F.I.T. Buddy

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Vision Statement

F.I.T. Buddy is a fitness app which is designed to generate workouts catered to your goals and availability / preferences. On sign up/account creation you will answer certain questions to build your profile and fitness plan. F.I.T. Buddy will create custom workouts for each week based on these questions and plan around you and your body type to help get you into shape. On top of this F.I.T. Buddy will have a portion for your diet as well as that is more important to your fitness journey than even the working out part. F.I.T. buddy however will NOT create full length diets for the user just give a general idea of calories that need to be eaten in a day, with consideration of their workout and physical information, as well as give ideas of different foods the user should be eating to fulfill their macronutrients and caloric requirements. F.I.T. Buddy will also have a BMI calculator, max lift estimator, and workout options for those who don't have a gym membership or the ability to go to one. Along with the workouts there will be pictures to help describe the motions which one needs to do to properly do the workout and there will be pictures of the food examples as previously stated. The main screen will display nutritional information(macronutrients you should eat and total calories you should eat with a drop down menu under each macronutrient for good examples of foods to fulfill those) and calories burned based on your stylized workout. The next "tab" is the workout tab which displays your daily workout and the ability to generate another one if you don't like that one/want to hit a different muscle group as well as drop downs for each exercise which displays the proper way to do the workout. Types of questions for profile building: weight, height, amount of time per day to workout, amount of times per week you can workout, goal weight, history of lifting, and maxes(if history of lifting is high enough).

Requirements

A discussion of what your application is required to have in functionality. It should identify user roles and goals/actions, and what the key features of the app should be.

Actor	Goal
User	Create an account
User	View fitness page(generate workouts)
User	View main page(see macronutrient info, calorie count, calories burned, and BMI)
User	Edit details of account
User	Reset information
Me	Edit accounts(remove, reset, add)
Me	Create main page
Me	Create login page
Me	Create signup page
Me	Create fitness page
Me	Create extra info page

Product Backlog

This will be updated throughout the semester as new PBIs are added, larger items are broken into smaller ones, and completed items removed.

| Story ID	Story	Story Points (in est. hours)	Priority	Status
1.1	Be able to login with correct credentials, warn user on bad input, reset password button	3	1	scrapped
1.2	Reset password button and Popup on bad user info input	2	1.5	scrapped
2.1	Create an account and establish the email/username & password into DB	3	2	scrapped
2.2	Input user info (height, weight, goals, access to gym, amount of time to go to gym, etc)	4	2.5	done
3.1	Be able to edit your user info (change pass, change physical info / goals)	4	3	todo
4.1	Displays the macronutrients information as well as calories burned from your workout and calories you should eat and BMI	10	4	todo
5.1	Displays your workout for the day with the option to cycle through to a different style of workout as well as show max lift info and ideal weights for specific lifts	10	5	todo
6.1	Bug report, email contact for more info, and version details	3	6	todo

Sprint #1

Sprint Backlog

Story ID	Story / Task	Estimated Hours	Actual Hours
1.1	Log on screen	2	2
2.1	Input user info (height, weight, goals, access to gym, amount of time to go to gym, etc)	4	6
3.1	Edit button on main page to lead to user info page	1	2
2.2	Different info page based on login selection choice	2	3

