

Project Closure

CSE 6324: Agile SE – SP 2022

Project Title: Personal Health Monitoring System (PHMS)

Project Type: Web Application

Team 4

Team members

Suhas Holla Karkada Chandrashekar, Chetan Balaji, Sainath Indupuri, Sasi Kalyan

Vennamaneni, Tarun Sai Thota, Venkata Rami Naidu Malla, Nudrat Nawal Saber

Submitted to: Prof Dr. Bahram Khalili

Version: [1.0]

Date: [04/28/2022]

TABLE OF CONTENTS

1 User Manual.....	3
1.1 Landing Page.....	3
1.2 Registration Page.....	3
1.3 Validate Registration.....	4
1.4 Login Page.....	4
1.5 Home Page.....	5
1.6 Support/Contact Page	6
1.7 Medication Form.....	6
1.8 Medication Listing Page.....	7
1.9 Notification by Email to Take Medicine.....	7
1.10 Profile Page	8
1.11 Diet Information Form	9
1.12 Diet Listing Page (Date and Meal)	9
1.13 Diet Details Page.....	9
1.14 BMI Calculator.....	10
1.15 Vital signs history page	11
1.16 Register Vital Signs.....	12
1.17 Vital Sign Details page.....	13
1.18 Communication Form (Add/Edit).....	14
1.19 Communication Listing Page	14
1.20 Search Medication/Stored Data.....	15
1.21 Add/Delete Note List.....;	15
1.22 Note details page (View/Edit).....	16
1.23 Doctor Appointment Reminder.....	17
 2 Future Plan	 18
 3 Group Photo.....	 19

1. User Manual

1.1 Landing Page



1.2 Registration Page

The screenshot shows the registration form of the PHMS. The header is dark blue with the PHMS logo and links to Home and Login. The form is titled "Registration Form" and contains several input fields for user information. The fields are: Full Name, Email Address (pre-filled with nudratsaber@gmail.com), Password (pre-filled with ****), Address, Gender (radio buttons for Male and Female), Date of birth (YYYY-MM-DD), and Mobile Number. A blue Signup button is at the bottom of the form. Below the button, there is a link for users who already have an account.

PHMS Home Login

Registration Form

Full Name

Email Address

nudratsaber@gmail.com

Password

Address

Gender

☒ Male ☐ Female

Date of birth

YYYY-MM-DD

Mobile Number

Signup

Already have an account? [Login](#)

1.3. Validate Registration

PHMS Home Login

Registration Form

Full Name

Email Address

error: You did not enter a valid email.

Password

Address

Gender
☒ Male ☐ Female

Date of birth

Mobile Number

You did not enter a valid mobile number.

[Signup](#)

Already have an account? [Login](#)

1.4. Login Page

PHMS Home Register

LOGIN

[Login](#)

[Forgot Password?](#)


[Create an Account](#)

1.5 Home Page

PHMS




tarun (tarun1@gmail.com)

Welcome to PHMS tarun




Vital Signs

Current Vitals



- Blood Pressure 110/60 Normal BP 
- Body Temperature 98.6°F Normal Temp 
- Blood Sugar 90 mg/dl - Normal 

Click Here




Diet Details

Dieting Information

- Average Calories: 100 
- Keto Diet 


Click Here



Doctor Appointments

Upcoming Appointments


Click Here



Medication

Medication Tips

Add Medicine




Vital Signs History

Vital Signs List

Date	Pulse Rate	Respiration Rate	Blood Pressure	Oxygen Saturation (SpO2)	Body Temperature
2022-04-19	2	3	3	4	1
2022-04-05	75	3	3	99	99
2022-04-05	73	18	120	95	98.6
2022-04-04	75	19	120	99	99
2022-04-03	77	20	125	99	100





Click Here



Todo List

Medicine List


Medicine Name	Start Date	End Date	Daily Dose
Abatacept	2022-03-21	2022-03-31	noon
Tylenol (acetaminophen)	2022-03-24	2022-04-07	morning
salmeterol	2022-03-24	2022-04-06	morning
CHLORZOXAZONE	2022-03-24	2022-04-08	night
Advil	2022-03-23	2022-04-02	night
Azithromycin	2022-03-24	2022-04-07	noon
vm	2022-03-24	2022-03-31	night


Get connected with us on social networks:    


PERSONAL HEALTH MONITORING SYSTEM

We are based in Dallas Fort Worth.
Providing Health System at your finger tips.

