

**VISVESVARAYA TECHNOLOGICAL UNIVERSITY
BELGAUM-590014**



**A DBMS Mini-Project Report
On
“Basic Diagnosis System”**

*A Mini-project report submitted in partial fulfillment of the requirements for the award of the degree of **Bachelor of Engineering in Computer Science and Engineering** of Visvesvaraya Technological University, Belgaum.*

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(ACCREDITED BY NBA, NEW DELHI FOR 3 YEARS VALIDITY:26-07-18 TO 30-06-21)
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Kanakpura Road, Udayapura, Bangalore 2017-2021 BATCH



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CERTIFICATE

This is to certify that the Mini-Project on Database Management System (DBMS) entitled “**BASIC DIAGNOSIS SYSTEM**” has been successfully carried out by **NEETHI B.S (1DT17CS059)** and **PRATHMESH AGASHE (1DT17CS065)** a bonafide students of **Dayananda sagar academy of technology and management** in partial fulfillment of the requirements for the award of degree in **Bachelor of Engineering in Computer Science and Engineering** of **Visvesvaraya Technological University, Belgaum** during academic year 2019-20. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the departmental library. The mini project report has been approved as it satisfies the academic requirements in respect of project work for the said degree.

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1:

2:

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It gives us immense pleasure to present before you our project titled “**BASIC DIAGNOSIS SYSTEM USING HTML,CSS,JAVASCRIPT AND PHP**”. The joy and satisfaction that accompany the successful completion of any task would be incomplete without the mention of those who made it possible. We are glad to express our gratitude towards our prestigious institution **DAYANANDA SAGAR ACADEMY OF TECHNOLOGY AND MANAGEMENT** for providing us with utmost knowledge, encouragement and the maximum facilities in undertaking this project.

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ABSTRACT

Our Project “BASIC DIAGNOSIS SYSTEM” is a computerized system that determines which [disease](#) or condition explaining a person's [symptoms](#) and [signs](#).

The system allows the user to identify the illness he/she is diagnosed with , by selecting the respective symptoms or signs his/her body is showing.

The user needs to sign up or log in and select the respective symptoms he/she thinks is a sign of some basic disease.

After selecting the respective symptoms the system then shows the result of what disease the user MIGHT be infected with.

The main purpose of this software is to provide a basic knowledge of diagnosis and give the user a basic result of what disease he/she MIGHT get or be infected with, but it's always better to consult a Doctor.

This project can help solve or will try to provide the basic diagnosis when required. Application will show or provide the basic details of what disease you might be affected with, after analyzing the symptoms provided by the user.

The system is not developed to that extent that it can provide the 100% correct results to the user. This can be a disadvantage as people with different symptoms might not know what they are affected with by using the system.

This application saves the data of employees and users in the database. Allows users to search for symptoms, and get the result which can tell the disease the user MIGHT be infected with.

TABLE OF CONTENTS

Chapter #	Chapter Name	Page #
------------------	---------------------	---------------

1			INTRODUCTION	1
	1.1		Background	1
	1.2		Problem Definition	1
	1.3		Motivation	1
	1.4		Objective	2
	1.5		Scope of the project	2
2			REQUIREMENTS	3
	2.1		Hardware Requirements	3
	2.2		Software Requirements	3
3			DESIGN	4
	3.1		Database Design	4
		3.1.1	E-R Diagram	4
		3.1.2	Database Schema	5
		3.1.3	Relational Schema	7
	3.2		Database Normalization	8

		3.2.1	First Normal Form	8
		3.2.2	Second Normal Form	8
		3.2.3	Third Normal Form	8
	3.3		User Interface	8
		3.3.1	User Registration Module	9
		3.3.2	User Operations Module	10
		3.3.3	Admin Registration Module	12
		3.3.4	Admin Operations Module	15
		3.3.5	Authority Registration Module	17
		3.3.6	Authority Operations Module	18
4			IMPLEMENTATION	19
	4.1		User Registration Module	19
	4.2		User Operations Module	20
	4.3		Admin Registration Module	21
	4.4		Admin Operations Module	22
	4.5		Authority Registration Module	24
	4.6		Authority Operation Module	25

	4.7		Stored Procedure and Trigger	26
5			SOURCE CODE	27
6			CONCLUSION AND FUTURE WORK	33
	6.1		Advantages	33
	6.2		Future Enhancements	33
7			BIBLIOGRAPHY	34

CHAPTER 1

INTRODUCTION

1.1 Background

Considering the real life scenarios happening around us on a daily basis, which comprises of not taking proper care of our health. So, it would be very difficult for people to reach out to the hospitals regarding what health issue they are facing by them and solving their own basic issue with a basic symptoms analysis. It is almost impossible for us to provide 100% correct result but it can provide the basic details about which disease you might have. This little project can help solve or will try to provide the basic diagnosis when required. Application will show or provide the basic details of what disease you might be affected with, after analyzing the symptoms provided by the user.

1.2 Problem Definition

The Basic problems an individual can face are-

- 1- Consumption of wrong medicines without proper Diagnosis.
- 2- Ignoring uneasy happenings in an individual which can be fatal if ignored.
- 3- Individual might give wrong advice to each other which is better known as “Self Consultation”.
- 4- People in Remote Areas might not have the basic facilities to overcome basic health issues for the time-being.

1.3 Motivation

Manual System: The system is not developed to that extent that it can provide the 100% correct results to the user. This can be a disadvantage as people with different symptoms might not know what they are affected with by using the system.

Technical System: In the era of digitalization our aim should be making administration more reachable, people-friendly and reliable. With the invention of latest technology, we should update our system to a very fast, accurate, user-friendly and reliable system.

1.4 Objective

1. Main goal of this project is:
2. 1. Faster System
3. 2. Accuracy
4. 3. Reliability
5. 4. Cost Effective
6. User Friendly

1.5 Scope of the project

The project provides a very simple application which simplifies the manual work done by the people to raise their issue to the authorities. This application saves the issues of society. Allows users to search for category with respect to their symptoms provided in the list, And admin only has the rights to delete a user. The project provides a very simple application which simplifies the manual work done by the operation team of basic diagnosis system. This application saves the data of employees and users in the database. Allows users to search for symptoms, and get the result which can tell the disease the user MIGHT be infected with. Our project also allows users to calculate their BODY MASS INDEX by the use for our basic BMI calculator.

