

CPSC 471:Database Systems Final Report

Members:

Dave Sharma

Jaron Baldazo

Manjot Singh

Professor: Kashfia Sailunaz

Teaching Assistant: Moein Mirzaei

Abstract	3
Introduction	3
Solution	3
Project Design Section	4
System Users	4
Final Extended Entity Relation Diagram	5
Implementation Section	6
Relational Model	6
DBMS	7
API Endpoints	11
User Manual	11
Setting up environment	11
Functionalities	11
User Functionalities	11
Instructor Functionalities	20
Admin Functionalities	25
Account Login Information:	29
References	29

Abstract

In the current times of COVID-19, it is becoming increasingly difficult to maintain a balanced diet while exercising, and following a proper sleep schedule. As a result of the pandemic, many people have suffered from detriments to their physical and mental health, and with a health tracker app that measures your health holistically, people can feel much better about their life. Therefore, organizing your personal information that will track your diet based on caloric intake, workout routines and number of hours slept, can be used to guide one into a healthier lifestyle. Currently, there are many applications that provide individual functionality at a cost, which is not accessible for everyone to use. We have created an online web application that will allow users to track their personal information to identify incremental improvements in their lifestyle, without any cost.

Introduction

The problem of maintaining a healthy lifestyle has become increasingly difficult ever since the 1990s with chronic respiratory disease, obesity rates and diagnosed diabetes increasing rapidly according to [1]. Especially with the pandemic, younger people aged 18-24 years have been reported as having a greater difficulty with handling anxiety and depression during the pandemic [2].

Certain applications such as workout apps, or recipe apps have been conceived, however not many applications that combine these facets of people's lives have been created. Currently, applications such as MyFitnessPal or Sleep Cycle, allows users to track their fitness and sleep, however some of these applications are not free, and are not combined to create one central application to track your entire health. We have improved on the current applications by providing an application that will track your health holistically.

Our online web application will allow users to access their personal account to enter diet, exercise and sleep information to better gauge the overall health of the individual. In addition, instructors will be able to assist the users with their physical health along with capabilities to communicate via a chatting mechanism. Users can view their past diet information, overall nutrition facts, weekly sleep information, and overall exercise information gathered by the online fitness application.

Solution

This project achieves the goal of allowing users to more effectively track their physical health, such as workout routines, sleep cycles and even their caloric intake to help people to better understand their own physical and mental health.

We produced a web application that allows users to login, and enter their personal information in a way that will track their health over time. They can enter information affiliated to their workout routines, and enter related information for food intake to track their physical

health too. Plus they can enter information related to the number of hours of sleep to better their overall physical and mental health. Visual graphics will allow users to easily view their information in a systematic and clear way. The user will have access to instructors who will help lead them to a healthier lifestyle, and be able to communicate with them about their concerns.

Project Design Section

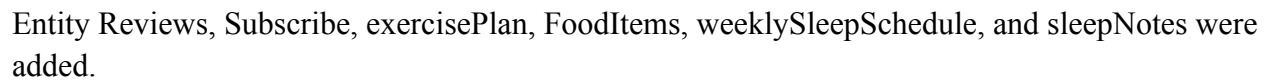
System Users

Our system includes three users, being a user, an instructor and an admin. The user must first begin by either logging in with a previously made account or sign up. Once this process is completed they are redirected to the main page of the system. On the main page the user is able to see many important facts that serve for motivation. From this page a user can go to their diet tracker, sleep tracker, or exercise tracker, as well as being able to subscribe to an instructor. The diet tracker allows users to input the food they have been eating, and consequently provide graphs and statistics regarding the macros of their food as well as tracking their daily caloric intake. The diet tracker also provides recipes from the instructor the user has subscribed for. The sleep tracker allows users to input the interval they slept in, as well as any notes on their quality of sleep. From this data a graph and chart is created to allow users to keep track of their sleep quality. Also the user's instructor will provide recommendations towards bettering the user's sleep. The exercise tracker allows users to input their medical stats, such as BMI, height, and weight. Users can also input exercises they have been doing. From this data we have graphs and charts to help users track their progress. Instructors also provide a weekly workout schedule to help users reach their goal. The user also has an instructor tab, where they are able to subscribe and review to different instructors. This tab also has a chat feature, where users will be able to communicate to their subscribed instructors. Users are also able to logout as well as update account information.

Instructors first begin by logging in to the website in the specific instructor login page. From here they are redirected to the main page where they are able to see reviews as well as the number of subscribers they currently have. From here they can click on the sidebar to choose whether to update the exercise tracker, diet tracker, and sleep tracker. There is also a tab for them to check and reply to their message from their subscribers. In the exercise tab, an instructor is able to choose one of their subscribers and provide them a personal workout plan for a week. In the sleep tab, an instructor is able to choose one of their subscribers and provide them personal sleep recommendations. In the diet tab, an instructor is able to choose one of their subscribers and provide them tailored recipes. Finally an instructor is able to update their own account information as well as logout from the site.

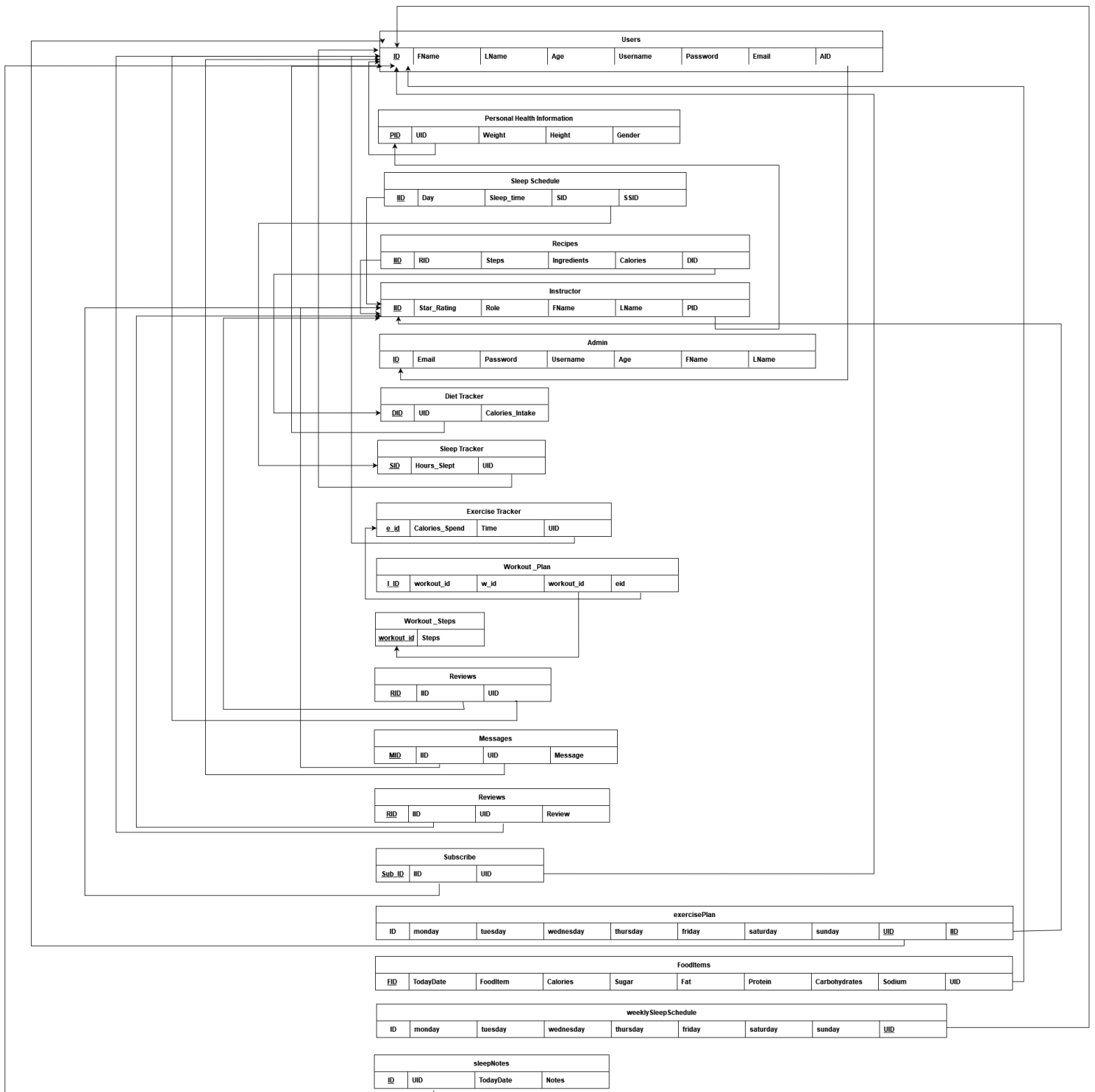
The Admin is our final user and begins by logging in to the website through the admin login page. From here they are redirected to the main page which reports the number of users and instructors. From this page they can redirect to either an instructor page, where they can edit