CONTACT

 Arlington, 76013, US

 info@phms@example.com

 + 01 234 567 88

© 2022 Personal Health Monitoring System

1.6. Support/Contact Page

Personal Health Monitoring System [Home](#) [Login](#)[Register](#)

CONTACT US

If you are facing any issue, Please fill out this form. We'll get it in touch with you.

Your Name

Your Mail

Your Message

Submit

1.7. Medication Form

PHMS [My Dashboard](#)

Your medications Section, Nudrat Nawal Saber

Add Medication

Medicine Name:

Enter Drug Name (ex. Advil)

Doctor Name:

Prescribed Doctor Name

Start Date:

mm/dd/yyyy

End Date:

mm/dd/yyyy

Daily Dose:

☒ Morning ☐ Noon ☐ Night

Add Medicine

1.8. Medication Listing Page

MEDICATION HISTORY

Medicine List				
Medicine Name	Doctor Name	Start Date	End Date	Daily Dose
Abatacept	TT	2022-03-21	2022-03-31	noon
Tylenol (acetaminophen)	Tom	2022-03-24	2022-04-07	morning
salmeterol	pat	2022-03-24	2022-04-06	morning
CHLORZOXAZONE	VV	2022-03-24	2022-04-08	night
Advil	TT	2022-03-23	2022-04-02	night
Azithromycin	Nudrat	2022-03-24	2022-04-07	noon
vm	vm	2022-03-24	2022-03-31	night

Get connected with us on social networks.

PERSONAL HEALTH MONITORING SYSTEM

We are based in Dallas Fort Worth.
Providing Health System at your finger tips.

CONTACT

Arlington, 76013, US

infophms@example.com

+ 01 234 567 88

© 2022 Personal Health Monitoring System

1.9. Notification by Email to Take Medicine

PHMS

larun (larun@gmail.com)

Vital Signs History

Date	Pulse Rate	Respiration Rate	Blood Pressure	Oxygen Saturation (SpO2)	Body Temperature
2022-04-19	2	3	3	4	1
2022-04-05	75	3	3	99	99
2022-04-05	73	18	120	95	98.6
2022-04-04	75	19	120	99	99
2022-04-03	77	20	125	99	100

Click Here

Todo List

Medicine List			
Medicine Name	Start Date	End Date	Daily Dose
Abatacept	2022-03-21	2022-03-31	noon
Tylenol (acetaminophen)	2022-03-24	2022-04-07	morning
salmeterol	2022-03-24	2022-04-06	morning
CHLORZOXAZONE	2022-03-24	2022-04-08	night
Advil	2022-03-23	2022-04-02	night
Azithromycin	2022-03-24	2022-04-07	noon
vm	2022-03-24	2022-03-31	night

Get connected with us on social networks.

PERSONAL HEALTH MONITORING SYSTEM

We are based in Dallas Fort Worth.
Providing Health System at your finger tips.

CONTACT

Arlington, 76013, US

infophms@example.com

1-50 of 613

Primary	Social	Promotions
<div> <div></div> <div>☆</div> <div>tvus2022 6</div> <div>Reminder!! to take medicine - take daily dose of your night medicine vm</div> <div> <div></div> <div></div> </div> </div> <div> <div></div> <div>☆</div> <div>tvus2022 23</div> <div>Reminder!! to take medicine - take daily dose of your night medicine CHLORZOXAZONE</div> </div> <div> <div></div> <div>☆</div> <div>Google</div> <div>Security alert - A new sign-in on Windows mallavenkatrn@gmail.com We noticed a new sign-in to your Google Account on a Wi...</div> </div> <div> <div></div> <div>☆</div> <div>tvus2022 56</div> <div>It is time to take medicine - take mdicine</div> </div> <div> <div></div> <div>☆</div> <div>tvus2022</div> <div>It is time to take medicine g - take mdicine : g prescribed by dr k take at: morning</div> </div> <div> <div></div> <div>☆</div> <div>tvus2022</div> <div>It is time to take medicine r - take mdicine : r prescribed by dr r take at: noon</div> </div> <div> <div></div> <div>☆</div> <div>tvus2022 2</div> <div>It is time to take medicine frfr - take mdicine : frfr prescribed by dr frf take at: morning</div> </div> <div> <div></div> <div>☆</div> <div>tvus2022 2</div> <div>It is time to take medicine a - take mdicine : a prescribed by dr b take at: morning</div> </div> <div> <div></div> <div>☆</div> <div>tvus2022 2</div> <div>It is time to take medicine f - take mdicine : f prescribed by dr gh take at: morning</div> </div> <div> <div></div> <div>☆</div> <div>tvus2022 2</div> <div>It is time to take medicine vwf - take mdicine : vwf prescribed by dr fsdf take at: morning</div> </div> <div> <div></div> <div>☆</div> <div>tvus2022</div> <div>It is time to take medicine vwffef - take mdicine : vwffef prescribed by dr fsdf take at: morning</div> </div> <div> <div></div> <div>☆</div> <div>tvus2022</div> <div>It is time to take medicine venkat - take mdicine : venkat prescribed by dr check take at: noon</div> </div> <div> <div></div> <div>☆</div> <div>Google 2</div> <div>Critical security alert for testatus2022@gmail.com - This is a copy of a security alert sent to testatus2022@gmail.com. mallave...</div> </div>		