Review

[Screenshots, etc go here. This is where you discuss the product, describing what was done this sprint (potentially shippable product increment) and what was planned for the sprint but was not done.]
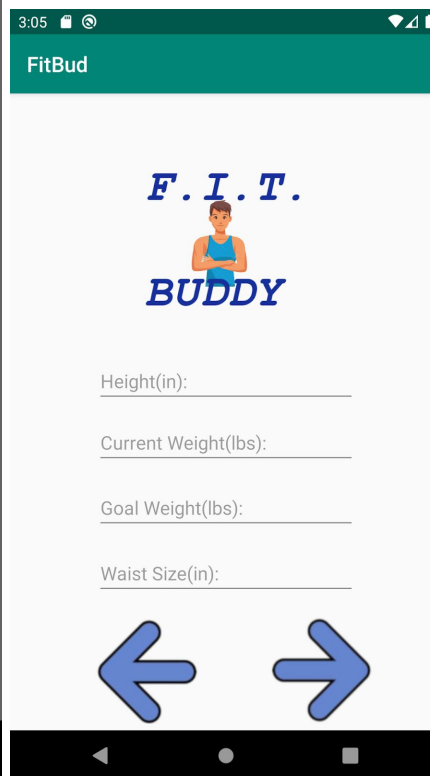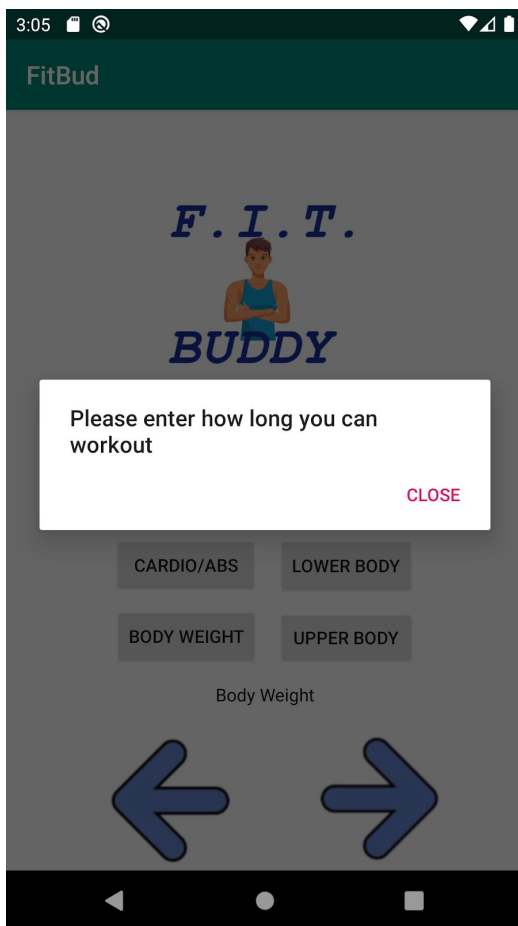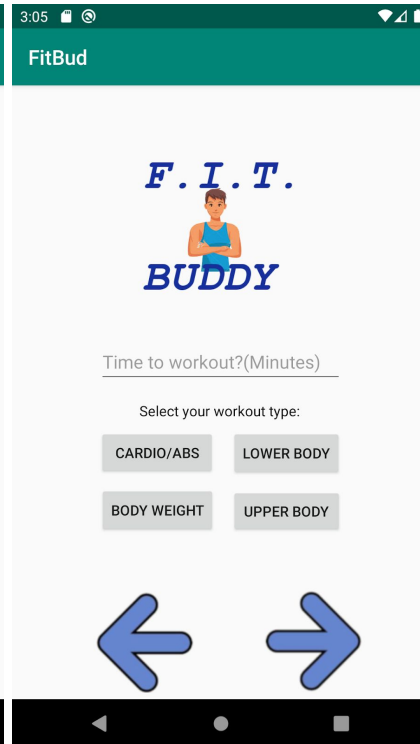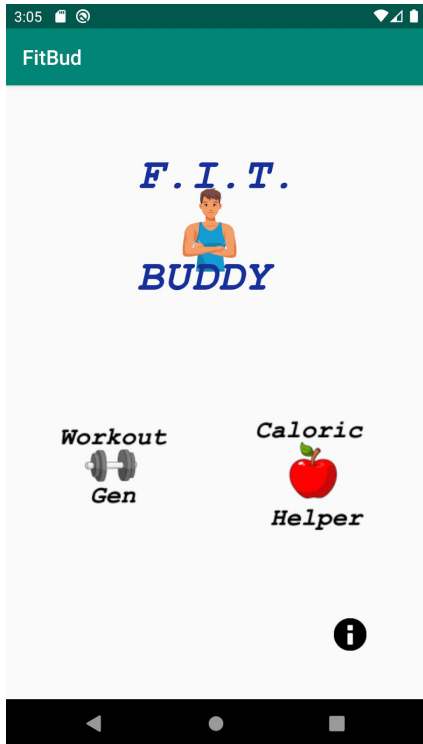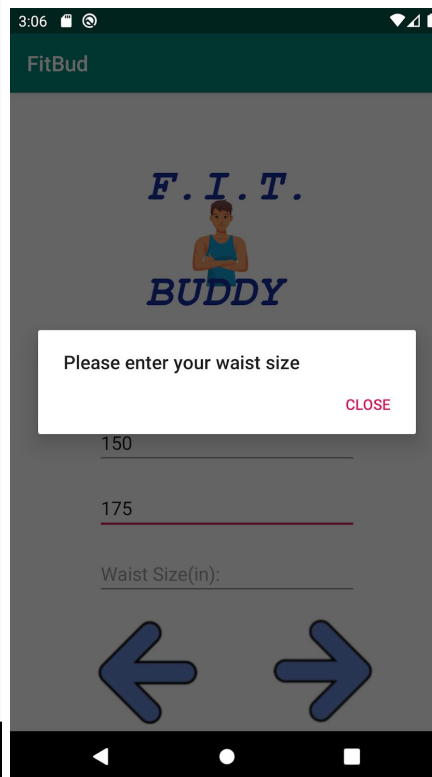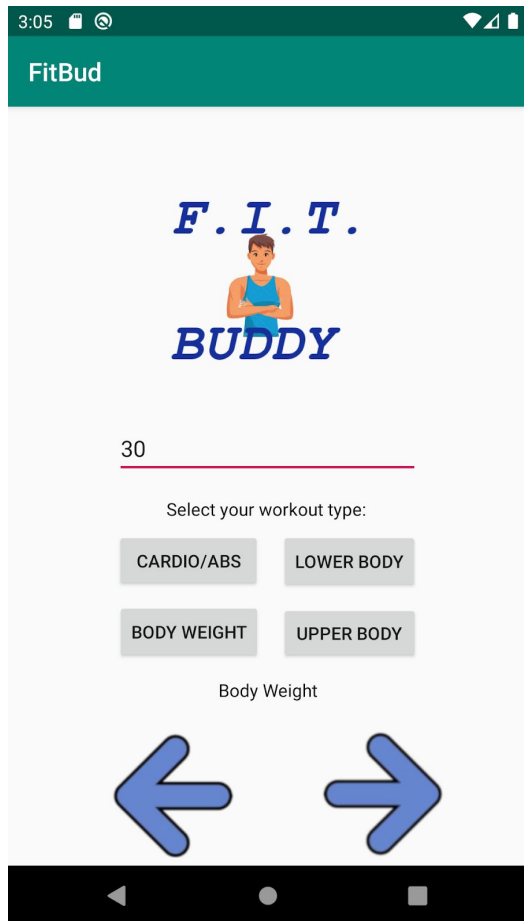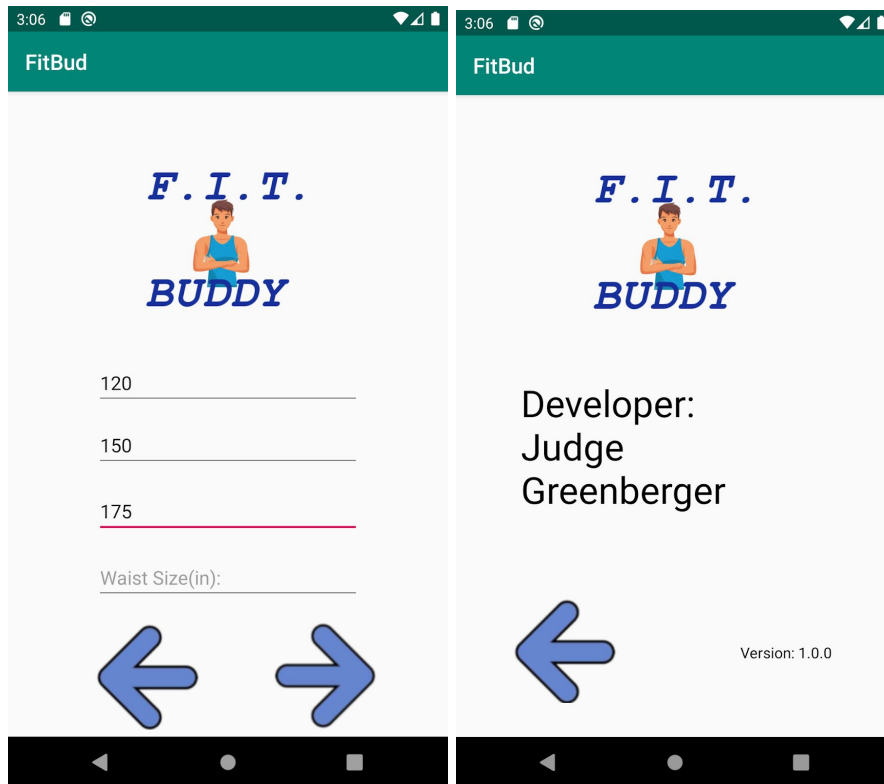
Retrospective