Final Extended Entity Relation Diagram



Implementation Section

Relational Model



Some entities were added and later converted to a table in the MySQL schema that would provide and store better information for the user, admin and instructor. The Entity Reviews, Subscribe, exercisePlan, FoodItems, weeklySleepSchedule, and sleepNotes were added to the relational model based on the changes in the EERD. No unusual changes occurred during the modification or the creation of the schema.

DBMS

The DBMS that we decided to utilize was the MySQL management system. It was hosted with Google Cloud. It was decided to utilize MySQL since it was one of the DBMS that all of the group members were familiar with. We were accustomed to using google cloud to do previous web app development projects in other classes. The following MySQL statements were utilized:

```
SELECT *  
FROM Users  
WHERE ID = 'uid'  
note: 'uid' is the id provided for the user.
```

```
SELECT *  
FROM Instructor  
WHERE IID = 'id'  
note: 'id' is the id provided for the instructor.
```

```
SELECT *  
FROM sleep_tracker  
WHERE UID = 'id'  
note: 'id' is the id provided for the user.
```

```
SELECT *  
FROM weekSleepSchedule  
WHERE UID = 'id'  
note: 'id' is the id provided for the user.
```

```
SELECT *  
FROM sleepPlan  
WHERE UID='id'  
note: 'id' is the id provided for the user.
```

```
SELECT calories_spent,timeSpent  
FROM exercise_tracker  
WHERE UID='id'  
note: 'id' is the id provided for the user.
```

```
SELECT *  
FROM Instructor
```

```
SELECT *  
FROM Users
```

```
SELECT *  
FROM Diet_tracker  
WHERE Diet_tracker.UID = 'id'  
note: 'id' is the id provided for the user.
```

```
SELECT *  
FROM Recipes  
WHERE Recipes.UID = 'id'  
note: 'id' is the id provided for the user.
```

```
INSERT INTO Users(Fname,Lname,Age,Username,pass,Email,AID)  
VALUES(?,?,?,?,?,?,?)  
note: where ? is the specific information to be inputted into the database.
```

```
SELECT *  
FROM subscribe,Instructor  
WHERE Instructor.IID = subscribe.IID AND UID = 'id'  
note: 'id' is the id provided for the user.
```

```
SELECT *  
FROM exercise_tracker  
WHERE UID='id'  
note: 'id' is the id provided for the user.
```

```
SELECT *  
FROM Messages  
WHERE IID= 'iid' AND UID= 'id'  
note: 'id' is the id provided for the user, and 'iid' is the id of the instructor user subscribed too.
```

```
SELECT *  
FROM personal_health_information  
WHERE UID='id'  
note: 'id' is the id provided for the user.
```

```
SELECT *  
FROM FoodItems  
WHERE UID=='id'  
note: 'id' is the id provided for the user.
```

```
SELECT Users.Fname,Users.Lname,subscribe.UID  
FROM subscribe,Users  
WHERE subscribe.IID= 'id' AND subscribe.UID=Users.ID  
note: 'id' is the id provided for the instructor.
```

```
SELECT *  
FROM sleepNotes  
WHERE UID='id'  
note: 'id' is the id provided for the user.
```

```
SELECT review  
FROM Reviews  
WHERE IID = 'id'  
note: 'id' is the id provided for the user.
```



```
SELECT *  
FROM Admin
```

```
SELECT *  
FROM Admin  
WHERE ID= 'id'  
note: 'id' is the id provided for the admin.
```

```
SELECT *  
FROM exercisePlan  
WHERE UID= 'id'  
note: 'id' is the id provided for the admin.
```

```
SELECT *  
FROM subscribe  
WHERE IID= 'id'  
note: 'id' is the id provided for the instructor.
```

```
SELECT *  
FROM sleepPlan  
WHERE UID='id'  
note: 'id' is the id provided for the user.
```

```
UPDATE Users  
SET Fname = ?,Lname=?,Age=?,Username=?,pass=?,Email=?,AID=?  
WHERE ID = 'id'  
note: 'id' is the id provided for the user and where ? is the specific information to be inputted into the database.
```

```
INSERT INTO FoodItems (UID,TodayDate,FoodItem,Calories,Sugar,Fat,Protein,Carbohydrates,Sodium)  
VALUES (?,?,,?,?,,?,?)  
note: where ? is the specific information to be inputted into the database.
```

```
INSERT INTO Diet_tracker (UID,calories_intake,dateDiet)  
VALUES (?,?,?)  
note: where ? is the specific information to be inputted into the database.
```

```
INSERT INTO sleep_tracker (hours_slept, UID, TodayDate)  
VALUES (?,?,?)  
ON DUPLICATE KEY UPDATE hours_slept = ?  
note: where ? is the specific information to be inputted into the database.
```

```
INSERT INTO weekSleepSchedule  
(monday, tuesday,wednesday,thursday,friday,saturday,sunday,UID)  
VALUES(?,?,?,?,?,?,?)  
note: where ? is the specific information to be inputted into the database.
```

```
INSERT INTO sleepNotes (UID, TodayDate, Notes)  
VALUES (?,?,?)  
note: where ? is the specific information to be inputted into the database.
```

```
INSERT INTO Messages (IID, UID, message,userSend)  
VALUES (?,?,?,?)
```

note: where ? is the specific information to be inputted into the database.

```
INSERT INTO Recipes (IID, UID, steps, ingredients, calories, name)
VALUES (?, ?, ?, ?, ?, ?)
```

note: where ? is the specific information to be inputted into the database.

```
INSERT INTO subscribe (IID, UID)
VALUES (?, ?)
ON DUPLICATE KEY UPDATE IID = ?
```