1.10.Profile Page

PHMS

Nudrat Nawal Saber (nudratsaber@gmail.com)

My Profile Dashboard

Welcome "Nudrat Nawal Saber"

Profile Information

Full Name

Nudrat Nawal Saber

Mobile Number

2148926389

Email Address

nudratsaber@gmail.com

Address

315 n greenville ave.allen.tx-75002

Gender

female

Date of Birth

1994-06-09

Submit

1.11. Diet Information Form

PHMS My Dashboard

Add Diet Details

Food:

Calories:

Current Weight:

Current Height:

Description:

Date: ☐

Time: ☒ ☐ ☐
Morning Noon Night

1.12. Diet Listing Page (Date and Meal)


DIET LISTING PAGE						
DIET List						
ID	FOOD NAME	CALORIES	DESCRIPTION	DATE	TIME	OPERATIONS
2	Pizza	800	Cheat Day	2022-04-27	morning	<input type="button" value="Delete"/>

1.13. Diet details page



PHMS


My Dashboard



Rice(1 Serving)

Calories : 200


Add To Diet



Chicken(1 Serving)

Calories : 250


Add To Diet



Dumplings (1 Serving)

Calories : 170


Add To Diet



Biryani (1 Serving)


Calories : 250

Add To Diet



Ice Cream(1 Serving)

Calories : 280



Caesars Salad(1 Serving)

Calories : 150

1.14.BMI Calculator

PHMS

My Dashboard

BMI of under 18.5

BMI of under 18.5 indicates that a person has insufficient weight, so they may need to put on some weight. They should ask a doctor or dietitian for advice.

BMI of 18.5–24.9

A BMI of 18.5–24.9 indicates that a person has a healthy weight for their height. By maintaining a healthy weight, they can lower their risk of developing serious health problems.

BMI of 25–29.9

A BMI of 25–29.9 indicates that a person is slightly overweight. A doctor may advise them to lose some weight for health reasons. They should talk with a doctor or dietitian for advice.

BMI of over 30

A BMI of over 30 indicates that a person has obesity. Their health may be at risk if they do not lose weight. They should talk with a doctor or dietitian for advice.

Easy BMI Calculator

21.7

Normal Weight 😊

85 kg

198 cm

1.15. Vital signs history page

The image shows two screenshots of a web application. The top screenshot is the 'Vital Signs History' page, and the bottom screenshot is the 'Vital Signs Details' page.

Top Screenshot: Vital Signs History

The page has a header with 'PHMS' and a user profile 'tarun (tarun1@gmail.com)'. It features a 'Vital Signs History' section with a table of vital signs and a 'Click Here' button. A red arrow points to the button with the text 'vital signs detail page button'.

Date	Pulse Rate	Respiration Rate	Blood Pressure	Oxygen Saturation (SpO2)	Body Temperature
2022-04-19	2	3	3	4	1
2022-04-05	75	3	3	99	99
2022-04-05	73	18	120	95	98.6
2022-04-04	75	19	120	99	99
2022-04-03	77	20	125	99	100

Bottom Screenshot: Vital Signs Details

The page has a header with 'PHMS' and a user profile 'tarun (tarun1@gmail.com)'. It features a 'Vital Sign' section with a table of oxygen saturation and a 'Measuring SpO2' section with text and a bullet point.

