RECOMMENDATION OF SOLUTION FOR DISEASE A MINI-PROJECT REPORT

Submitted by

MONISHA R 200701152

in partial fulfillment of the award of the degree

of

BACHELOR OF ENGINEERING

IN

COMPUTER SCIENCE AND ENGINEERING
RAJALAKSHMI ENGINEERING COLLEGE, CHENNAI



BONAFIDE CERTIFICATE

Certified that this project "Recommendation of solution for Diseases"
is the bonafide work of "Monisha R (200701152)" who carried out the
project work under my supervision.

SIGNATURE
Dr. K. ANAND M.E Ph.D.,
ASSOCIATE PROFESSOR

Dept. of Computer Science and Engg, Rajalakshmi Engineering College, Chennai

Submitted for the ANNA UNIVERS	STTY practica	l examination	Mini-Project	work
viva voce held on				

INTERNAL EXAMINER

EXTERNAL EXAMINER

ABSTRACT

A disease is a particular abnormal condition that negatively affects the structure or function of all or part of an organism, and that is not immediately due to any external injury. Diseases are often known to be medical conditions that are associated with specific signs and symptoms. There are millions of germs which cause many diseases around the world. The benefits of obtaining interactive and intelligent medical services based on knowledge discovery are rapidly growing. In general, medical doctors diagnose diseases and select treatment schemes based mostly on their personal experience and knowledge. Inadequate communication, experience exchange, and cooperation between young and senior doctors results in the failure of young doctors to learn and take guidance from the experience, diagnoses, and treatment plans of experienced senior doctors. Therefore I have developed a basic system that displays how to cure the disease by first identifying the disease which is found when the user submits a list of their symptoms.

ACKNOWLEDGEMENT

We express our sincere thanks to our beloved and honorable chairman MR.S.MEGANATHAN and the chairperson DR.M.THANGAM MEGANATHAN for their timely support and encouragement

We are greatly indebted to our respected and honorable principal **Dr. S.N.MURUGESAN** for his able support and guidance

No words of gratitude will suffice for the unquestioning support extended to us by our head of the department **Dr. P. KUMAR M.E Ph.D.**, for being ever supporting force during our project work.

We also extend our sincere and hearty thanks to our internal guide **Dr. K.ANAND**, **M.E Ph.D.**, for his valuable guidance and motivation during the completion of this project.

Our sincere thanks to our family members, friends and other staff members from the department of computer science.

TABLE OF CONTENTS

CHAP	TER NO.		PAGE
T	TITLE		
A	ABSTRACT		iv
1	INTROD	UCTION	1
	1.1	INTRODUCTION	1
	1.2	SCOPE OF THE WORK	1
	1.3	PROBLEM STATEMENT	1
	1.4	AIM AND OBJECTIVES OF THE PROJECT	2
2	SYSTEM	SPECIFICATIONS	3
	2.1	HARDWARE SPECIFICATIONS	3
	2.2	SOFTWARE SPECIFICATIONS	3
3	MODULI	E DESCRIPTION	4
4	SYSTEM	DESIGN	5
	4.1 AR	CHITECTURE DIAGRAM	5
	4.2 FL0	OW CHART DIAGRAM	6
	4.3 US	E CASE DIAGRAM	7
	4.4 AC	TIVITY DIAGRAM	8
	4.5 SEC	QUENCE DIAGRAM	9
5	TABLE		10
	5.1 USEI	R DETAILS	10
	5.2 DISE	EASE INFO	11
	5.3 DISE	CASE SYMPTOMS	11
6	CODING		12
7	SCREEN	SHOTS	25

8	CONCLUSION AND FUTURE ENHANCEMENT	31
9	REFERENCES	32

LIST OF FIGURES

FIGURE NO	URE NO FIGURE NAME	
1	ARCHITECTURE DIAGRAM	5
2	FLOW CHART	6
3	USE CASE DIAGRAM	7
4	ACTIVITY DIAGRAM	8
5	SEQUENCE DIAGRAM	9
6	PATIENT DETAILS COLLECTION PAGE	25
7	JAVASCRIPT VALIDATION OF THE FORM	25
8	FORM WITH PATIENT DETAILS	26
9	DIAGNOSIS BASED ON SUBMISSION OF SYMPTOMS	26
10	SOLUTION FOR COMMON COLD	27
11	SOLUTION FOR FEVER	27

12	SOLUTION FOR	28
	HEADACHE	
13	SOLUTION FOR	28
	HEADACHE	
14	SOLUTION FOR	28
	DIARRHEA	
15	SOLUTION FOR	29
	INDIGESTION	
16	SOLUTION FOR	29
	EAR INFECTION	
1.7	COLUZION FOR	20
17	SOLUTION FOR	30
	CONJUNCTIVITIS	
18	SOLUTION FOR	30
10		30
	CONSTIPATION	

LIST OF TABLES

TABLE NO.	TITLE	PAGE NO.
1.	USER DETAILS	11
2.	DISEASE SYMPTOMS	12
3.	DISEASE INFO	12

LIST OF ABBREVIATION

ABBREVIATION ACRONYM

SRS Software Requirement Specification.

SERVER A program or device that provides a service

RAM Random access memory

HTTP Hyper Text Markup Language

PHP Hypertext Preprocessor.

XAMPP X-operating system, Apache, Mysql, Php,

Perl.

MYSQL A relational database management

system

HTTP Hyper Text Transfer Protocol

PDF Portable Document Format

Username Unique name given to each account of

digital library

Password: Unique word set by each user as a secret

code.

- HTML
- Javascript
- CSS
- MySQL
- PHP

INTRODUCTION

INTRODUCTION

This project is aimed at establishing a website that will provide both home remedies and over the counter medications which will be the solution for the disease. It is aimed for the benefit of the users who are unable to seek medical attention immediately. The solutions for some of the most common diseases that affect humans are available on this website. It is suitable for people of all ages.