note: where ? is the specific information to be inputted into the database.

```
INSERT INTO Reviews (IID, UID, review)
VALUES (?, ?, ?)
```

note: where ? is the specific information to be inputted into the database.

```
UPDATE Instructor
SET Fname = ?, Lname = ?, PID = ?, username = ?, Email = ?, password = ?, role = ?
WHERE IID = ?
```

note: where ? is the specific information to be inputted into the database.

```
UPDATE Admin
SET Fname = ?, Lname = ?, Username = ?, Email = ?, pass = ?, Age = ?
WHERE ID = ?
```

note: where ? is the specific information to be inputted into the database.

```
INSERT INTO exercisePlan
(monday, tuesday, wednesday, thursday, friday, saturday, sunday, UID, IID)
VALUES (?, ?, ?, ?, ?, ?, ?, ?)
```

```
ON DUPLICATE KEY UPDATE monday = ?, tuesday = ?, wednesday = ?, thursday = ?, friday = ?, saturday = ?, sunday = ?
```

note: where ? is the specific information to be inputted into the database.

```
UPDATE Users
SET Username = ?, Fname = ?, Lname = ?, Age = ?, Email = ?
Where ID = ?
```

note: where ? is the specific information to be inputted into the database.

```
UPDATE Instructor
SET username = ?, FName = ?, LName = ?, role = ?, Email = ?
Where IID = ?
```

note: where ? is the specific information to be inputted into the database.

```
INSERT INTO sleepPlan (recSleepTime, recWakeupTime, recHours, UID, IID)
VALUES (?, ?, ?, ?, ?)
```

```
ON DUPLICATE KEY UPDATE recSleepTime = ?, recWakeupTime = ?, recHours = ?
```

note: where ? is the specific information to be inputted into the database.

API Endpoints

Documentation Link Created by Postman

(<https://documenter.getpostman.com/view/20194231/UVyxRtnf>)

CHANGE the language at the top to PHP-cURL

*Note the POST responses will be 1 indicating a successful post echoed by the API server

User Manual

Setting up environment

A proper user guide for people other than you and your TA to be able to smoothly use your project outcome, you must show all functionalities of your Web interface (i.e. with screenshots of every option of every page with descriptions).

Environment Setup:

- Download PHP on a windows device and add the file path to the environment variables
- In the PHP config.ini file uncomment curl and mysqli extensions to use the functionality

Running Application:


- Open 2 cmd lines to run locally
- Redirect to the correct directory of the PHP files
- Run 1 cmd line with php -S localhost:4000 and the other in the folder rest run php -S localhost:5000
- Open a browser and type localhost:4000/login.php to given menu options to login to user, admin, and instructor

Functionalities

User Functionalities

User Login

- User is prompted for a username and password
- After entering a valid username/password and clicking login, the user is redirected to the main page
- If username and password is invalid, the user is redirected back to the login page

SimpleHealth

User Login


Username

Password

☒ Remember me

User Signup

- After completing the form and clicking sign up, user is redirected to main page (logged in as a new user)

SimpleHealth

Email

Username

Age

First Name

Last Name

Password

Confirm Password

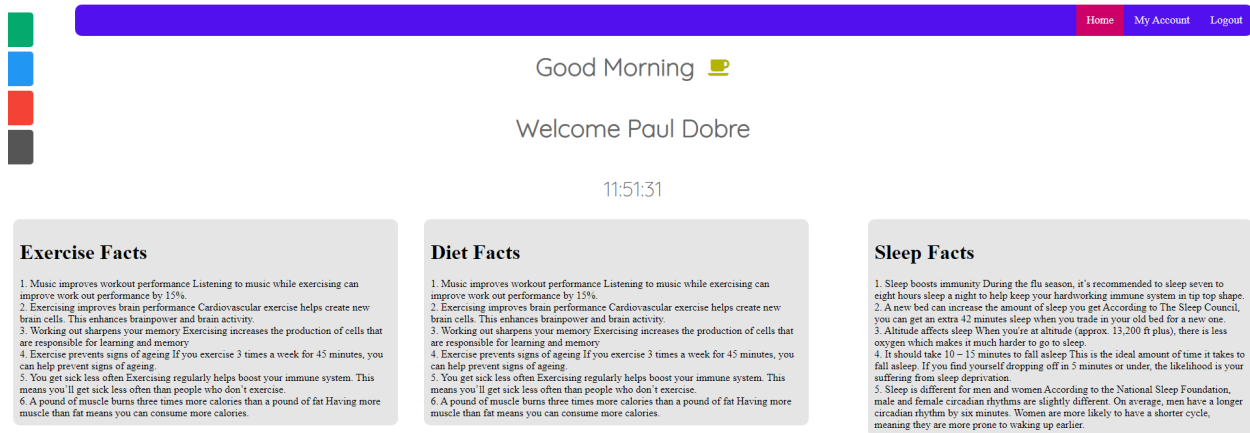
☒ Remember me

Got an account?

Forgot [password?](#)

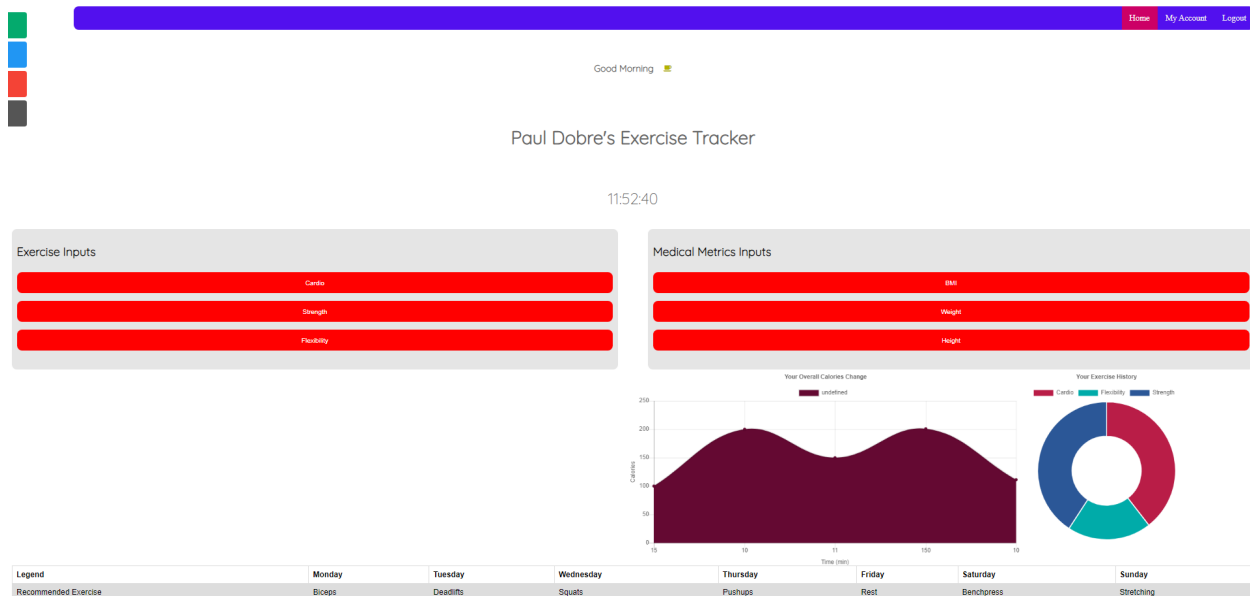
User Main Page

- Facts about exercise, diet, and sleep are shown
- Left navigation bar shows Exercise, Sleep, Diet, Instructor
- Top navigation bar shows Home, My Account, Logout



