated system can address the frustrations of patients waiting in long queues at hospitals. Patients can book appointments and check their preferred doctor's availability from home, saving time and money. Doctors can access patients' medical histories for personalized care. The system streamlines administrative and management processes, improving patient care and providing secure data handling. The goal is to automate current systems efficiently and cost-effectively. The system will also provide automated predicted medical disorders based on the symptoms provided, the same can be confirmed from the Doctor.

HARDWARE AND SOFTWARE REQUIREMENTS

- Operating System Windows 7 or above
 Mac OS high sierra 10.13 or above
- Processor Intel Pentium 4 or late or AMD 3020e
- Memory 4GB minimum, 8GB preferred
- Hard Drive or SSD- Minimum 32GB, recommended 64GB or above
- Sound Card w/ Speaker
- Camera and Microphone.
- MySQL
- Python and Django
- HTML
- Notepad ++ , CyberDuck







PROCESS FLOW

02 03 04 01 **SQL** - Doctor's **SQL** - Patient's Front-end **Database** database Creating a website/application Creating a Creating a database for the ease of database to that maintains the booking maintain the appointments with patient's records doctor's attributes the concerned like frequently like the doctor's doctor, check their causing disease, availability, look for department, concerning doctor, alternative (if any), experience level, medicines feed the disease and timings and prescribed, etc. get directed to the appointment concerned doctor, approval, etc. etc. STEP 04 STEP 01 STEP 02 STEP 03

At the doctor's end

Informing the doctor and updating the doctor's schedule likewise. In a way, the doctor gets prepared for the patient and requirements.