SCOPE OF THE WORK

This website should be able to run on any device regardless of the operating system or hardware well within reason. It can be accessed using a simple internet connection on a home user's desktop computer or laptop or mobile phone. This system is very user friendly and can be used by people in rural areas too. The application is designed for all types of users regardless of their age or experience to perform various operations. It must function effectively and maintain an efficient level of service.

PROBLEM STATEMENT

The problem statement is to provide the solution for the disease that prevails the particular user. This can be done by the use of forms to collect the user details and symptoms. This system adopts a comprehensive approach to minimize the manual work of going to the hospital to visit the doctor when the simpler and non life-threatening diseases can be treated at home easily. At this time and age where everything is fast paced people neglect to take care of their health. It saves people's time and money. This system is very useful in places where there is no immediate access to medical facilities. This system aims to be less tedious for all the parties that are involved.

AIM AND OBJECTIVES OF THE PROJECT

This project is aimed at developing a recommendation system for Diseases. The user needs to submit a form with the list of their systems which helps in diagnosing the user with what ails them and provides some solutions on how to cure them easily. It provides an effective and trustable solution for the disease by advising the user to make lifestyle and dietary changes as well as Over-the-Counter medicines. This is a convenient and simple way to have a collective and effective solution for the disease.

SYSTEM SPECIFICATIONS

HARDWARE SPECIFICATIONS

Processor : Pentium IV Or Higher

Memory Size : 256 GB (Minimum)

HDD : 40 GB (Minimum)

SOFTWARE SPECIFICATIONS

Operating System : WINDOWS 07 Or XP

Front – End : Eclipse Oxygen

Back – End : MYSQL 5.1

Language : HTML,CSS, Javascript,JSP,Java

MODULE DESCRIPTION

5.PROJECT MODULE

User Data Collection Module

This module is for the users to fill in their details. Those include their personal details such as name, age, gender, contact information as well as their previous medical history. The users are also required to submit a list of the symptoms that currently ails them.

Diagnosis Module

According to the symptoms submitted by the user all possible diseases that could ail them are displayed. This is done with the help of a MySQL database which maintains a list of symptoms for the diseases.

Solution Module

This module is used to provide the solution for the diseases that currently ail the user. The solution that is being displayed is suitable for people of all ages from all walks of life. It generally contains natural remedies and over the counter medicines.

SYSTEM DESIGN

ARCHITECTURE DIAGRAM

An architecture diagram is a graphical representation of a set of concepts, that are part of an architecture, including their principles, elements and components

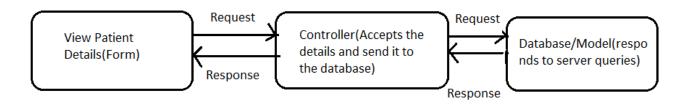


Figure 4.1 Architecture Diagram

From the above Figure 4.1, the architecture of the system is well understood.

FLOW CHART

A flowchart is a type of diagram that represents an algorithm, workflow or process. The flowchart shows the steps as boxes of various kinds, and their order by connecting the boxes with arrows. This diagrammatic representation illustrates a solution model to a given problem.

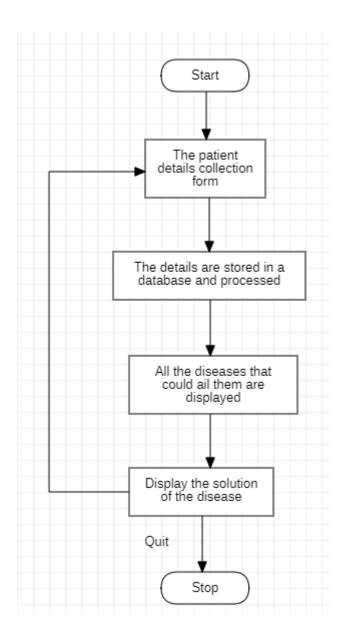


Figure 4.2 Flow Chart

From the above Figure 4.2, the workflow of the system is identified.

USE CASE DIAGRAM

A use case is a list of actions or event steps typically defining the interactions between a role (known in the Unified Modeling Language as an actor) and a system to achieve a goal. The actor can be a human or other external system.

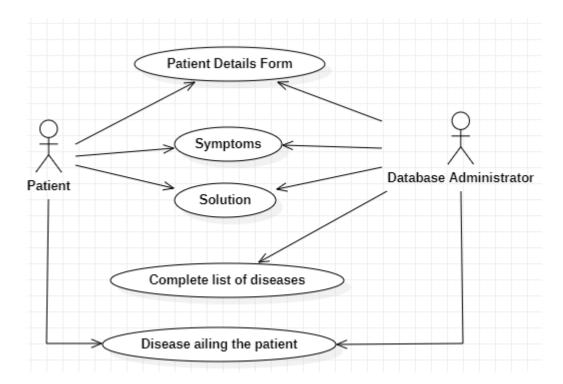


Figure 4.3 Use case diagram

From the above figure 4.3, the interactions between a role in the system is shown

ACTIVITY DIAGRAM

An activity in Unified Modeling Language (UML) is a major task that must take place in order to fulfill an operation contract. Activities can be represented inactivity diagrams. An activity can represent: The invocation of an operation. A step in a business process.

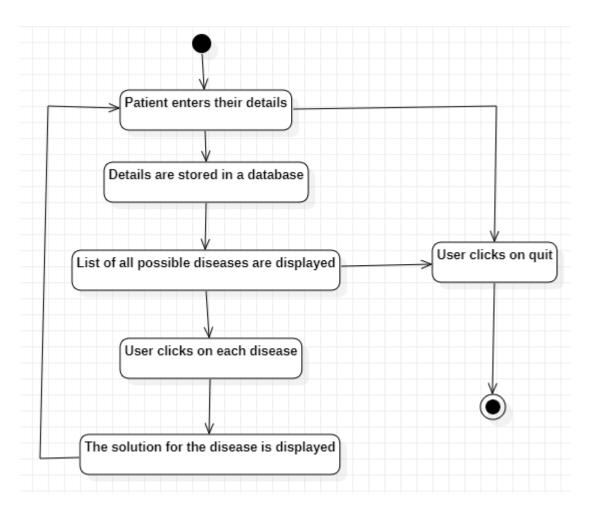


Figure 4.4 Activity Diagram

From the above figure 4.4, the activities if the system is shown.