CHAPTER 2

REQUIREMENTS

The requirements can be broken down into 2 major categories namely hardware and software requirements. The former specifies the minimal hardware facilities expected in a system in which the project has to be run. The latter specifies the essential software needed to build and run the project.

2.1 Hardware Requirements

The Hardware requirements are very minimal and the program can be run on most of the machines.

- Processor - Intel 486/Pentium processor or better
- Processor Speed - 500 MHz or above
- Hard Disk - 20GB (approx)
- RAM - 64MB or above
- Storage Space - Approx. 3MB

2.2 Software Requirements

- Technology Implemented : Apache Server, MySQL Server
- Language Used : PHP
- Database : My SQL
- User Interface Design : HTML5, CSS
- Web Browser : Google Chrome
- Software : XAMPP Version: 7.1.10

CHAPTER 3

DESIGN

3.1 Database Design

3.1.1 E-R Diagram

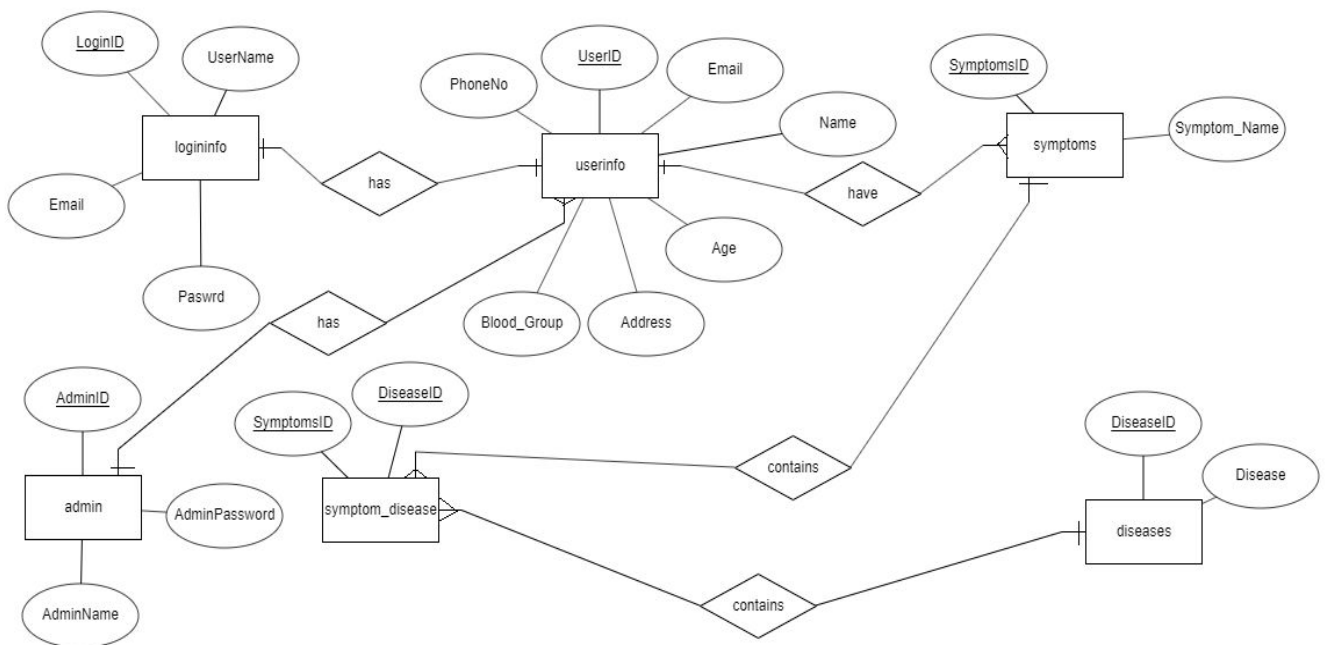


Fig 3.1 E-R diagram for BDS

3.1.2 Database Schema

phpMyAdmin

Recent Favorites

New

dbmsproject

Procedures

New

proc

Tables

New

admin

diseases

logininfo

symptoms

symptom_disease

userinfo

information_schema

mysql

performance_schema

phpmyadmin

project

signupsystem

test

Server: 127.0.0.1 > Database: dbmsproject

Structure

SQL

Search

Query

Export

Import

Operations

Privileges

Routines

Events

Triggers

Tracking

More

Filters

Containing the word:

Table	Action	Rows	Type	Collation	Size	Overhead
admin		1	InnoDB	latin1_swedish_ci	16 K	-
diseases		10	InnoDB	latin1_swedish_ci	16 K	-
logininfo		4	InnoDB	latin1_swedish_ci	48 K	-
symptoms		37	InnoDB	latin1_swedish_ci	32 K	-
symptom_disease		50	InnoDB	latin1_swedish_ci	48 K	-
userinfo		7	InnoDB	latin1_swedish_ci	80 K	-
6 tables	Sum	109	InnoDB	latin1_swedish_ci	240 K	0 B

Check all

With selected:

Print

Data dictionary

Create table

Name: Number of columns:

4

Go

Console

Bookmarks Options History Clear

Press Ctrl+Enter to execute query

>SELECT * FROM `symptom_disease`

>ALTER TABLE `symptom_disease` ADD INDEX(`DiseaseID`);

>SELECT * FROM `userinfo`

>SELECT * FROM `logininfo`

>ALTER TABLE `logininfo` ADD INDEX(`Email`);

Table 3.1.2.1: Project Database

The screenshot shows the phpMyAdmin interface for the 'admin' table. The 'Table structure' tab is selected, displaying the table's columns: AdminID (int(11), AUTO_INCREMENT), AdminName (varchar(20)), and AdminPassword (varchar(20)).

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	AdminID	int(11)			No	None		AUTO_INCREMENT	Change Drop More
2	AdminName	varchar(20)	latin1_swedish_ci		No	None			Change Drop More
3	AdminPassword	varchar(20)	latin1_swedish_ci		No	None			Change Drop More

Table 3.1.2.2: Admin Table

The screenshot shows the phpMyAdmin interface for the 'diseases' table. The 'Table structure' tab is selected, displaying the table's columns: DiseaseID (int(11)) and Disease (varchar(20)).