User Exercise Page (using navigation bar on left)

- User can input exercise and update bmi, weight, and height
- Various graphs shows calorie changes and exercise history
- Instructor weekly recommended exercise shown



Exercise Inputs for Cardio (similar pages for strength and flexibility tracker)

- After clicking cardio button in exercise input, user is prompted to enter calories burnt, exercise name, and exercise time

Calories Burnt

Enter Calories

Exercise Name

Enter Name

Exercise Time

Enter Time

Submit

Cancel

Medical Metric Inputs for BMI (similar pages for weight and height)

- After clicking BMI button in medical metric inputs, user is prompted to enter new BMI to be updated

BMI Tracker

×

New BMI

21

Submit

Cancel

User Sleep Page (using navigation bar on left)

- Users can enter sleep/wakeup time and sleep notes
- Various graphs are shown to show weekly sleep hours and percentage of hours slept in a day (based on hours slept and hours recommended by instructor)
- Tables are shown to show recommended hours, hours slept, and past sleep notes
- Instructor recommendation is shown at the bottom of the page



Sleep Tracker for Paul Dobre

12:04:53

Sleep Time

Wakeup Time

Submit

Notes

Enter Notes Here...

Save



My Notes

Date	Notes
2022-04-08	zzzz
2022-04-08	test

Legend	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Recommended Hours	11	11	11	11	11	11	11
Hours Slept	14	7	4	9	4	6	12

Instructor Recommendation: Try to sleep at 9:30pm and wake up at 8:30am. Aim for at least 11 hours of sleep.

Sleep/Wakeup Time and Sleep Notes

- User can enter the time they slept and the time they wake up
- User can enter sleep notes

Sleep Time

--:--

Wakeup Time

--:--

Submit

Notes

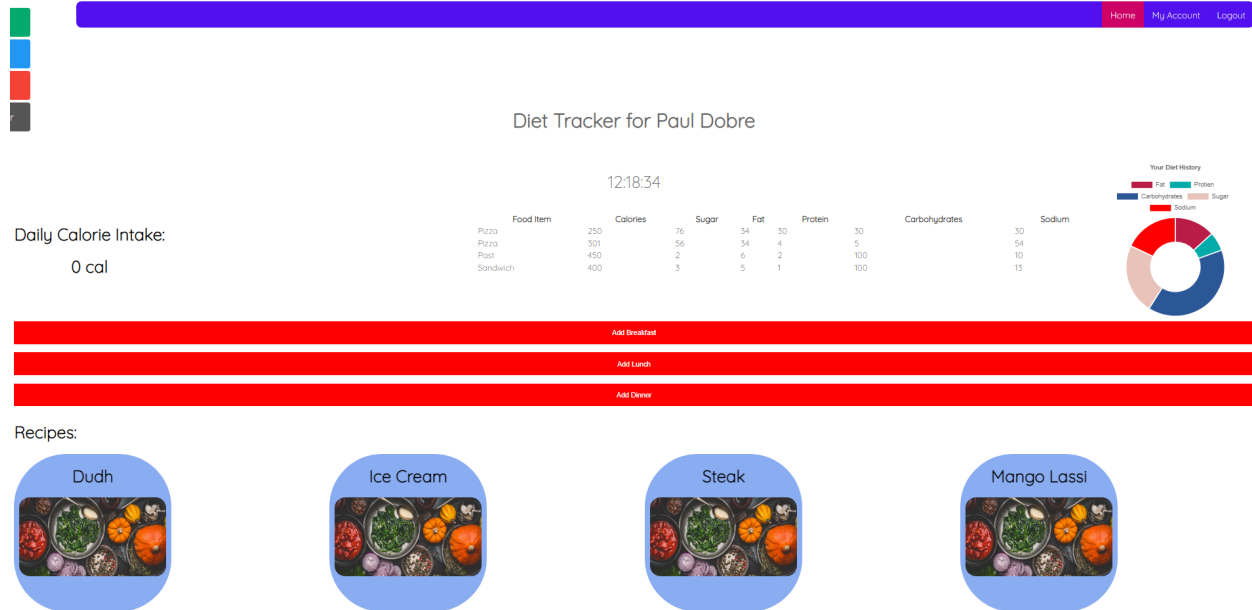
Enter Notes Here...

Save

User Diet Tracker Page (using navigation bar on left)

- Diet history, daily calorie intake, and nutritional values are shown as tables or graphs

- Buttons to add a new breakfast/lunch/dinner item are shown
- Recipes recommended by an instructor are shown



User Hovering over Recipe

- Hovering over a recipe shows the name, ingredients, and calorie count



Add Breakfast Item (similar pages for adding lunch and dinner)

- After clicking Add Breakfast button, user can input and submit food item and its corresponding calories, sugar, fat, protein, carbohydrates, and sodium

Food Item:

ex: Pizza

Calories(cal):

ex: 250

Sugar(g):

ex: 76

Fat(g):

ex: 34

Protein(g):

ex: 30

Carbohydrates(g):

ex: 30

Sodium(g):

ex: 30

Add Food Item

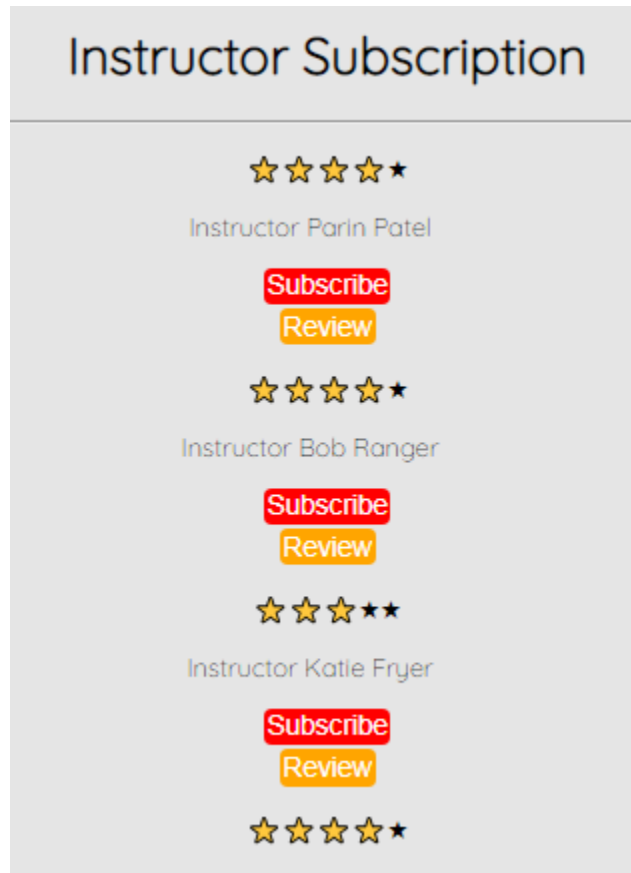
User Instructor Page (using navigation bar on left)

- List of available instructors to be subscribed to are shown on the left
- Users can also chat to instructor they are subscribed to shown on the right

The screenshot displays a web application interface for a user's instructor page. On the left, a vertical navigation bar contains four colored squares: green, blue, red, and black. The main content area has a purple header bar with links for 'Home', 'My Account', and 'Logout'. Below the header, a greeting 'Good afternoon!' with a sun icon and a welcome message 'Welcome Paul Dobre' are shown. A timestamp '12:14:42' is displayed. The interface is divided into two panels. The left panel, titled 'Instructor Subscription', lists four instructors: 'Instructor Parin Patel' (5 stars), 'Instructor Bob Ranger' (5 stars), 'Instructor Kalle Fager' (5 stars), and 'Instructor asd dd' (5 stars). Each instructor entry includes a 'Subscribe' button and a 'Review' button. The right panel, titled 'Instructor Chat', shows a message '(Instructors you have subscribed too)' and a 'Chat' button next to 'Instructor Parin Patel'.