SEQUENCE DIAGRAM

A sequence diagram is a type of interaction diagram because it describes how—and in what order—a group of objects works together

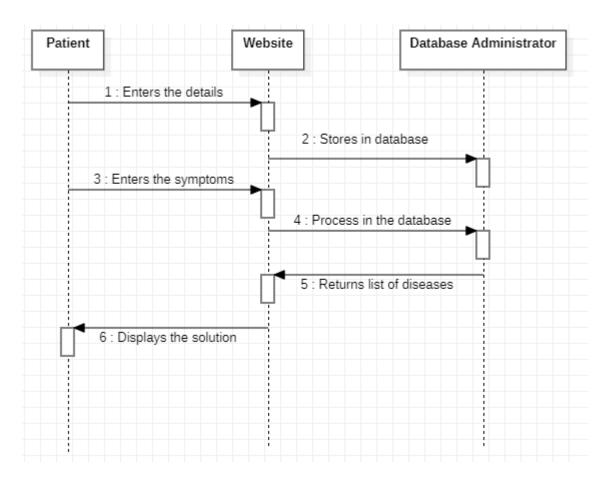


Figure 4.5 Sequence Diagram

The above figure 4.3 represents the type of interaction of the system

TABLE

USER DETAILS:

S.NO	ATTRIBUTE	ТҮРЕ
1.	FIRST_NAME	VARCHAR(50)
2.	LAST_NAME	VARCHAR(50)
3.	AGE	INT
4.	GENDER	VARCHAR(10)
6.	EMAIL	VARCHAR(100)
7.	MOBILE	VARCHAR(10)
8.	HISTORY	VARCHAR(250)

DISEASE INFO

S.NO	ATTRIBUTE	ТҮРЕ
1.	DISEASE_ID	INT
2.	DISEASE_NAME	VARCHAR(50)
3.	DISEASE_CURE	VARCHAR(5000)

DISEASE SYMPTOMS

S.NO	ATTRIBUTE	TYPE
1.	SERIAL_NO	INT
2.	DISEASE_SYMPTOM	VARCHAR(50)
3.	DISEASE_ID	INT

SAMPLE CODING

1.MAIN_PAGE.HTML

}

```
<!DOCTYPE html>
<html>
<head>
       <title>
               Solution for the disease
       </title>
       <script type="text/javascript">
               function validateform(){
                       var first=document.myform.first name.value;
                       var last = document.myform.last name.value;
                       var age = document.myform.age.value;
                       var gender = document.myform.gender.value;
                       var email = document.myform.email.value;
                       var phone = document.myform.phone.value;
                       var history = document.myform.history.value;
                       if (first == "" \parallel first == null \parallel last == "" \parallel last == null ){
                        alert("Please enter your name");
                        return false;
                       else if(age == "" || age == null){
                               alert("Please enter your age");
                               return false;
                       else if(gender == "" \parallel gender == null){
                               alert("Please select the gender");
                               return false;
                       else if(email == null || email == ""){
                               alert("Please enter an email id");
                               return false;
                       else if(phone == null || phone == ""){
                               alert("Please enter a phone number");
                               return false;
                       else if (history == null || history == ""){
                               alert("Please enter your previous medical history");
                               return false;
                       }
```

```
</script>
     <style>
           body {
            background-image: url('medical image.jpg');
            background-repeat: no-repeat;
            background-attachment: fixed;
            background-size: cover;
     </style>
</head>
<body>
     <div align="center">
           <h1> <strong>Patient Details Entry Form</strong> </h1>
     </div>
     <form name = "myform" method = "post" action = "main page.php" onsubmit =
"validateform()">
            <label>First Name : </label>
                       <input type = "text" name = "first name">
                 <label>Last Name :</label>
                       <input type = "text" name = "last name">
                 <label>Age :</label>
                       <input type = "number" name = "age"</td>
                  <label>Gender : </label>
                       <input type = "radio" name = "gender" value = "male">Male
                       <input type = "radio" name = "gender" value =</pre>
"female">Female
```

```
<label>Email: </label>
                       <input type = "email" name = "email">
                 <label>Phone : </label>
                       <input type = "phone" name = "phone">
                 <label>Previous medical history : </label>
                       <textarea name = "history" rows=4 cols=21></textarea>
                 <label>Select your symptoms :</label>
                 <select id = "symptom" name = "symptom[]" multiple>
                             <option value = "body pain">Body Pain
                             <option value = "dehydration">Dehydration
                             <option value = "dizziness">Dizziness</option>
                             <option value = "ear pain">Ear Pain
                             <option value = "hard bowel movement">Hard Bowel
movement</option>
                             <option value = "headache">Headache
                             <option value = "hearing loss">Hearing Loss</option>
                             <option value ="heartburn">Heartburn</option>
                             <option value = "high temperature">High
Temperature</option>
                             <option value = "nausea">Nausea
                             <option value = "redness of the eye">Redness of the
Eye</option>
                             <option value = "runny nose">Runny Nose
                             <option value = "sore throat">Sore Throat
                             <option value = "watery stool">Watery Stool
                       </select>
                 <input type = "submit" name =
"save" value = "Submit" style = "font-size:25px">
```