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	DiseaseID	int(11)			No	None			Change Drop More
2	Disease	varchar(20)	latin1_swedish_ci		Yes	NULL			Change Drop More

Table 3.1.2.3: Diseases Table



Server: 127.0.0.1 • Database: dbmsproject • Table: logininfo

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	LoginID	int(11)			No	None		AUTO_INCREMENT	Change Drop More
2	UserName	varchar(30)	latin1_swedish_ci		Yes	NULL			Change Drop More
3	Email	varchar(30)	latin1_swedish_ci		Yes	NULL			Change Drop More
4	Paswrd	varchar(20)	latin1_swedish_ci		Yes	NULL			Change Drop More

Check all With selected: Browse Change Drop Primary Unique Index Fulltext Add to central columns Remove from central columns

Table 3.1.2.4: Login Info Table



Server: 127.0.0.1 • Database: dbmsproject • Table: userinfo

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	UserID	int(11)			No	None		AUTO_INCREMENT	Change Drop More
2	Email	varchar(30)	latin1_swedish_ci		No	None			Change Drop More
3	Name	varchar(30)	latin1_swedish_ci		Yes	NULL			Change Drop More
4	Age	int(11)			Yes	NULL			Change Drop More
5	Address	varchar(100)	latin1_swedish_ci		Yes	NULL			Change Drop More
6	Blood_Group	varchar(3)	latin1_swedish_ci		Yes	NULL			Change Drop More
7	PhoneNo	varchar(10)	latin1_swedish_ci		Yes	NULL			Change Drop More

Check all With selected: Browse Change Drop Primary Unique Index Fulltext Add to central columns Remove from central columns

Table 3.1.2.5: User Info Table



Server: 127.0.0.1 • Database: dbmsproject • Table: symptoms

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	SymptomsID	int(11)			No	None			Change Drop More
2	Symptom_Name	varchar(60)	latin1_swedish_ci		No	None			Change Drop More

Check all With selected: Browse Change Drop Primary Unique Index Fulltext Add to central columns Remove from central columns

Table 3.1.2.6: Symptoms Table



Server: 127.0.0.1 • Database: dbmsproject • Table: symptom_disease

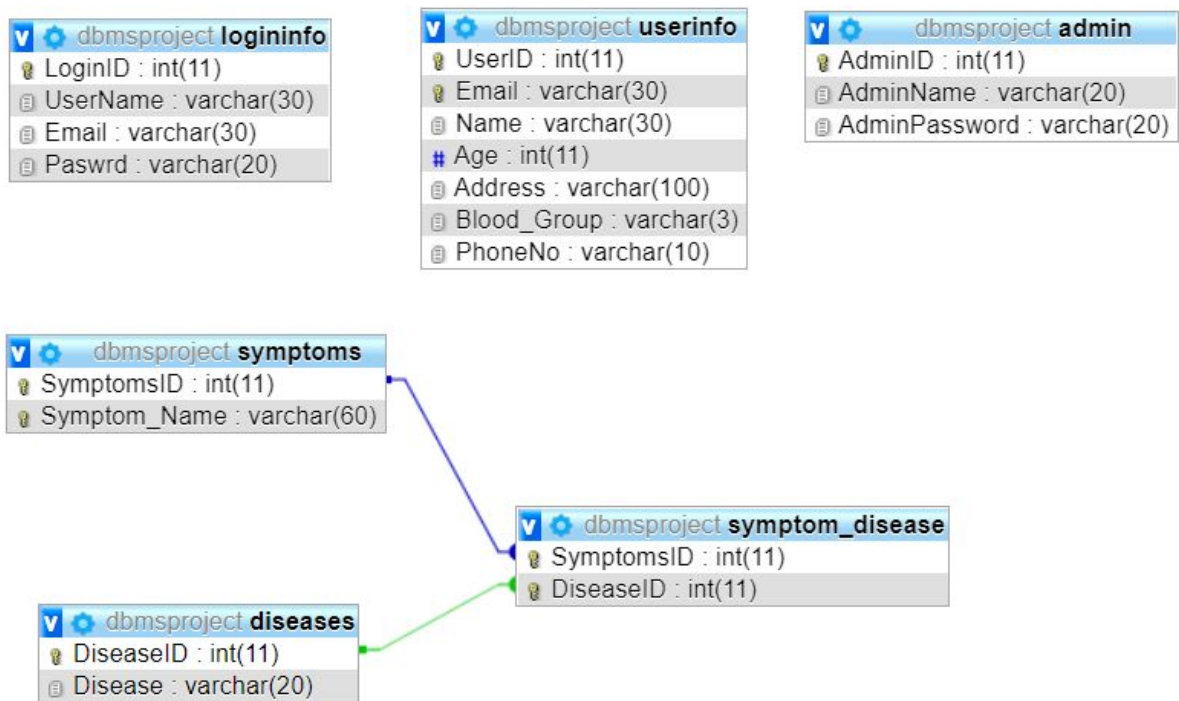
#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	SymptomsID	int(11)			No	None			Change Drop More
2	DiseaseID	int(11)			No	None			Change Drop More

Check all With selected: Browse Change Drop Primary Unique Index Fulltext Add to central columns Remove from central columns

Table 3.1.2.7: Symptoms and Disease Table

3.1.2 Relational Schema

Database: Basic Diagnosis System



Public Basic Diagnosis System Schema

Database Normalization

3.1.3 First Normal Form

All the Relations are designed in such a way that it has no repeating groups. Hence all tables are in 1st Normal Form.

3.1.4 Second Normal Form

A relation is said to be in second normal form if it is already in first normal form and it has no partial dependency. All the tables in the database are designed in such a way that there is no partial dependency. Hence all tables are in 2nd Normal Form.