Date	Oxygen Saturation (SpO2)
2022-04-19	4
2022-04-05	99
2022-04-05	95
2022-04-04	99
2022-04-03	99

About Oxygen Saturation (SpO2)

SpO2, also known as oxygen saturation, is a measure of the amount of oxygen-carrying hemoglobin in the blood relative to the amount of hemoglobin not carrying oxygen. The body needs there to be a certain level of oxygen in the blood or it will not function as efficiently. In fact, very low levels of SpO2 can result in very serious symptoms. This condition is known as hypoxemia. There is a visible effect on the skin, known as cyanosis due to the blue (cyan) tint it takes on. Hypoxemia (low levels of oxygen in the blood) can turn into hypoxia (low levels of oxygen in the tissue). This progression and the difference between the two conditions is important to understand.

Measuring SpO2

There are many ways that the blood can be tested to ensure it contains normal oxygen levels. The most common way is to use a pulse oximeter to measure the SpO2 levels in the blood. Pulse oximeters are relatively easy to use, and are common in health care facilities and at home. They are very accurate despite their low price point.

- Normal arterial blood oxygen saturation levels in humans are 95-100 percent. ❤️

PHMS

tarun (tarun@gmail.com)

About Blood Pressure

Blood pressure is the force of the blood pushing against the artery walls during contraction and relaxation of the heart. Each time the heart beats, it pumps blood into the arteries, resulting in the highest blood pressure as the heart contracts. When the heart relaxes, the blood pressure falls. Two numbers are recorded when measuring blood pressure. The higher number, or systolic pressure, refers to the pressure inside the artery when the heart contracts and pumps blood through the body. The lower number, or diastolic pressure, refers to the pressure inside the artery when the heart is at rest and is filling with blood. Both the systolic and diastolic pressures are recorded as "mm Hg" (millimeters of mercury). This recording represents how high the mercury column in an old-fashioned manual blood pressure device (called a mercury manometer or sphygmomanometer) is raised by the pressure of the blood. Today, your doctor's office is more likely to use a simple dial for this measurement. High blood pressure, or hypertension, directly increases the risk of heart attack, heart failure, and stroke. With high blood pressure, the arteries may have an increased resistance against the flow of blood, causing the heart to pump harder to circulate the blood.

Blood pressure is categorized as normal, elevated, or stage 1 or stage 2 high blood pressure:

- **Normal** blood pressure is systolic of less than 120 and diastolic of less than 80 (120/80) 🟢
- **Elevated** blood pressure is systolic of 120 to 129 and diastolic less than 80
- **Stage 1** high blood pressure is systolic is 130 to 139 or diastolic between 80 to 89
- **Stage 2** high blood pressure is when systolic is 140 or higher or the diastolic is 90 or higher

Vital Sign

Blood Pressure Record	
Date	Blood Pressure
2022-04-19	3
2022-04-05	3
2022-04-05	120
2022-04-04	120
2022-04-03	125

Vital Sign

Body Temperature Record	
Date	Body Temperature (in Fahrenheit)
2022-04-19	1
2022-04-05	99
2022-04-05	98.6
2022-04-04	99

About Body Temperature

A fever is a rise in body temperature. It's usually a sign of infection. The fever itself is generally harmless and probably helpful. Fevers usually don't need treatment.

The average body temperature is 98.6 F (37 C). But normal body temperature can range between 97 F (36.1 C) and 99 F (37.2 C) or more. Your body temperature can vary depending on how active you are or the time of day. Generally, older people have lower body temperatures than younger people have. **Normal body temperature** is:

- Body Temperature 98.6°F Normal Temp 🟢

Following thermometer readings generally indicate a fever:

- Rectal, ear or temporal artery temperature of 100.4 (38 C) or higher
- Oral temperature of 100 F (37.8 C) or higher
- Armpit temperature of 99 F (37.2 C) or higher

1.16. Register Vital Signs

PHMS

tarun (tarun@gmail.com)

Welcome to PHMS tarun

Vital Signs

Current Vitals

- Blood Pressure 110/60 Normal BP 🟢
- Body Temperature 98.6°F Normal Temp 🟢
- Blood Sugar 90 mg/dl - Normal 🟢

[Click Here](#)


Diet Details

Dieting Information

- Average Calories: 100 🟢
- Keto Diet 🟡

[Click Here](#)