2.MAIN_PAGE.PHP

```
<?php
$server name = "localhost";
$username = "username";
$password = "password";
$database_name = "disease";
$conn = mysqli connect($server name,$username,$password,$database name);
// checking the connection
if(!$conn){
    die("Connection Failed:" . mysqli connect error());
if(isset($ POST['save'])){
    $first name = $ POST['first name'];
    $last name = $ POST['last name'];
    ae = POST['age'];
    $gender = $_POST['gender'];
    $email = $_POST['email'];
    $phone = $ POST['phone'];
    $history = $ POST['history'];
    $sql query = "INSERT INTO user details
(first name, last name, age, gender, email, mobile, history)
    VALUES ('$first_name', '$last_name', '$age', '$gender', '$email', '$phone', '$history')";
    if (mysqli query($conn, $sql query)){
           if(isset($ POST['symptom'])){
                  $disease array = array();
                  $disease id array = array();
                  foreach ($_POST['symptom'] as $symptom){
```

\$sql = "SELECT disease_name,disease_info.disease_id FROM disease_info,disease_symptom

```
WHERE disease info.disease id=disease symptom.disease id AND
symptoms= "" .($symptom) .""";
                          $result = $conn->query($sql);
                          if (\frac{\text{result->num rows}}{0}) {
                                  // output data of each row
                                  while($row = $result->fetch assoc()) {
                                         ceck = 0;
                                          foreach($disease_array as $element){
                                                 if( $element == $row['disease name']){
                                                         check = 1;
                                         if($check == 0){
array push($disease array,$row['disease name']);
array push($disease_id_array,$row['disease_id']);
                          }
                   }
                   echo "<h2> You have been diagnosed with </h2>";
                   \frac{1}{2}
                   foreach($disease array as $x){
                          $id=$disease id array[$index];
                          echo "<a href=disease cure page.php?val=",$id," target=' blank'>"
.$x ."</a><br/>";
                          \frac{1}{\sin dex} = \frac{1}{\sin dex}
                   echo " Click on the disease to know how to cure it !";
           else{
                   echo " <strong> Please select a symptom first</strong>";
    }
    else {
           echo "Error: " . $sql . "" . mysqli error($conn);
```

```
<html>
   <head>
       <style>
                     body {
                      background-image: url('white.jpg');
                      background-repeat: no-repeat;
                      background-attachment: fixed;
                      background-size: cover;
       </style>
   </head>
   </html>
   3.DISEASE CURE PAGE.PHP
<?php
       $server_name = "localhost";
       $username = "username";
       $password = "password";
       $database_name = "disease";
       $conn=mysqli connect($server name,$username,$password,$database name);
       // checking the connection
       if(!$conn){
              die("Connection Failed:" . mysqli_connect_error());
       else{
              $val=$ GET["val"];
              $sql = "SELECT disease cure FROM disease info WHERE
disease info.disease id= "" .($val) .""";
              $result = $conn->query($sql);
              if (\frac{\text{sresult->num rows}}{0}) {
                            // output data of each row
                            while($row = $result->fetch assoc()) {
                                   echo $row['disease cure'];
                            }
      }
?>
```

<html> <head>

<style>

```
body {

background-image: url('white.jpg');
background-repeat: no-repeat;
background-attachment: fixed;
background-size: cover;
}

</style>
</head>
</html>
```

4. DATABASE

Database name: Disease

Tables:

- disease_info
- disease_symptoms
- user_details

disease_info

Disease i	Disease nam	Disease_cure
d	e –	_
1	Common	<head><title>COLD</title></head> <body< p=""> style='font-size: 1.2em'><h1 style="color:green">Cold remedies that work /h1>The common cold, also known simply as a cold, is a viral infectious disease of the upper respiratory tract that primarily affects the respiratory mucosa of the nose, throat, sinuses, and larynx. There is no vaccine for the common cold. The primary methods of prevention are hand washing; not touching the eyes, nose or mouth with unwashed hands; and staying away from sick people. /p><div>If you catch a cold, you can expect to be sick for one to two weeks. That doesn't mean you have to be miserable. These remedies might help you feel better: better: /p></div>Stay hydrated : /strong> Water, juice, clear broth or warm lemon water with honey helps loosen congestion and prevents dehydration. /li>Rest : /strong> Your body needs rest to heal. /li>Soothe a sore throat : /strong> A saltwater gargle — 1/4 to 1/2 teaspoon salt dissolved in a glass of warm water — can temporarily relieve a sore or scratchy throat. cbr/>vou can also try ice chips, sore throat sprays, lozenges or hard candy. strong> Combat stuffiness : /strong> Over-the-counter saline nasal drops, syrups, tablets and sprays can help relieve stuffiness and congestion. strong> Compestant eli> Compestant medications help ease nasal congestion and stuffiness. </h1></body<>

	Nonsteroidal anti-inflammatory drugs (NSAIDs) such as ibuprofen (Advil, Motrin), naproxen (Aleve), and aspirin can help ease body aches, inflammation, and fever symptoms. li>Sip warm liquids : A cold remedy used in many parts of the world, taking in warm liquids, such as chicken soup, tea or warm apple juice, might be soothing and might ease congestion by increasing mucus flow. v v v v v <
	or if the severity of the symptoms increases.
Viral Fever	<head><title>VIRAL FEVER</title></head> <body< p=""> style='font-size:1.2em'><h1 style="color:green">Treatment for Fever</h1><div>A viral fever is a higher-than-average body temperature that a virus causes. While not every person experiences a fever when they have a virus, a fever can be a sign that the body is trying to fight off the infection. Viral illnesses don't respond to antibiotics. Instead, most simply have to run their course. This can take anywhere from a couple of days to a week or longer, depending on the type of infection. /p></div> Drink fluids: /strong> A viral fever makes your body much warmer than usual. This causes your body to sweat in an effort to cool down. But this leads to fluid loss, which can cause dehydration. Try to drink as much as you can when you have a viral fever to replenish lost fluids. /li> A viral fever is a sign that your body is working hard to fight off an infection. So try to avoid as much physical activity as possible. Aim for eight to nine hours or more of sleep per night. /li> These can also soothe a feverish body. But be sure not to overdo it as it can risk development of additional symptoms. /li> Strong> Common OTC fever reducers include <ul< td=""></ul<></body<>
Diarrhea	a 2 days or if the temperature rises above 103°F. <head><title>DIARRHEA</title></head> <body< p=""> style='font-size:1.2em'><h1 style="color:green">Remedies to cure Diarrhea are as follows </h1> The most common cause of Diarrhea is an infection of the intestines due to either a virus, bacterium, or parasite Most cases clear on their own. These infections are often acquired from food or water that has been contaminated by feces, or directly from another person who is infected. Some infections may need antibiotics. Severe cases can cause enough dehydration to require intravenous fluids. Drink plenty of liquids,</body<>