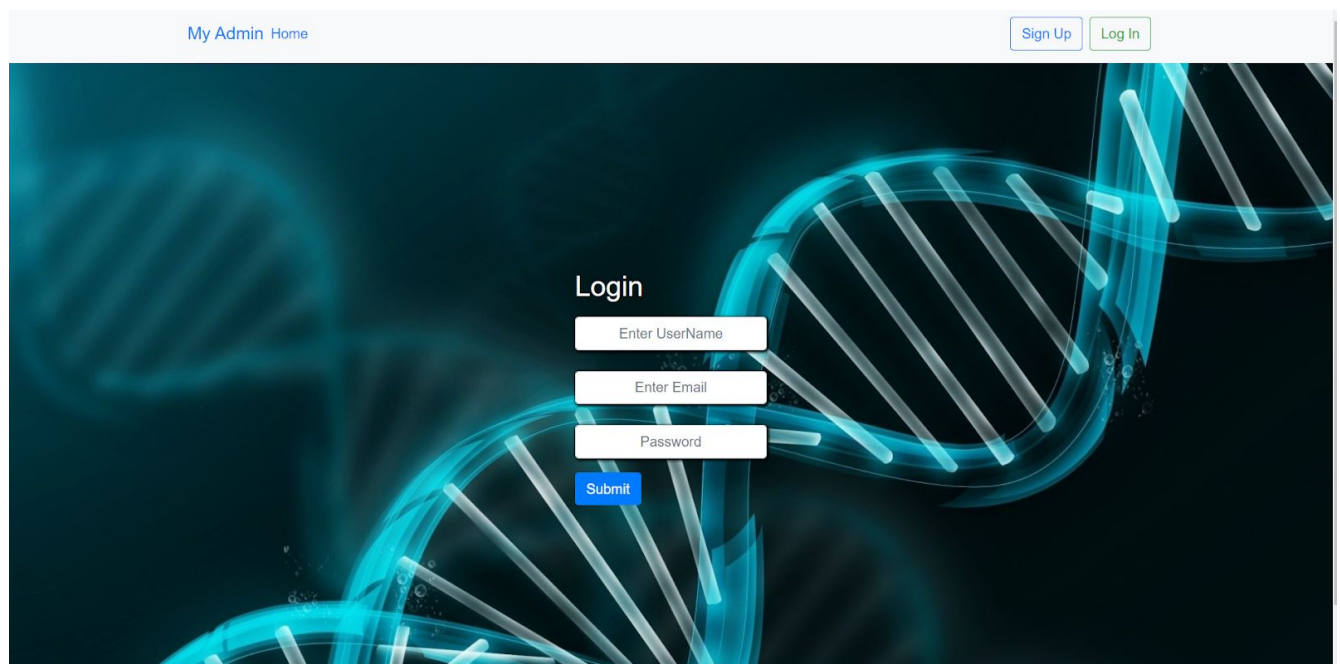
3.1.5 Third Normal Form

A relation is said to be in third normal form if it is already in 1st and 2nd Normal Form and has no transitive dependency. All the tables in the database are designed in such a way that there is no transitive dependency. Hence all tables are in 3rd Normal Norm.

3.2 User Interface

The User Interface of the Basic Diagnosis System is divided into three parts:

1. User Module - For the users
2. Admin Module – For the admin/owner(employee)



My Admin Home

Sign Up Log In

Login

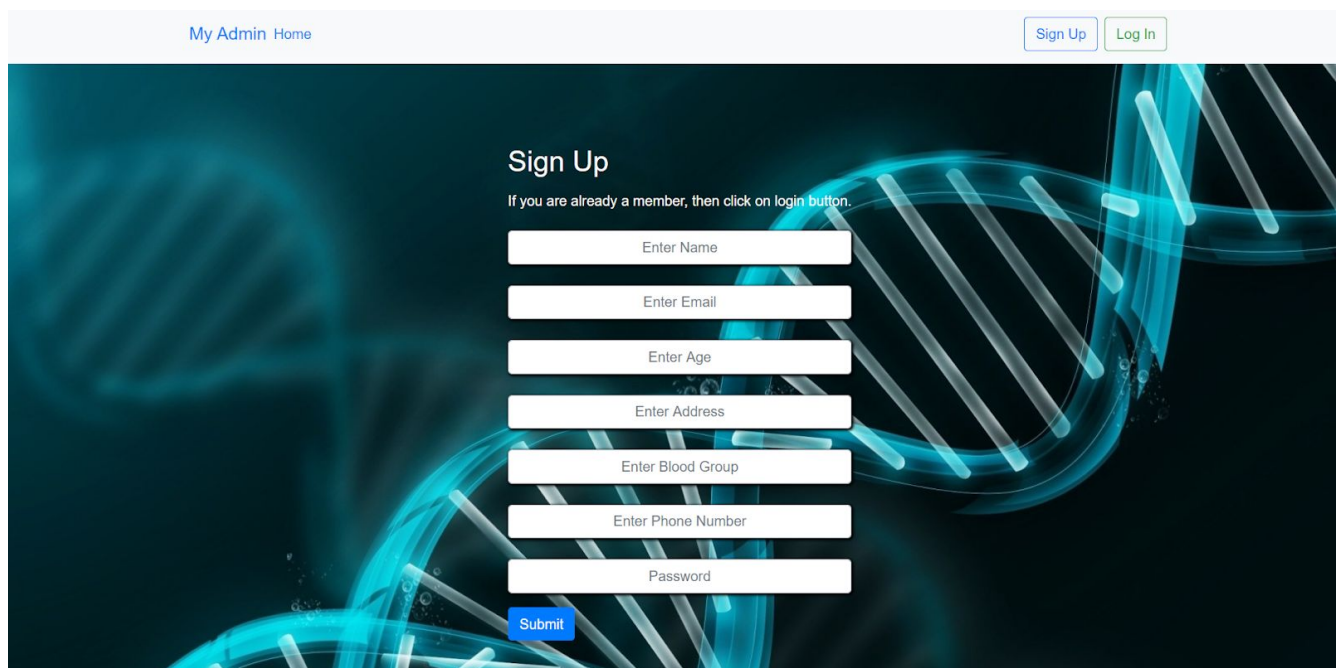
Enter UserName

Enter Email

Password

Submit

Figure 3.3 Welcome Page



My Admin Home

Sign Up Log In

Sign Up

If you are already a member, then click on login button.