Codes And Outputs

```
<!DOCTYPE html>
     <html>
     <head>
         <title>Landing Page</title>
     <link rel="shortcut icon" type="image/x-icon" href="images/favicon.png" />
     <link href="//maxcdn.bootstrapcdn.com/bootstrap/4.1.1/css/bootstrap.min.css" rel="stylesheet" id="bootstrap-</pre>
     css">
     <link rel="stylesheet" href="vendor/fontawesome/css/font-awesome.min.css">
     <link href="https://fonts.googleapis.com/css?family=IBM+Plex+Sans&display=swap" rel="stylesheet">
     <link rel="stylesheet" type="text/css" href="landing_pg.css">
     <script src="//maxcdn.bootstrapcdn.com/bootstrap/4.1.1/js/bootstrap.min.js"></script>
10
     <script src="//cdnjs.cloudflare.com/ajax/libs/jquery/3.2.1/jquery.min.js"></script>
11
12
     <script >
13
         function alphaOnly(event) {
14
       var key = event.keyCode;
15
       return ((key >= 65 && key <= 90) || key == 8 || key == 32);
16
17
     };
18
       </script>
19
     <style >
20
         body{
21
         background: -webkit-linear-gradient(left, =#6cd6f7, =#fa8dce);
22
23
24
25
       .contact-form {
         background: #fcfae9;
26
         border-top-left-radius: 10% 50%;
27
         border-bottom-left-radius: 10% 50%;
28
29
         border-top-right-radius: 10% 50%;
```

```
border-bottom-right-radius: 10% 50%;
</style>
</head>
<body>
    <nav class="navbar navbar-expand-lg navbar-dark fixed-top" id="mainNav" >
    <div class="container">
     </div>
    </div>
  </nav>
    <div class="container contact-form" style="font-family: 'IBM Plex Sans', sans-serif;">
            <div class="contact-image">
                <img src="C:\Users\vineet\OneDrive\Documents\GitHub\Hospital-Management-</pre>
System\Project_exh\hospi_logo.jpg" width = "250" height="250" />
            </div>
            <form method="post" action="contact.php">
                <h2>hospital_name</h2>
               <div class="row">
                    <div class="col-md-6">
                        <div class="form-group">
                            <input type="text" name="txtName" class="form-control" placeholder="Your Name *"</pre>
value="" onkeydown="return alphaOnly(event);" required/>
                        </div>
                        <div class="form-group">
                            <input type="email" name="txtEmail" class="form-control" placeholder="Your Email</pre>
```

```
<div class="torm-group">
                             <input type="email" name="txtEmail" class="form-control" placeholder="Your Email</pre>
*" value="" required />
                         </div>
                         <div class="form-group">
                             <input type="tel" name="txtPhone" class="form-control" placeholder="Your Phone</pre>
Number *" value="" minlength="10" maxlength="10" required />
                         </div>
                         <div class="form-group" >
                             <input type="submit" name="btnSubmit" class="btnContact" value="Submit" />
                         </div>
                         <br> <br>>
                         <div>
                           <h3>
                             <a href="patient_pg.html">Patient</a></h3>
                           <header>
                             <h3><a href="d_login.html">Doctor</a></h3>
                             </header>
                         </div>
                    </div>
                </div>
            </form>
</div>
</body>
</html>
```

```
ojectezni_code / W consultation.num / W num / W body / W lonii / W div
     <!DOCTYPE html>
     <html lang="en">
     <head>
3
          <title>Patient page</title>
 4
          <link rel="stylesheet" href ="consultation.css">
 5
          <script src="consultation.js"></script>
 6
         <meta charset="UTF-8">
 7
          <meta http-equiv="X-UA-Compatible" content="IE=edge">
 8
          <meta name="viewport" content="width=device-width, initial-scale=1.0">
 9
10
11
12
     <style>
13
          body {
14
              background-image: url('consultation_bg.jpg');
15
              background-size: cover;
16
17
     </style>
     </head>
18
     <body>
19
          <header>
20
21
              <h1> CONSULTATION </h1>
22
          </header>
23
          <form action="backend.php">
              <div>
24
25
              </div>
26
              <div>
27
                  NAME : <input type="text" name="Patients_name">
28
              </div>
29
```

```
48
              <form>
49
                  <label for="symp1"> Symptom 1: </label>
                  <select id="symp1" style="display: inline-block;">
50
                      <option value="itching">Itching </option>
51
                      <option value="shivering">Shivering </option>
52
53
                      <option value="stomach_pain">stomach pain </option>
                      <option value="headache">headache </option>
54
                      <option value="indigestion">Indigestion </option>
55
56
                      <option value="throat patches">Throat patches </option>
                      <option value="fatigue">Fatigue </option>
57
                      <option value="sunken_eyes">Sunken eyes </option>
58
                      <option value="cough">cough </option>
59
60
                  </select>
61
62
                      <br>
63
64
                   <label for="symp2"> Symptom 2: </label>
                   <select id="symp2" style="display: inline-block;">
65
                        <option value="skin_rash">skin rash</option>
66
                        <option value="chills">chills</option>
67
                        <option value="acidity">acidity</option>
68
                        <option value="vomitting">vomitting</option>
69
                        <option value="chest_pain">chest pain</option>
70
                        <option value="loss_of_appetite">loss of appetite</option>
71
                        <option value="high_fever">high fever</option>
72
                        <option value="weight_loss">weight loss</option>
73
                        <option value="dehydration">dehydration</option>
74
                   </select> <br>>
75
76
```

```
ProjectExh_code > JS consultation.js
      function predict_Disease() {
           const symp1 = document.getElementById("symp1").value;
  2
           const symp2 = document.getElementById("symp2").value;
  3
           const symp3 = document.getElementById("symp3").value;
  4
  5
           if (symp1 === "itching" && symp2 === "skin_rash" && symp3==="nodal_skin_eruption") {
  6
             return "You are likely to have fungal infection.";
  7
             else if (symp1 === "shivering" && symp2 === "chills" && symp3==="watery_eyes") {
  8
             return "You are likely to have an allergy.";
  9
           | else if(symp1 ==="stomcah_pain" && symp2==="acidity" && symp3==="ulcers_on_tongue"){
 10
             return " You are likely to have GRED";
 11
 12
           } else if(symp1=="itching" && symp2=="vomitting" && symp3=="nausea"){
 13
             return "You are likely to have Chronic cholestasis";
           } else if(symp1=="headache" && symp2=="chest_pain" && symp3=="dizziness"){
 14
 15
             return "You are likely to have Hypertension";
             else if(symp1=="indigestion" && symp2=="loss_of_appetite" && symp3 == "abdominal_pain"){
 16
 17
             return "You are likely to have Peptic ulcer disease";
            else if( symp1=="throat_patches" && symp2=="high_fever" && symp3=="restlessness"){
 18
 19
             return "You are likely to have AIDS";
            else if(symp1=="fatigue" && symp2=="weight_loss" && symp3=="restlessness"){
 20
             return "You are likely to have diabetes";
 21
           } else if (symp1=="sunken_eyes" && symp2=="dehydration" && symp3=="diarrhoea"){
 22
             return "You are likely to have Gastroenteritis";
 23
            else if (symp1=="cough" && symp2=="high_fever" && symp3=="breathlessness"){
 24
             return "You are likely to have Bronchial asthma";
 25
 26
 27
 28
             else {
             return "We were unable to determine your illness.";
 29
 30
```



hospital_name

Your Name *

Your Email *

Your Phone Number *

Submit

Patient

Doctor

Patient Services

Consultation

Get personalized medical advice from our licensed healthcare professionals.

Lab Tests

Order lab tests and get results quickly and conveniently.

Prescriptions

Get prescriptions filled and delivered to your doorstep with just a few clicks.