User Options to Subscribe or View Reviews

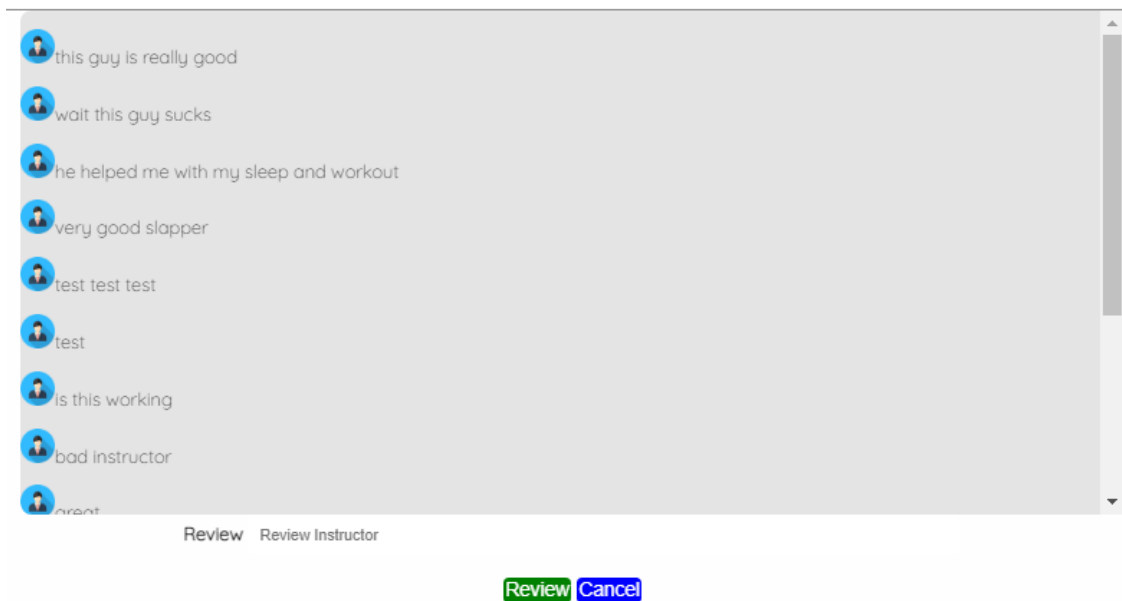
- Users can only subscribe to one instructor at a time
- Users can view reviews of all instructors



User Viewing Reviews for Instructor

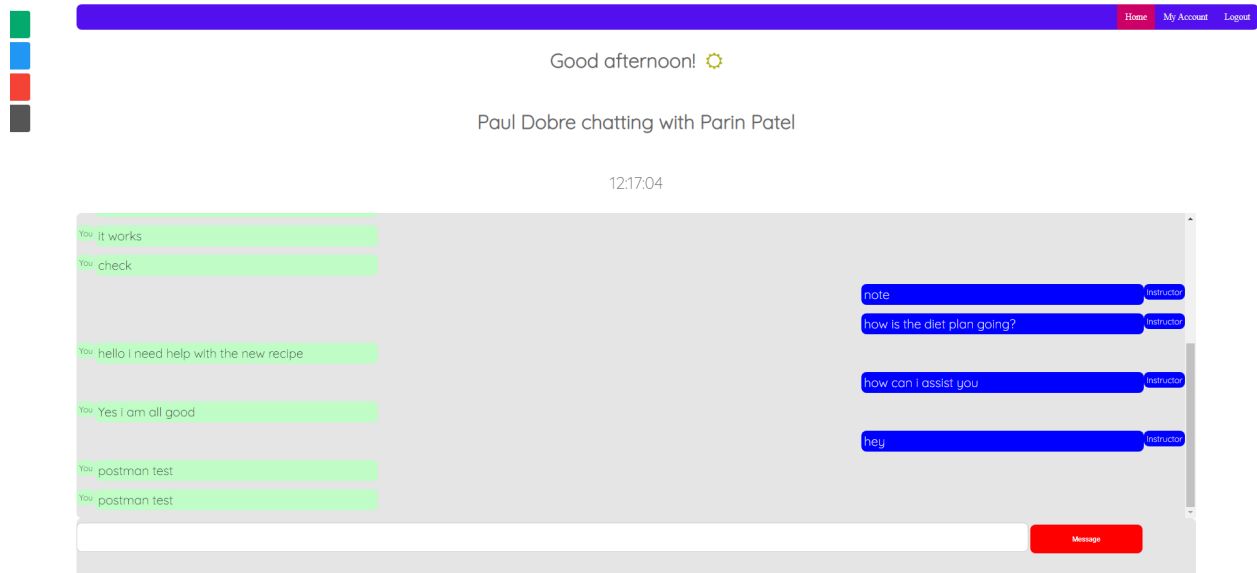
- Review page when user click Review for an instructor
- Users can also add a review

Reviews for Instructor Parin Patel



User Chatting with Subscribed Instructor

- Users can chat with the instructors they are subscribed to
- User messages are shown on the left
- Instructor messages are shown on the right



User My Account Page (using top right navigation bar)

- User information is shown
- A button to edit info can be clicked



Good afternoon! ☀

Welcome Paul Dobre

12:12:54

About Me

Edit Info	
Full Name	Paul Dobre
Username	paul
Email	pdar@outlook.com
Password	*****
Age	21

Edit User Info

- User is prompted to update information (first/last name, username, email, password, and age)