Enter Name

Enter Email

Enter Age

Enter Address

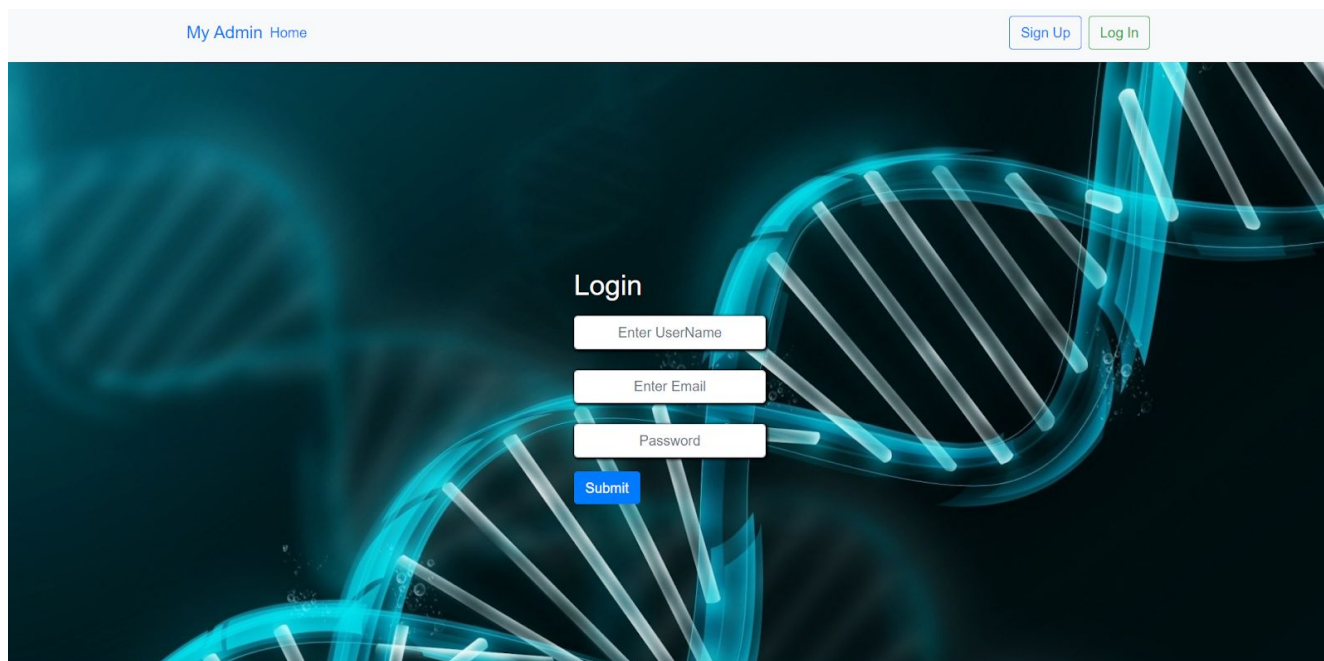
Enter Blood Group

Enter Phone Number

Password

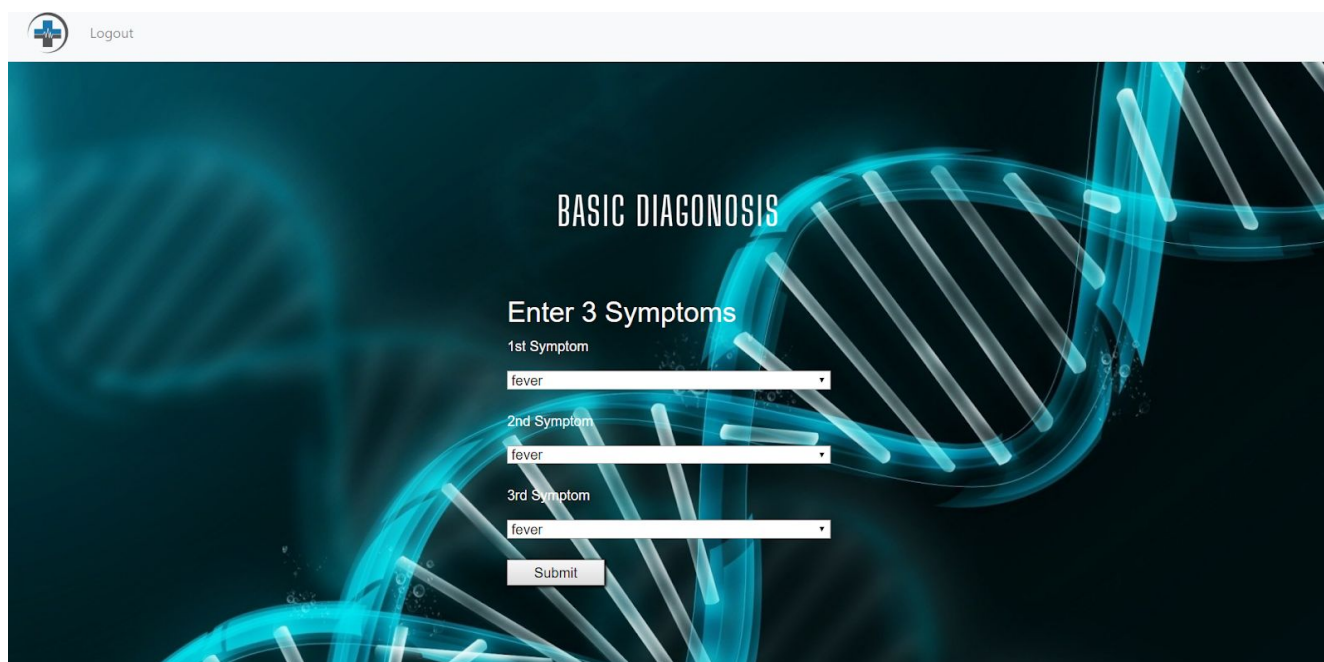
Submit

Figure 3.3.1 User Registration



The image shows a web page titled "User Login page". At the top left, there is a link "My Admin Home". At the top right, there are two buttons: "Sign Up" and "Log In". The main content area has a dark blue background with a glowing DNA double helix. In the center, there is a "Login" section with three input fields: "Enter UserName", "Enter Email", and "Password". Below these fields is a blue "Submit" button.

Figure 3.3.2 User Login page



The image shows a web page titled "Selecting Symptoms". At the top left, there is a "Logout" button with a plus icon. The main content area has a dark blue background with a glowing DNA double helix. In the center, there is a "BASIC DIAGNOSIS" section. Below this, there is a heading "Enter 3 Symptoms". There are three dropdown menus labeled "1st Symptom", "2nd Symptom", and "3rd Symptom". Each dropdown menu has "fever" selected. Below the dropdowns is a "Submit" button.