alcohol.Add semisolid and low-fiber foods gradually as your bowel movements return to normal. Try soda crackers, toast, eggs, rice or

chicken.strongAvoid certain foodsstrongsuch as dairy products, fatty foods, high-fiber foods or highly seasoned foods for a few days.Ask about anti-diarrheal medications. Over-the-counter anti-diarrheal medications, such as loperamide and bismuth subsalicylate, might help reduce the number of watery bowel movements and control severe microorganisms may help restore a healthy balance to the intestinal tract by boosting the level of good bacteria. Probiotics are available in capsule or liquid form and are also added to some foods, such as certain brands of yogurt.
strong>Lifestyle :Diarrhea can be controlled to a significant extent by maintaining your diet and practicing hygiene occasional bouts of diarrhea are common and not cause for concern, diarrhea can become dangerous if it leads to severe dehydration. Visit the doctor if there is Severe diarrhea for more than 2 days.Diarrhea accompanied by a fever. Diarrhea accompanied by frequent vomiting.Severe, unbearable pain in the abdomen or rectum.

4 Headache

<head><title>HEADACHE</title></head><body style='font-size:1.2em'><h3 style=color:green>Tension-type headaches</h3>Tension-type headaches, the most common variety of headaches: pain around your head, a dull ache or pressure mild to moderate pain on both sides of the head in frequencyCan be occasionalMay occur more than 15 days a month (chronic)Last from 30 minutes to a week
Most occasional tension-type headaches are easily treated with over-the-counter medications, including: AspirinIbuprofen (Advil, Motrin IB, others)Acetaminophen (Tylenol, others)/li><h3 style=color:green>Migraines</h3>Migraines are another common type of headache. They affect three times more women than men. Migraines typically:Cause pain that is moderate to severePulsateCause nausea, vomiting, or increased sensitivity to light or soundAffect only one side of your head, but can affect both sidesWavs to treat migraine at home are as follows :Rest in a quiet, dark roomHot or cold compresses to your head or neckMassage and small amounts of caffeineOver-the-counter medications such as ibuprofen (Advil, Motrin IB, others), acetaminophen (Tylenol, others) and aspirinSeek emergency care if you have: A very severe, sudden headacheHeadache after a head injury or fallFever. stiff neck, rash, confusion, seizure, double vision, weakness, numbness or difficulty speaking treatment<h3 style=color:green>Cluster headaches</h3>They cause severe pain on one side of the head and occur off and on for weeks over the course of a few months. Cluster

		headaches are associated with one or more signs and symptoms, such		
		as tearing, nasal congestion and nasal discharge. These occur on the		
	T 7 0 .:	same side as the pain.		
5	Ear Infection	<head><title>COLD</title></head> <body< td=""></body<>		
		style='font-size:1.2em'> <h1 style="color:green">Treating Ear</h1>		
		Infections Ear infections can be either bacterial or viral		
		infections. They can occur in your middle ear, the part of your ear		
		just behind your eardrum, as well as the outer and inner ear. They		
		often clear up on their own but can be painful due to inflammation or		
		fluid buildup. <div></div>		
		Ear infections can be chronic or acute. Acute ear infections are		
		painful but short in duration. Chronic ear infections either don't clear		
		up or recur many times. They can cause damage to the middle and		
		inner ear, which is infrequently permanent.		
		These methods are effective in relieving the symptoms of a mild		
		ear infection: Apply a warm cloth to the affected		
		ear. Take over-the-counter (OTC) pain medication such as		
		ibuprofen (Advil) or acetaminophen (Tylenol).		
		prescription ear drops to relieve pain.		
		decongestants like pseudoephedrine (Sudafed).		
		sleeping on the affected ear.		
		treatmentIf your symptoms get worse or don't improve,		
		see a doctor. They may prescribe antibiotics if your ear infection is		
		bacterial, chronic, or doesn't appear to be		
		improving. The Centers for Disease Control and		
		Prevention recommends seeing a doctor when your child has:		
		= a fever over 102.2°F byus, discharge, or fluid		
		leaking from your ear		
		symptoms li>symptoms for more than 2 to 3		
		days li>hearing loss other concerning		
_	_	symptoms		
6	Indigestion	<head><title>INDIGESTION</title></head> <body< td=""></body<>		
		style='font-size:1.2em'> <h1 style="color:green">Treating</h1>		
		Indigestion <div>Pain from inside the abdomen or the outer</div>		
		muscle wall, ranging from mild and temporary to severe and		
		requiring emergency care. <div>Abdominal pain can have</div>		
		causes that aren't due to underlying disease. Examples include		
		constipation, wind, overeating, stress or muscle strain.		
		<pre>Drinking water : The body needs water</pre>		
		to efficiently digest and absorb nutrients from foods and beverages.		
		Being dehydrated makes digestion more difficult and less effective,		
		which increases the likelihood of an upset stomach. Additionally,		
		drinking water may help reduce heartburn.		
		<pre>Avoiding lying down</pre>		
		may prevent indigestion from becoming heartburn. When the body is		
		horizontal, the acid in the stomach is more likely to travel backward		
		and move upward, which can cause heartburn.		
		<pre>Ginger : People with an upset stomach could</pre>		
		try adding ginger to their food or drinking it as a tea. Some		
		all-natural ginger ales may also contain enough ginger to settle an		
		upset stomach.		
		foods: Research suggests that the following foods may		
		increase the risk of indigestion: fatty or acidic		