First Name

Last Name

Username

Email

Password

Age

Save

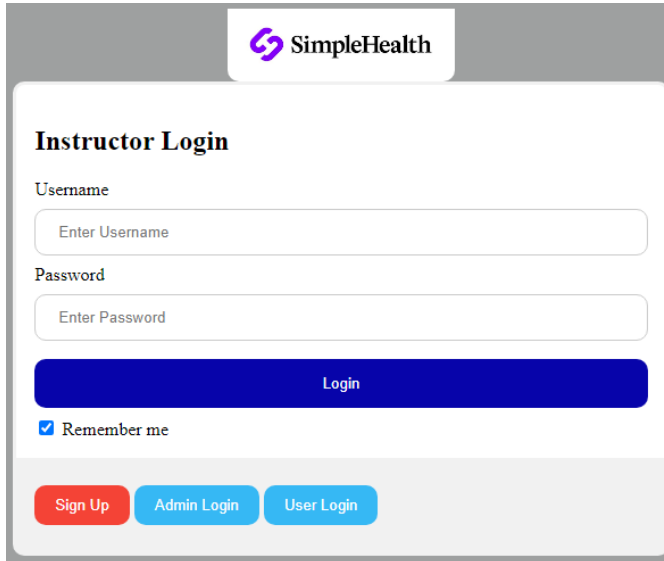
Cancel

Instructor Functionalities

Instructor Login

- Instructor is prompted for a username and password

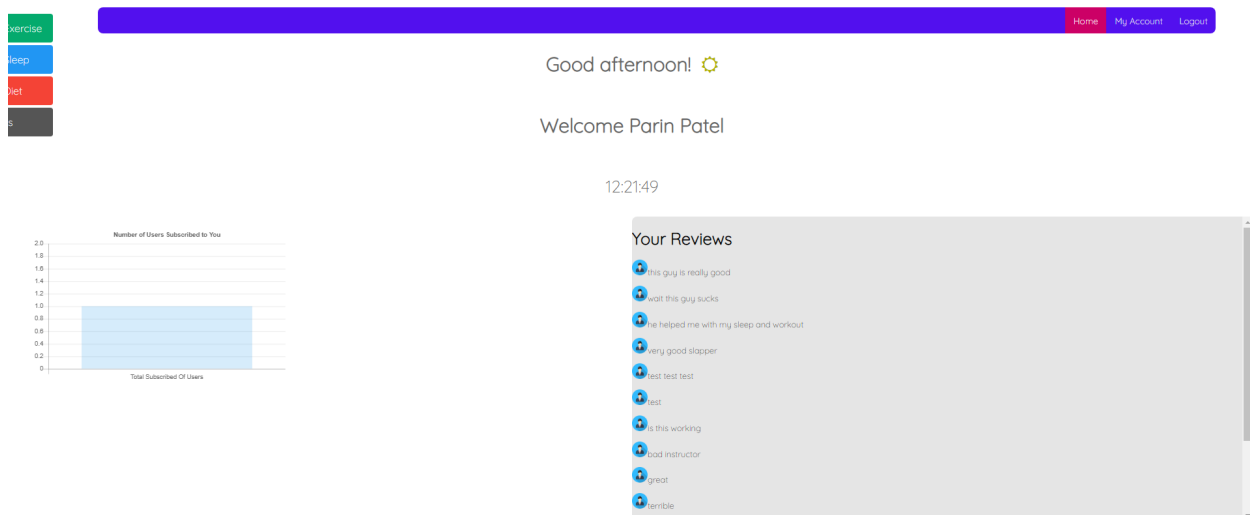
- After entering a valid username/password and clicking login, the instructor is redirected to the main page
- If username and password is invalid, the instructor is redirected back to the login page



The image shows the 'Instructor Login' form for SimpleHealth. It features a header with the SimpleHealth logo. The form includes fields for 'Username' and 'Password', each with a placeholder 'Enter Username' and 'Enter Password' respectively. Below these fields is a blue 'Login' button. A checkbox labeled 'Remember me' is checked. At the bottom, there are three buttons: 'Sign Up' (red), 'Admin Login' (blue), and 'User Login' (blue).

Instructor Main Page

- Number of users subscribed to instructor and reviews are shown
- Left navigation bar shows Update Exercise, Update Sleep, Update Diet, Messages
- Top navigation bar shows Home, My Account, Logout



Instructor Update Exercise Plan for Subscribers (using left navigation bar)

- Instructors can update an exercise plan for users they are subscribed to
- Instructors are prompted for a muscle group to be worked on daily

This screenshot shows a modal form titled 'Add Exercise Plan' with a 'Cancel' button. The form contains a list of days from Monday to Sunday. Each day has a 'Muscle Group' label followed by a text input field with an example value in parentheses: Monday (ex: Triceps), Tuesday (ex: Back), Wednesday (ex: Shoulders), Thursday (ex: Chest), Friday (ex: Biceps), Saturday (ex: Rest), and Sunday (ex: Legs). At the bottom left of the modal, there is a red button labeled 'Add Exercise Plan'.

Available Users
(Users that have subscribed to you)

Paul Dabre

Monday
Muscle Group: ex: Triceps

Tuesday
Muscle Group: ex: Back

Wednesday
Muscle Group: ex: Shoulders

Thursday
Muscle Group: ex: Chest

Friday
Muscle Group: ex: Biceps

Saturday
Muscle Group: ex: Rest

Sunday
Muscle Group: ex: Legs

Add Exercise Plan Cancel

Instructor Update Sleep Plan for Subscribers (using left navigation bar)

- Instructors can update a sleep plan for users they are subscribed to
- Instructors are prompted for recommended sleep/wakeup time and sleep hours

This screenshot shows a modal form titled 'Add Sleep Plan' with 'Add Sleep Plan' and 'Cancel' buttons. The form contains three sections: 'Recommended Sleep Start Time' with a 'Sleep Time' input (ex: 7:00pm), 'Recommended Sleep End Time' with a 'Wake up Time' input (ex: 5:00am), and 'Recommended Sleep Hours' with a 'Sleep Hours' input (ex: 8). The background shows the 'Available Users' section with a 'Paul Dabre' button.

Recommended Sleep Start Time
Sleep Time: ex: 7:00pm

Recommended Sleep End Time
Wake up Time: ex: 5:00am

Recommended Sleep Hours
Sleep Hours: ex: 8

Add Sleep Plan Cancel

Available Users
(Users that have subscribed to you)

Paul Dabre

Instructor Update Diet Plan for Subscribers (using left navigation bar)

- Instructors can update a diet plan for users they are subscribed to

- Instructors are prompted for name of recipe and its corresponding ingredients, steps, and calorie count

Recipe:

Name[ex: Steak]
Ingredients[ex: Raw Beef]
Steps[ex: Grill for 5 minutes]
Calories[ex: 500]

Add Recipe
Cancel

Available Users

(Users that have subscribed to you)

Paul Dobre

Instructor Messages with Subscribers (using left navigation bar)