Figure 3.3.3 Selecting Symptoms

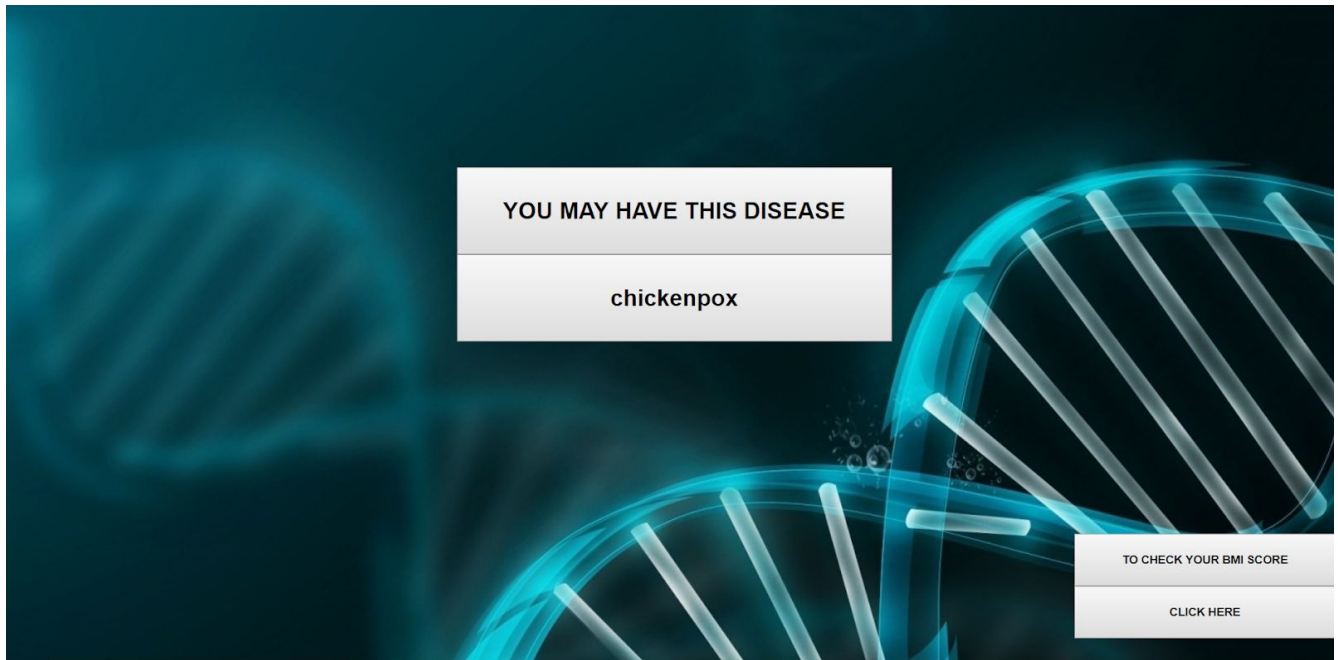


Figure 3.3.4 Disease you might be infected with after selecting the symptoms.

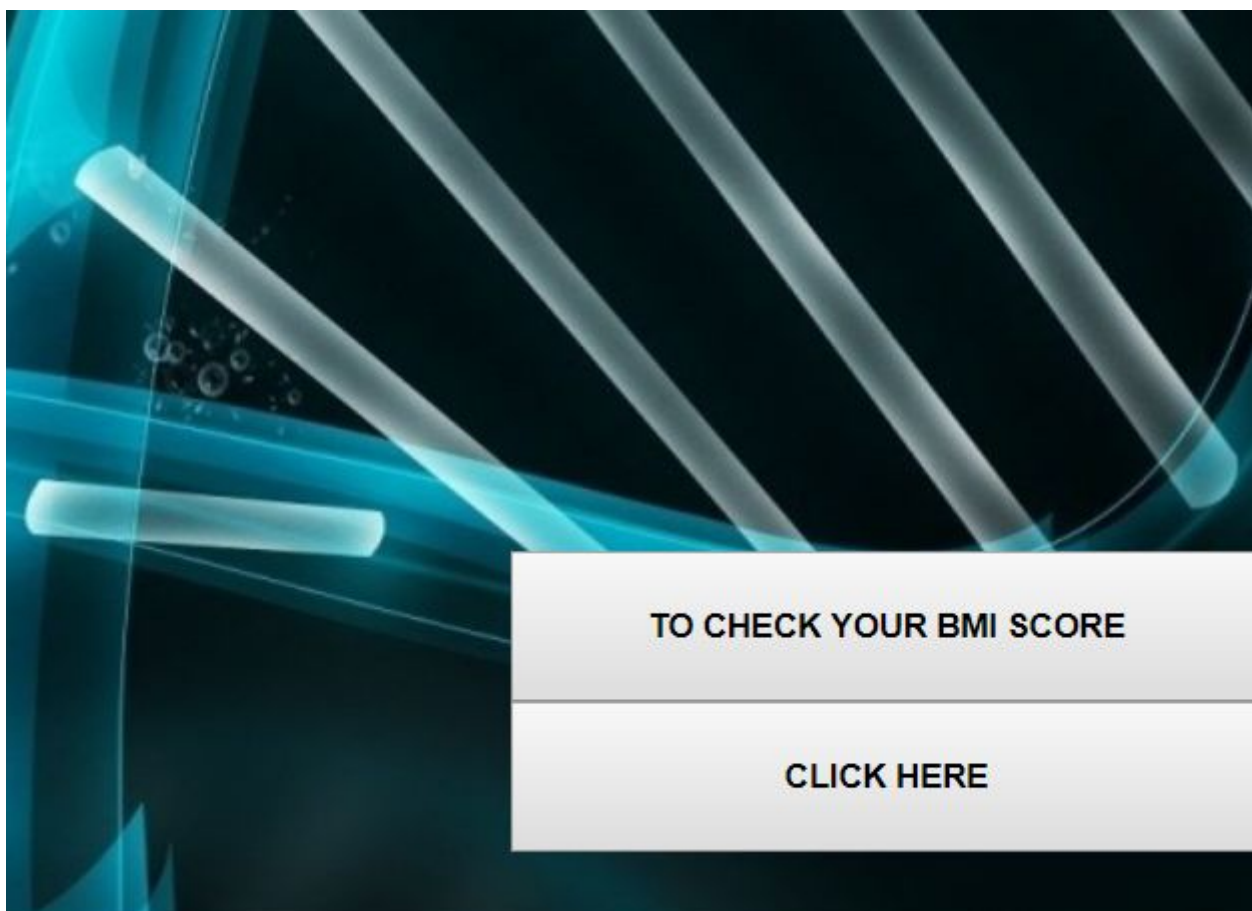


Figure 3.3.5 To Calculate the Body Mass Index.