		foods li>wheat products spicy foods greasy			
		foods			
		<pre>Lime or lemon juice, baking soda, and water :</pre>			
		Some studies suggest that mixing lime or lemon juice in			
		water with a pinch of baking soda can help relieve heartburn and			
		indigestion by reducing stomach			
		acidity. The following tips may help			
		prevent indigestion : eating slowereating			
		less fatty or processed foods			
		and allergies and allergies i> partaking in regular exercise i> reducing attracts i > (n) < (n			
		stress stress y> stress h> seek medical attention if other stress h stress			
		complication arises or if the severity of the symptoms increases.			
7	Conjunctiviti	<pre></pre> <pre></pre> <pre></pre> <pre> </pre> <pre> <pre> </pre> <pre> </pre> <pre> <pre> </pre> <pre> </pre> <pre> <pre> <pre> </pre> <pre> <pre> </pre> <pre> <pre> </pre> <pre> <pre> <pre> <pre> </pre> <pre> <pre> <pre> <pre> <pre> </pre> <pre> <</pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre>			
'	Conjunctiviti	<pre><head><title>CONJUNCTIVITIS</title></head><body< pre=""></body<></pre>			
	S	style='font-size:1.2em'><\h1 style=color:green>Treating			
		Conjunctivitis(pink eye)Because pink eye is highly contagious, early diagnosis is important. Bacterial cases can be cured			
		with antibiotic eye drops, viral conjunctivitis clears up on its own,			
		and allergic reactions can be treated with various types of eye			
		drops. br/> Here are some general tips:			
		<l< td=""></l<>			
		existing infection to your other eye, and to other			
		people. Don't rub your eyes. Use a cool wet			
		washcloth to soak off any crusting.			
		Use a warm or cool compress to reduce			
		discomfort. li>Discard eye make-up because it may cause			
		future infection.			
		contaminated, including towels and pillowcases. Try to use clean			
		towels and pillowcases everyday.			
		lenses and discard current lenses.			
		prescribed, place drop in pocket formed by pulling down lower lid.			
		Make sure you don't touch the bottle to the eye in order to prevent			
		contamination. li>If the infection does not improve in 2 or 3			
		days, make an appointment for re-evaluation.			
		 <!--</td-->			
		extremely contagious so if you know someone who is infected,			
		I > make sure you do not expose yourself to contact with the I > make sure you do not expose yourself to contact with the I > make sure you do not expose yourself to contact with the			
		person's eye fluid. li>The infection can easily be passed via keyboards, doorknobs, make-up, pens, gym equipment, and a vast			
		number of other items.			
		hands frequently, avoid touching your eyes, and wash anything that			
		may be contaminated.			
8	Constipation	<pre></pre>			
ľ	Consupution	style='font-size:1.2em'> <h1 style="color:green">Treating Constipation</h1>			
		at home Treatment for constipation depends on the cause,			
		how long you've had it and how severe your symptoms are.			
		I many cases, it's possible to relieve the symptoms by making			
		dietary and lifestyle changes.			
		constipation are outlined below.			
		adviceChanges to diet and lifestyle are often recommended			
		as the first treatment for constipation. In many cases, this will			
		improve the condition without the need for			
		medication.Some self-help methods of treating constipation			

are listed below: Increase your daily intake of fibre. You should eat at least 18-30g of fibre a day. High-fibre foods include plenty of fresh fruit and vegetables and cereals.Add some bulking agents, such as wheat bran, to your diet. This will help to make your stools softer and easier to pass.Avoid dehydration by drinking plenty of water.Exercise more regularly – for example, by going for a daily runKeep to a routine (a place and time of day) when you're able to spend time on the toilet. Respond to your bowel's natural pattern: when you feel the urge, don't delay.Try resting your feet on a low stool while going to the toilet, so that your knees are above your hips; this can make passing stools easier.If medication you're taking could be causing constipation, your Genral Practitioner may be able to prescribe an alternative.

$disease_symptom$

serial_no	symptoms	disease_id	
1	runny nose	1	
2	sore throat	1	
3	high temperature	1	
4	body pain	2	
5	high temperature	2	
6	dehydration	3	
7	watery stool	3	
8	headache	4	
9	dizziness	4	
10	ear pain	5	
11	hearing loss	5	
12	nausea	6	
13	heartburn	6	
14	redness of the eye	7	
15	hard bowel movement	8	

User_details

first_name	last_name	age	gender	email	mobile	history
Monisha	Ram	20	female	abc@rajalakshmi.edu.in	2569874569	Fever, cold and cough
Lily	James	25	female	erat@gmail.com	9968754987	None