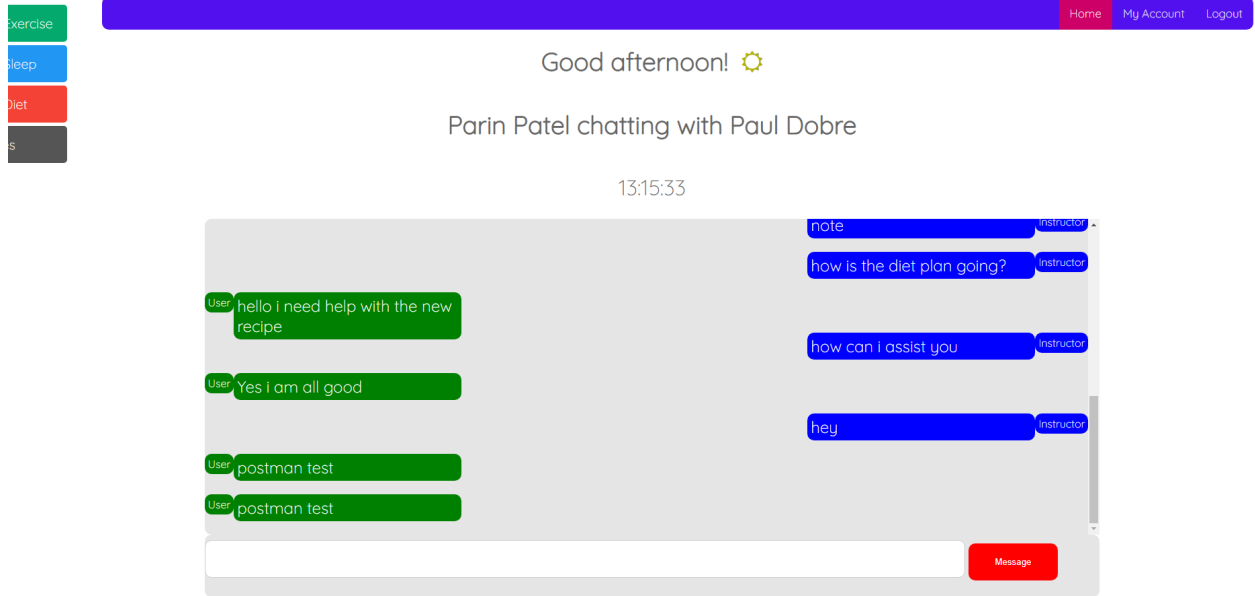
- Instructors can chat with the subscribed users
- User messages are shown on the left
- Instructor messages are shown on the right

Welcome Parin Patel

User Chat

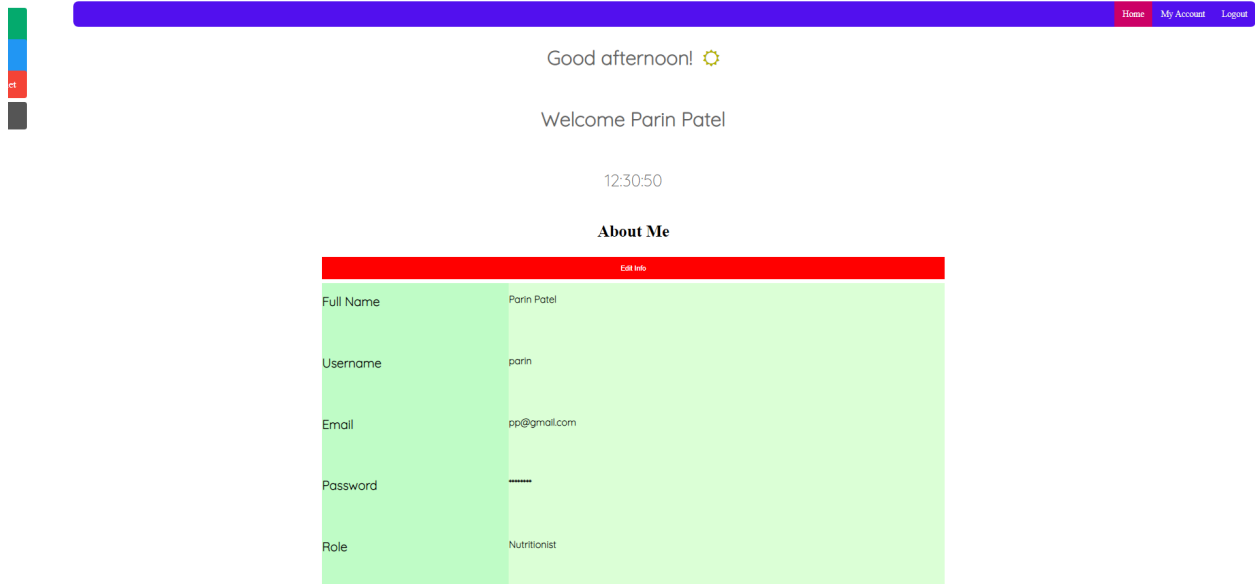
(Users that have subscribed to you)

User Paul Dobre
Chat



Instructor My Account Page

- Instructor information is shown
- A button to edit info can be clicked



Instructor Edit Info

- Instructor is prompted to update information (first/last name, username, email, password, and role)

First Name

Parin

Last Name

Patel

Username

parin

Email

pp@gmail.com

Password

Role

Nutritionist

Save

Cancel

Admin Functionalities

Admin Login

- Admin is prompted for a username and password
- After entering a valid username/password and clicking login, the admin is redirected to the main page
- If username and password is invalid, the admin is redirected back to the login page