Figure 3.3.6 Body Mass Index Page

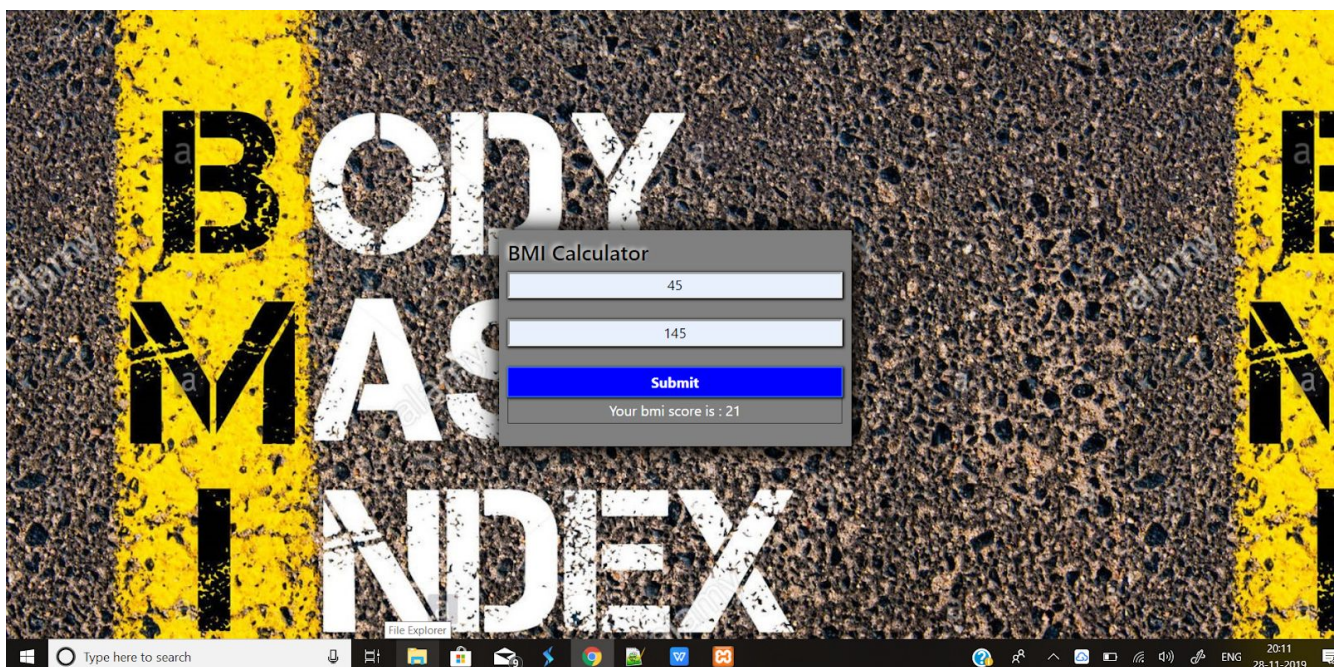


Figure 3.3.7 Total BMI score.

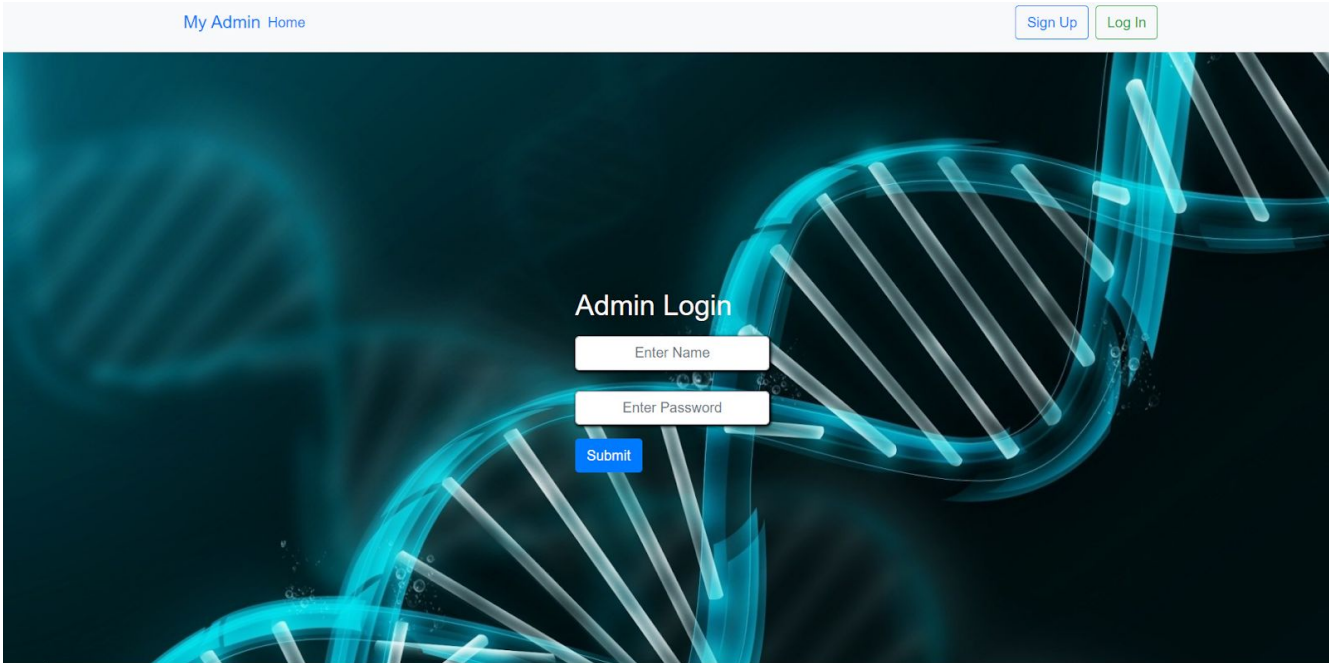


Figure 3.3.8 Admin login

UserID	Email	Name	Age	Address	Blood Group	Phone No	Want to Delete?
6	neethisadasivan@gmail.com	neethi	20	jp nagar	a+	2147483647	Delete
22	saman123@gmail.com	samanvitha	18	rajajinagar	o+	9900990099	Delete
25	abc@gmail.com	abc	20	51/52 MAIN ROAD	a+	8762448166	Delete
27	lalala@gmail.com	neethi	20	51/52 MAIN ROAD	o-	8762448166	Delete
29	blah@gmail.com	neethi	20	51/52 MAIN ROAD	o-	8762448166	Delete
30	poojashetty@gmail.com	pooja	20	51/52 MAIN ROAD	a+	8879379923	Delete
31	poojashetty123@gmail.com	pooja	20	51/52 MAIN ROAD	a+	8879379923	Delete