Hey "tarun", Enter your Vital Signs



Add Vital Signs


Body Temperature (in Fahrenheit):

Pulse Rate (in BPM):


Respiration Rate (in BPM):

Blood Pressure (in mmHg):

Oxygen Saturation (SpO2):


Date: 

1.17. Vital sign details page



Vital Signs history


Body Temperature	Pulse Rate	Respiration Rate	Blood Pressure	Oxygen Saturation (SpO2)	Date
1	2	3	3	4	2022-04-19
99	75	3	3	99	2022-04-05
98.6	73	18	120	95	2022-04-05


Get connected with us on social networks: 


PERSONAL HEALTH MONITORING SYSTEM

We are based in Dallas Fort Worth.
Providing Health System at your finger tips.

CONTACT

 Arlington, 76013, US

 infophms@example.com

 + 01 234 567 88

© 2022 Personal Health Monitoring System

1.18. Communication form (Add/Edit)

PHMS

Sainath indupuri (sainathindupuri@gmail.com)

Upcoming Appointments

- 03/01/2022 - Diabetician
- 03/18/2022 - Regular Heart Checkup

Click Here

Medication Tips

- One must take medicine on time
- Do not sleep after taking medicine

Add Medicine

Contacts

Add and Remove Important Contacts

Add Contacts

View Contacts

Notes

With supporting text below as a natural lead-in to additional content.

Click Here

Get connected with us on social networks:

PHMS

My Dashboard

Contact List

Name:

Add full name

Mobile No :

Phone No.

Email :

email address

Category:

Relationship with the user

Permanent Address :

permanent address

Physical Address :

Mailing address

Add Contact

Reset All

View Contacts

1.19. Communication Listing Page


PHMS My Dashboard Add Contacts							
Name	Mobile	Category	Email	Permanent Address	Temporary Address	Action	
Dr Phill	6894561233	Dietician	Phill@gmail.com	415 summit ave arlington	415 summit ave arlington	Delete	

1.20. Search Medication/Stored Data

PHMSMy Dashboard

Abatacept

Your medications Section, Nudrat Nawal Saber



Abatacept
Prescribed by: TT
daily dose: noon
start date: 2022-03-21
end date: 2022-03-31

1.21. Add/Delete Note list

PHMSMy Dashboard


+ Add note

take medicine take the appointment of the doctor

1.22. Note details page (View/Edit)





1.23. Doctor Appointment Reminder



Doctor Appointments

Upcoming Appointments

- 03/01/2022 - Diabetician 
- 03/18/2022 - Regular Heart Checkup 

[Click Here](#)

Your Appointments, tarun

Add Appointment

Date:

Doctor Name:

Category:

Time:

[Add Doctor Appointment](#)

Appointments HISTORY			
Appointments List			
Appointment Date	Doctor Name	Category	Time
2022-04-27	raj	hello	00:00:11.000000
2022-04-23	tarun	hello	12:13
2022-04-27	tarun	hello	17:10
2022-04-27	jhon	fracture	21:00

2. Future Plan

In this period of 5 sprints, we have tried to complete all of the required criteria as we had envisioned. Still, we considered a few points that can improve usability and the overall experience.

- We have considered Setting up virtual/online doctor visits through our system so that a user could select a date and look at the availability of their doctors on particular days.
- Also, setting up a portal for doctors to handle their patient's records and manage their appointments, chat online, Etc., would increase the doctor's experience using the application.
- We are planning to add family members' diet details also so that the user can follow up on his loving ones.
- We have planned to allow users to upload their prescriptions and reports in image/pdf format and use OCR to convert images/ pdf to texts and store required information in the database. In addition, developing IOT health products that can be programmed with the latest technologies to obtain ECG, Heart rate, and other vitals directly from the physical device to our system will make the application more dynamic and versatile.
- We will keep a premium option. We have a plan to integrate payment options so that a user can use all the premium options by purchasing them.
- Building cross-platform mobile applications, that is, both android and ios using Flutter framework by google. Also, by using the Flutter framework, we will be able to build a desktop application as well for users. This involves certain costs which will be evaluated before implementation
- Integrating our Personal Health Monitoring System(PHMS) application for the apple watch and other leading smartwatches to utilize the health functionalities available with the watch and update it to our system will add robustness to the experience.

3. Group Photo

It's been three months, and we all were together on this exciting journey. Cheers to the entire team!

TEAM 4