SimpleHealth

Admin Login

Admin Username

Enter Username

Password

Enter Password

Login

☒ Remember me

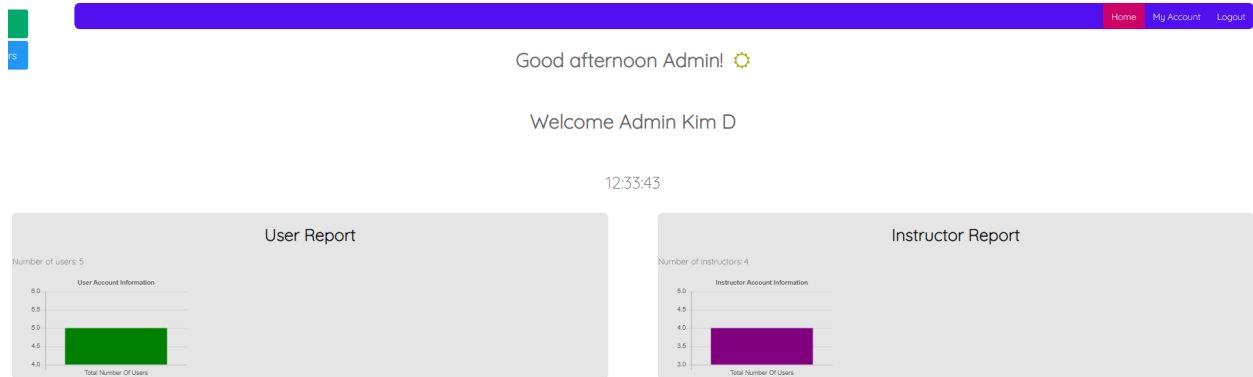
Sign Up

User Login

Instructor Login

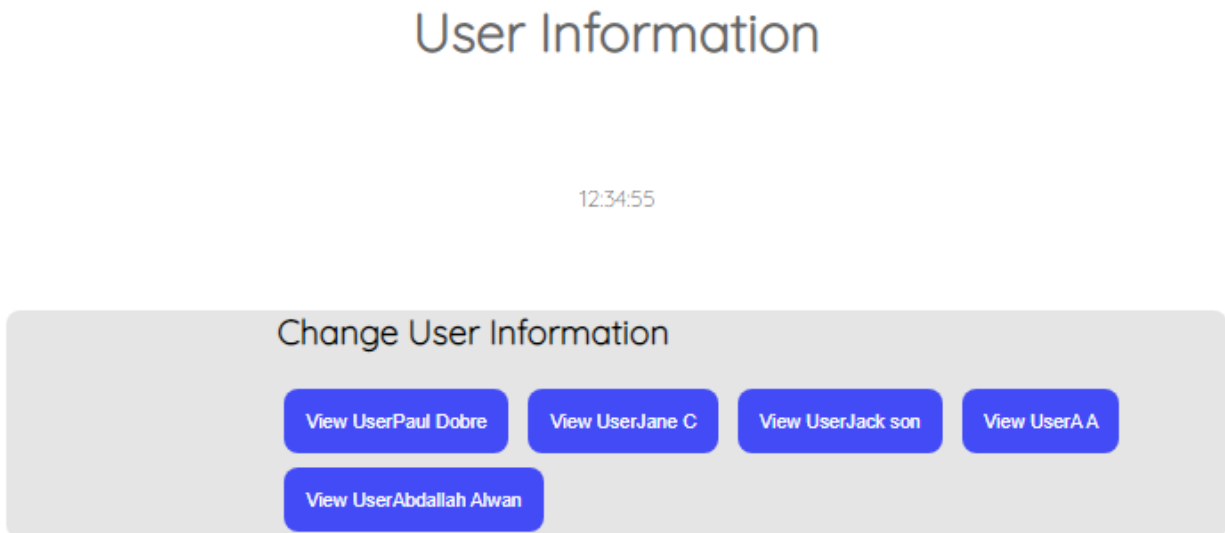
Admin Main Page

- Number of users and instructors in the database are shown
- Left navigation bar shows Users and Instructors
- Top navigation bar shows Home, My Account, Logout



Admin View Users (using left navigation bar)

- List of all users are shown



Admin Update User Information

- After viewing a user, admin can change username, first/last name, age, and email

User Paul Dobre

Username	<input type="text" value="paul"/>
First Name	<input type="text" value="Paul"/>
Last Name	<input type="text" value="Dobre"/>
Age	<input type="text" value="21"/>
Email	<input type="text" value="pdar@outlook.com"/>
<div><input type="button" value="Update"/> <input type="button" value="Cancel"/></div>	

Admin View Instructors (using left navigation bar)

- List of all instructors are shown

Instructor Information

12:35:38

Change Instructor Information

Admin Update Instructor Information

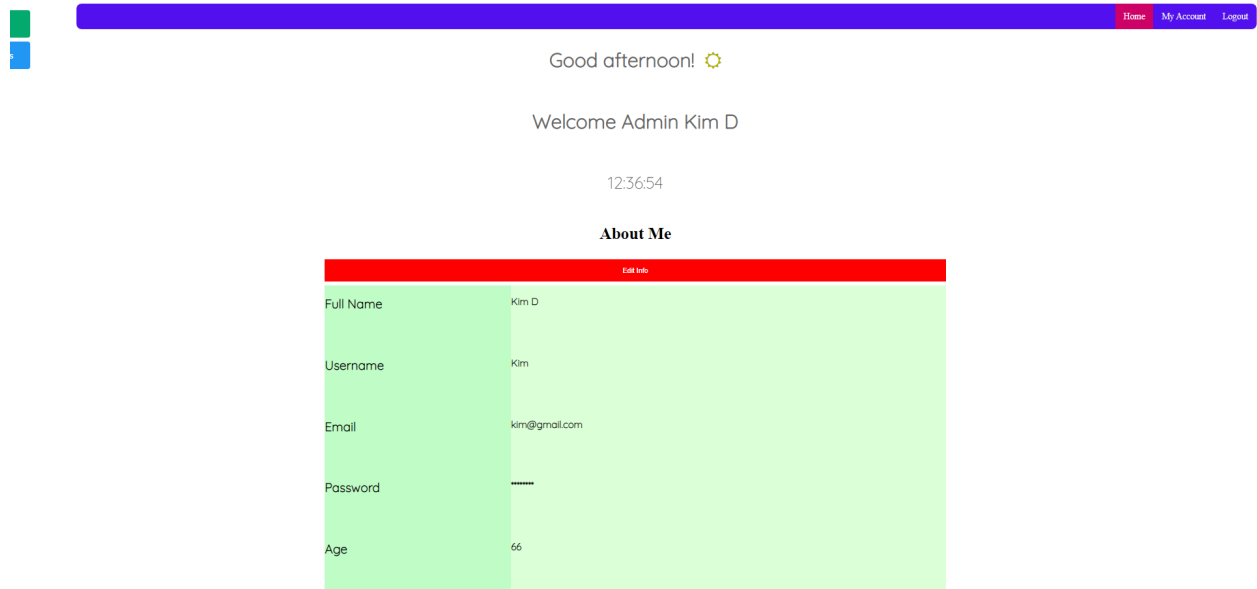
- After viewing an instructor, admin can change username, first/last name, role, and email

Instructor Parin Patel

Username	<input type="text" value="parin"/>
First Name	<input type="text" value="Parin"/>
Last Name	<input type="text" value="Patel"/>
Role	<input type="text" value="Nutritionist"/>
Email	<input type="text" value="pp@gmail.com"/>
<div><input type="button" value="Update"/> <input type="button" value="Cancel"/></div>	

Admin My Account Page (using top right navigation bar)

- Admin information is shown
- A button to edit info can be clicked



The screenshot shows the 'Admin My Account Page'. At the top, there is a purple navigation bar with links for 'Home', 'My Account', and 'Logout'. Below the navigation bar, the user is greeted with 'Good afternoon!' and a sun icon. The user's name 'Welcome Admin Kim D' is displayed, along with the time '12:36:54'. The main section is titled 'About Me' and contains a table with the following information:

Edit Info	
Full Name	Kim D
Username	Kim
Email	kim@gmail.com
Password	*****
Age	66

Admin Edit Info

- Admin is prompted to update information (first/last name, username, email, password, and age)

First Name

Kim

Last Name

D

Username

Kim

Email

kim@gmail.com

Password

Age

66

Save

Cancel

Account Login Information:

- Admin

	ID	Email	pass	Username	Age	Fname	Lname
▶	1	kim@outlook.com	12345	kim	55	Kim	D
*	NULL	NULL	NULL	NULL	NULL	NULL	NULL

- Instructors

	IID	star_rating	role	FName	LName	PID	password	username	Email
▶	1	5	Nutritionist	Parin	Patel	1	12345	parin	pp@gmail.com
	2	4	Holistic	Bob	Ranger	1	54321	bob	bobranger@gmail.com
	3	3	Holistic	Katie	Fryer	1	12345	katie	k@gmail.com
	4	4	asd	asd	dd	1	12345	asd	asd@gmail.com
*	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

- Users

	ID	Fname	Lname	Age	Username	pass	Email	AID
▶	1	Paul	Dobre	21	paul	12345	pdar@outlook.com	1
	2	Jane	C	46	janec	54321	jane@gmail.com	1
	4	Jack	son	19	jack	12345	jack@gmail.com	1
	5	A	A	20	abdallah	12345	a@gmail.com	1
	6	Abdallah	Alwan	20	abdallah	alwan	aa@gmail.com	1
	7	Eric	Lang	25	eric	12345	EC@outlook.com	1
*	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

References

[1] Luber, C. L. A. G. (n.d.). *Menu*. National Climate Assessment. Retrieved January 23, 2022, from <https://nca2014.globalchange.gov/report/sectors/human-health>

[2] Nirmita Panchal, R. K., & 2021, F. (2021, July 20). *The implications of COVID-19 for mental health and substance use*. KFF. Retrieved January 23, 2022, from

<https://www.kff.org/coronavirus-covid-19/issue-brief/the-implications-of-covid-19-for-mental-health-and-substance-use/>