Figure 3.10 Inside Admin login

CHAPTER 4

IMPLEMENTATION

4.1 User Registration Module

Process Name	: User Registration
Process Number	: 1.1
Input	: Username : Email : Age : Address : Blood Group : Phone Number : Password
Output	: Directs to the main page
Error Condition	: Please fill out this field : Email already exists

User login

Process Name	: User Login
Process Number	: 1.2
Input	: Username : Email : Password
Output	: Directs to the main page
Error Condition	: Invalid Username or Password : All Fields are Required

4.2 User Operation Module

User symptom selection

Process Name	: User Symptom Selection
Process Number	: 2.1
Input	: Select symptoms
Output	: Directs user to the Result Page
Error Condition	: No error condition

Result Page

Process Name	: Result Page
Process Number	: 2.2
Output	: Disease Result
Error Condition	: No error conditions

User Body Mass Index

Process Name	: Body Mass Index Page
Process Number	: 2.3
Output	: Body Mass Index Score
Error Condition	: Null

4.3 Admin Registration Module

Process Name	: Admin Login
Process Number	: 3.1
Input	: Name : Password
Output	: User Details
Error Condition	: Please fill out this field

4.4 Admin Operations Module

Process Name	: Delete users
Process Number	: 4.1
Input	: No input
Output	: User will be deleted
Error Condition	: No error condition

Stored Procedure:

The stored procedure proc implemented in the project is used to show the user details. The stored procedure proc implemented in the project is for displaying the disease after analysing the symptoms. This stored procedure is used to add any new user and his/her details into the database.

Trigger:

The trigger is implemented for deleting the user details from the login info as well as user info table. Whenever the Admin wants to delete any user or the users details from the database then the delete_from_logininfo trigger is used to delete the user details from the logininfo table and from the userinfo table.

CHAPTER 5

SOURCE CODE

Sample Source code for dbms connection from php:

```
<?php

@$Name=$_POST['Name'];

@$Email=$_POST['Email'];

@$Age=$_POST['Age'];

@$Address=$_POST['Address'];

@$Blood_Group=$_POST['Blood_Group'];

@$PhoneNo=$_POST['PhoneNo'];

@$Paswr=$_POST['Paswr'];

if(!empty($Name)||!empty($Age)||!empty($Address)||!empty($Blood_Group)||!empty($
PhoneNo)||!($Paswr))

{

$host="localhost";

$dbUsername="root";

$dbPassword="";

$dbName="dbmsproject";

//create connection

$conn=new mysqli($host,$dbUsername,$dbPassword,$dbName);

if(mysqli_connect_error())

{

die('Connect Error(' . mysqli_connect_errno().')'. mysqli_connect_error());

}
```

```
else

{

$sql="INSERT Into userinfo (Name,Email,Age,Address,Blood_Group,PhoneNo)
values('$Name','$Email','$Age','$Address','$Blood_Group','$PhoneNo')";

$sql1="INSERT Into logininfo(Username,Email,Paswr) values
('$Name','$Email','$Paswr)";

if(($conn->query($sql))&&($conn->query($sql1)))

{

header("Location: home.php");

}

else

{

echo "error:". $sql."<br>". $conn->error;

}

$conn->close();

}

}

else

{

echo "all fields are required";

die();

}

?>
```

Triggers:

```
CREATE TRIGGER `DELETE_FROM_LOGININFO` BEFORE DELETE ON  
`USERINFO`
```

```
FOR EACH ROW DELETE FROM LOGININFO WHERE  
OLD.EMAIL=LOGININFO.EMAIL;
```

Stored Procedure:

```
CREATE PROCEDURE `PROC` (IN `SYM1` VARCHAR(20), IN `SYM2`  
VARCHAR(20), IN `SYM3` VARCHAR(20))
```

```
NOT DETERMINISTIC CONTAINS SQL SQL SECURITY DEFINER SELECT  
D.DISEASE , S.DISEASEID, COUNT(*) AS RANK FROM SYMPTOM_DISEASE S,  
DISEASE D
```

```
WHERE D.DISEASEID=S.DISEASEID AND SYMPTOMSID IN (SELECT  
SYMPTOMSID FROM SYMPTOMS WHERE SYMPTOMS WHERE  
SYMPTOM_NAME IN (SYM1,SYM2,SYM3))
```

```
GROUP BY S.DISEASEID ORDER BY RANK DESC
```

CHAPTER 6

CONCLUSION AND FUTURE WORK

THE BASIC DIAGNOSIS SYSTEM IS A COMPUTERIZED SYSTEM THAT DETERMINES WHICH DISEASE OR CONDITION EXPLAINING A PERSON'S SYMPTOMS AND SIGNS. THE PURPOSE OF THIS SYSTEM IS TO PROVIDE A BASIC RESULT OF WHICH DISEASE THE USER MIGHT HAVE.

6.1 Advantages

- 1-WILL PROVIDE THE DISEASE AN INDIVIDUAL MIGHT BE AFFECTED WITH.
- 2- IT CAN BE USED BY INDIVIDUALS FROM HOME WITHOUT VISITING ANY CLINIC FOR BASIC DISEASES WHICH AN INDIVIDUAL MIGHT BE AFFECTED WITH.
- 3- THE BASIC DIAGNOSIS CAN BE PROVIDED BY ANALYZING THE GIVEN SYMPTOMS.

6.2 Future Enhancements

THE BASIC DIAGNOSIS SYSTEM CAN FURTHER BE ENHANCED TO A BETTER USER-FRIENDLY SYSTEM BY PROVIDING A 100% TRUE RESULT. IT CAN ALSO BE USED TO PROVIDE THE NECESSARY PRECAUTIONS OR MEDICINES JUST LIKE A FIRST-AID TO THE USER BEFORE HE/SHE IS TAKEN TO THE HOSPITAL.

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HTML Learning:

Ø <https://www.codecademy.com/>

Ø <https://www.w3schools.com/>

PHP Learning:

Ø <http://www.tutorialspoint.com/php/>

Ø <https://killerphp.com>

Ø <https://www.w3schools.com/>

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