SCREEN SHOTS

1. PATIENT DETAILS COLLECTION PAGE

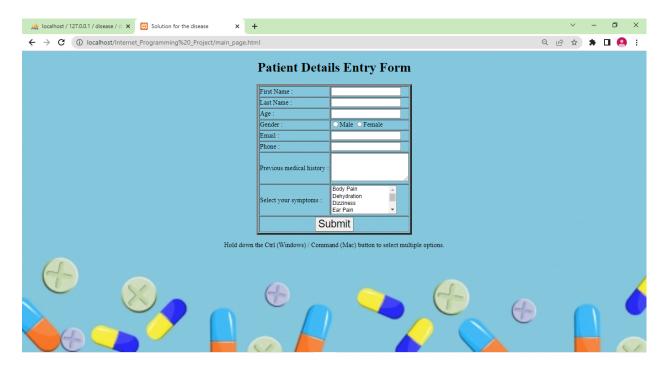


Figure 7.1 Patient Details Form

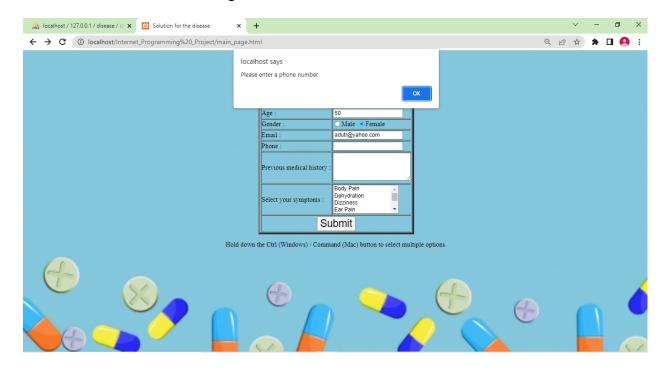
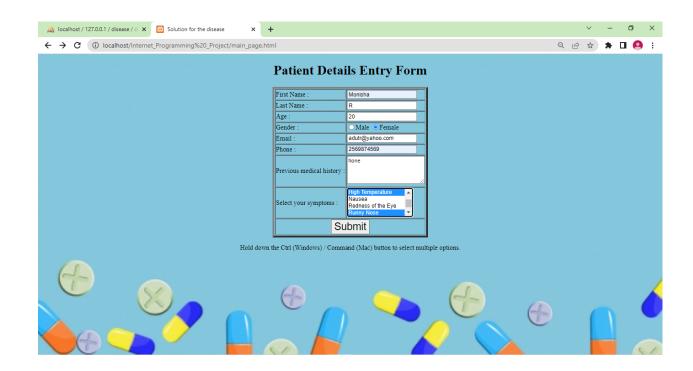


Figure 7.2 Javascript validation of the form



7.3 Form with Patient Details

2. DIAGNOSIS PAGE

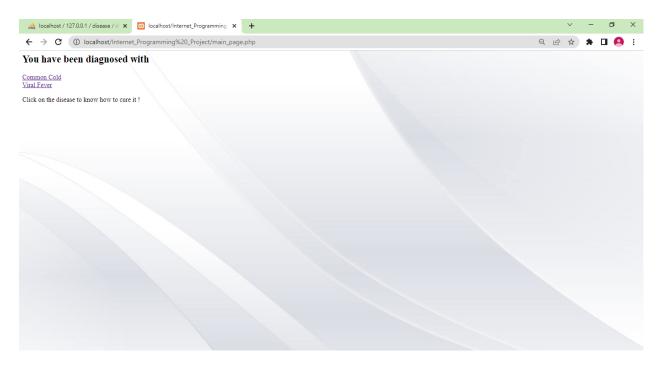


Figure 7.4 Diagnosis based on submission of symptoms

3. SOLUTION FOR THE DISEASE

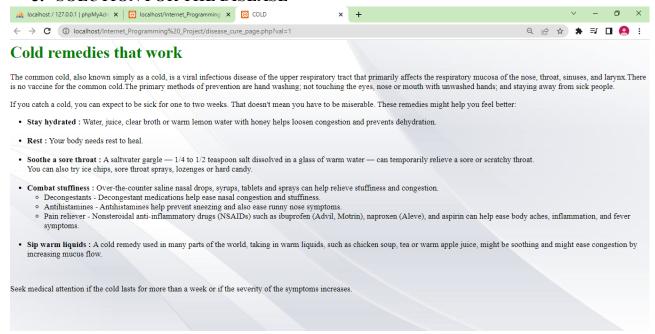


Figure 7.5 Solution for Common Cold

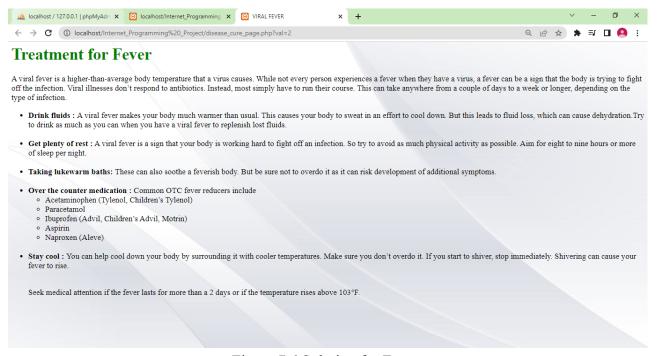
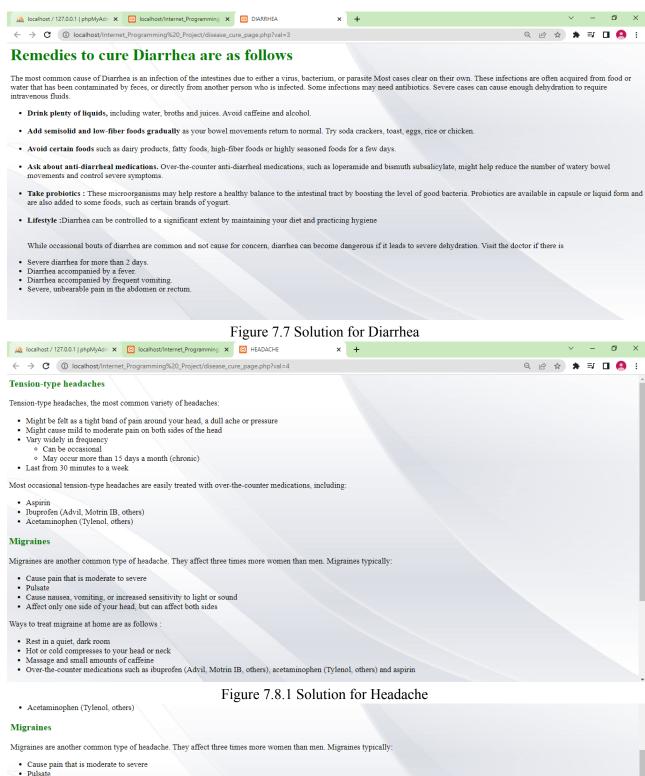