Patient Information

Personal Information

Medical History

Prescriptions

Personal Information

Name: John Doe

Date of Birth: 01/01/1980

Gender: Male

Address: 123 Main St, Anytown USA 12345

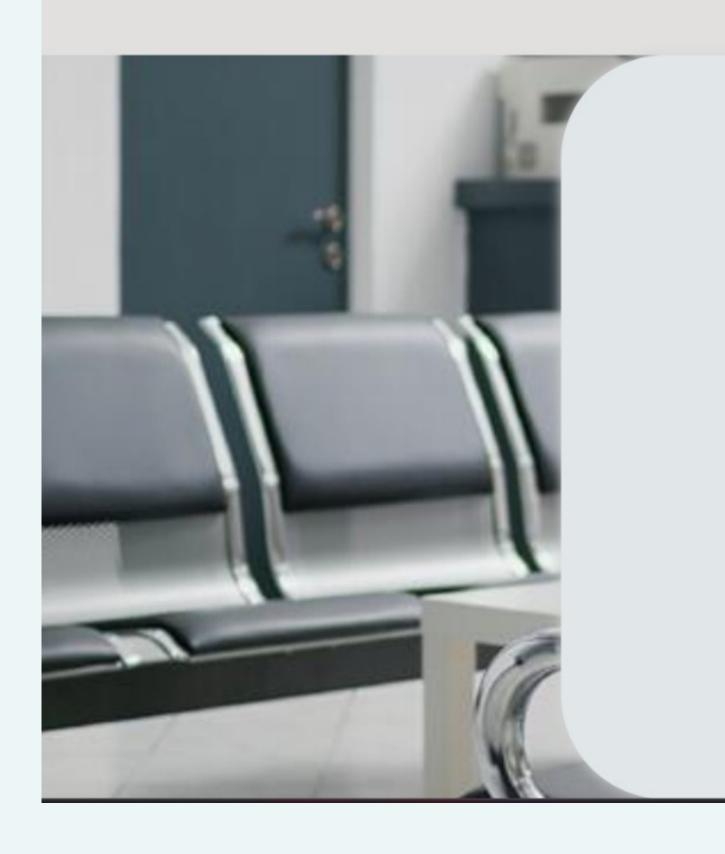
Phone: (123) 456-7890

Email: john.doe@email.com

Medical History

Allergies: None

CONSULTATION



NAME :

AGE:

DOB: dd-mm-yyyy

EMAIL:

Sex : Male ○ Female ○

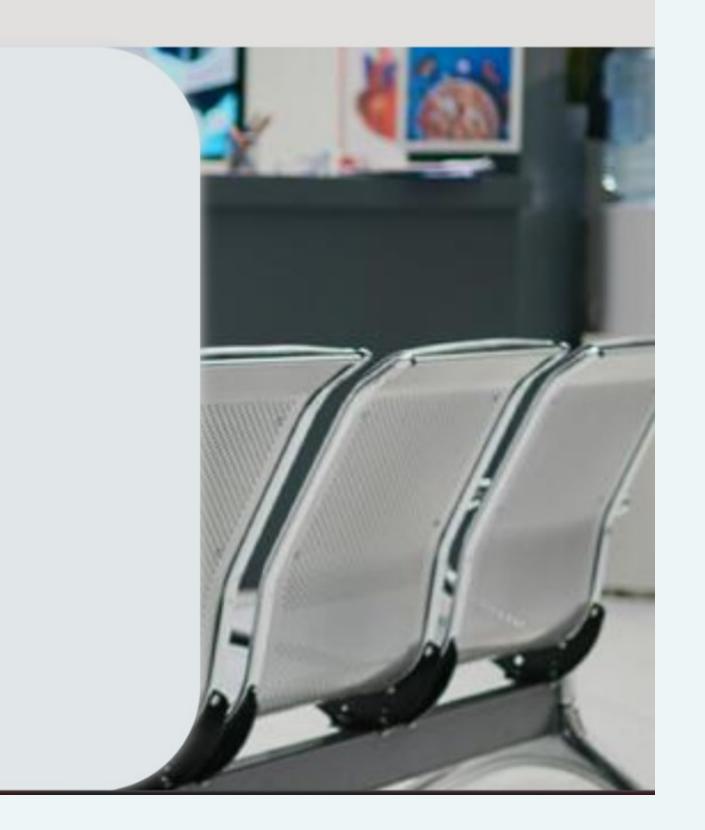
Symptom 1: Itching

Symptom 2: skin rash

Symptom 3: nodal skin eruptions

Predict Disease

You are likely to have fungal infection.



FUTURE SCOPE

- The ability to obtain real-time updates on a patient's current status, the inclusion of specialized modules for managing pharmacy, laboratory, bed allotment, and other hospital operations
- A Frequently Asked Questions section to provide helpful information and support for users.

These features would further optimize the system's ability to streamline hospital operations and enhance overall patient care.

Reference For future implementation

https://www.researchgate.net/publication/318604547_Heart_Disease_Prediction_Syste m_Using_Random_Forest

The above link taken as the reference for the future enlargement of the project where the it only suggest the heart related disease, our system will be predicting variety of issues and diseases

Reference Links

- https://pub.abuad.edu.ng/Open_Access_Research_Projects_of_Universities__Batch_2/COMPUTER%20SCIENCE/DESIGN_AND_IMPLEMENTATION_OF_PATI
 ENT_MANAGEMENT_SYSTEM.pdf
- https://www.academia.edu/32266783/Doctor_Appointment_Booking_System
- http://ijcat.org/IJCAT-2018/5-4/Medicus-A-Doctor-Appointment-Booking-System.pdf
- https://www.researchgate.net/publication/350353202_Laurent_Bleu_Doctor-Patient_Appointment_System_LBDPAS_A_Clinic_Appointment_Management_and_ Medical_History_System

THANKYOU