Figure 7.6 Solution for Fever



- Cause nausea, vomiting, or increased sensitivity to light or sound
- · Affect only one side of your head, but can affect both sides

Ways to treat migraine at home are as follows

- · Rest in a quiet, dark room
- · Hot or cold compresses to your head or neck
- Hot of cond compresses to you need on neck
 Massage and small amounts of caffeine
 Over-the-counter medications such as ibuprofen (Advil, Motrin IB, others), acetaminophen (Tylenol, others) and aspirin

Seek emergency care if you have:

- · A very severe, sudden headache
- · Headache after a head injury or fall
- · Fever, stiff neck, rash, confusion, seizure, double vision, weakness, numbness or difficulty speaking Pain that worsens despite treatment

They cause severe pain on one side of the head and occur off and on for weeks over the course of a few months. Cluster headaches are associated with one or more signs and symptoms, such as tearing, nasal congestion and nasal discharge. These occur on the same side as the pain

Figure 7.8.2 Solution for Headache

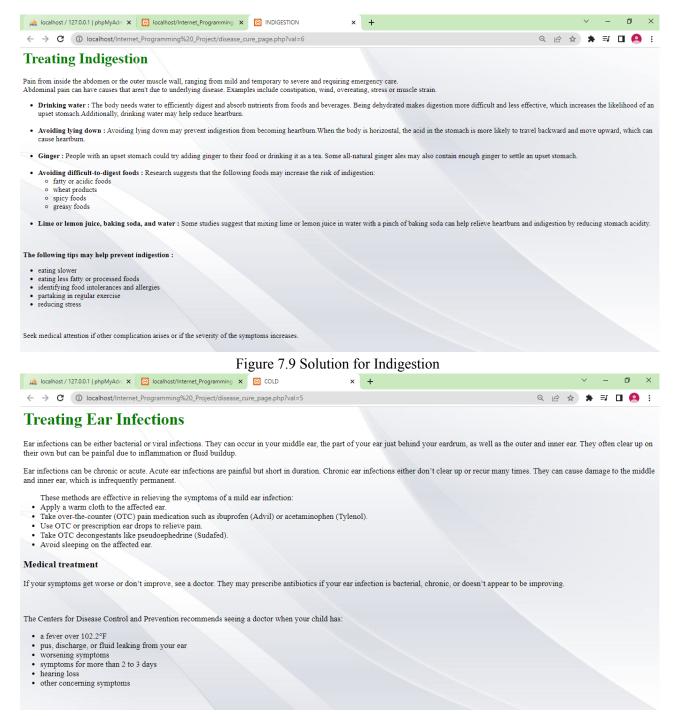


Figure 7.10 Solution for Ear Infection

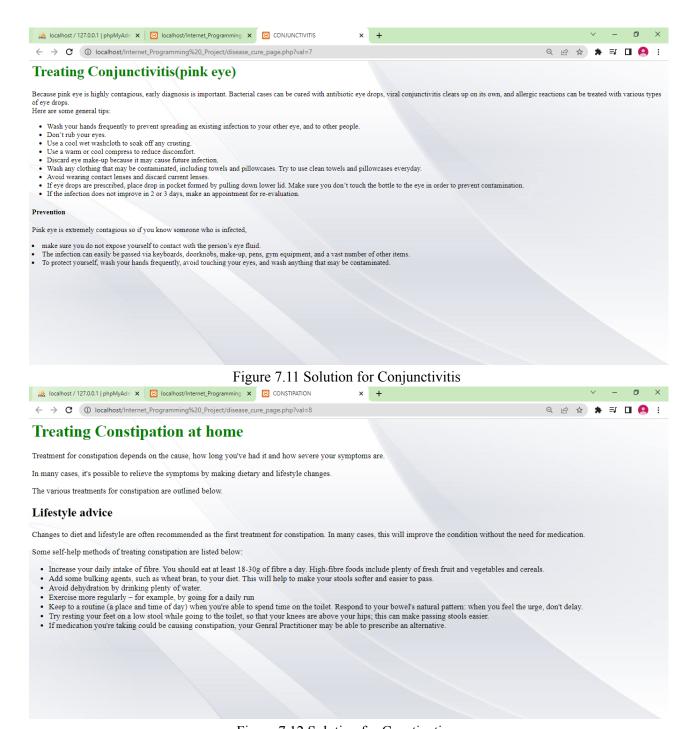


Figure 7.12 Solution for Constipation

CONCLUSION AND FUTURE ENHANCEMENT

Thus this project has been developed successfully and the performance of the system has been found highly satisfactory. With the use of this system the people are able to save more time and money. They are also able to get a peace of mind as they can find out what ails them, the features that can included in the coming future are:

- Having an admin login to oversee all of the processes
- Connecting hospitals to book doctor appointments
- Instantly making calls to medical services in case of emergency
- A live chat session between Patient and Doctor so that all the doubts can be cleared

REFERENCES

- Prediction of Health Problems and Recommendation System Using Machine Learning and IoT Published by IEEE Sanjay J P; Tummalapalli Naga Deepak; Manimozhi M
- 2. Efficient Chronic Disease Diagnosis prediction and recommendation system, Published by IEEE Asmaa S. Hussein; Wail M. Omar; Xue Li; Modafar At
- 3. Disease Prediction and Doctor Recommendation System using Machine Learning Approaches, ResearchGate Anand Kumar, Prakash U M, Ganesh Kumar Sharma
- 4. Health Recommender Systems: Concepts, Requirements, Technical Basics and Challenges, Martin Wiesner and Daniel Pfeifer
- 5. Disease Prediction and Doctor Recommendation System, International Research Journal of Engineering and Technology (IRJET) e-ISSN: 2395-0056 Volume: 05 Issue: 03 | Mar-2018 ,Dhanashri Gujar, Rashmi Biyani, Tejaswini Bramhane, Snehal Bhosale, Tejaswita P. Vaidya