[This is where you discuss the process. What went well (and are you planning to do more of that?) What didn't go so well (and do you have a way to do less of that)? What changes are you planning to make in how you plan & carry out the next sprint?]

I decided to scrap the idea of having a login page and user account creation as for the scope of the project it really wasn't needed and turned out to be more of a hassle than what it was worth. With that said I made a user decision homepage with the info button, caloric helper button, and a fitness helper button. Each one leads to its specific function in which the user inputs his/her information that I need to be able to generate a calorie goal for the day as well as macros and generate a specific workout for the user. I plan on continuing down this path and making the calorie display page first as I think that will be the harder of the two so it will be good getting it out of the way.

Sprint #2

Sprint Backlog

| Story ID	Story / Task	Estimated Hours	Actual Hours
3.1	Edit personal info	3	3
4.1	Macronutrient display	6	5
4.2	Display food types for goal	4	pushed back
4.3	Display calorie totals on day	5	8

Review

[Screenshots, etc go here. This is where you discuss the product, describing what was done this sprint (potentially shippable product increment) and what was planned for the sprint but was not done.]

Retrospective

[This is where you discuss the process. What went well (and are you planning to do more of that?) What didn't go so well (and do you have a way to do less of that)? What changes are you planning to make in how you plan & carry out the next sprint?]

One problem faced while developing my app was the problem of trying to pass user data to different activities, I solved this using the parcelable option that android studio offers to pass my userData class to whatever activity I launched whenever I launched it. Another thing I didn't take into account was the sheer amount of time it would take me to create the pictures/logos for my application. This took a lot more of my time than I had originally thought causing me to have to push back the display of food types for each macronutrient label. I had to do this because that part will require the most amount of photoshop to create the images of the foods like I want to do. For the next iteration I plan on finishing out the calorie helper section by showcasing the foods and potentially having a "user info" page to display all the info on the current user. One other change I want to implement is being able to save the state of the

current calories ate page.

F.I.T Bud

F.I.T.
BUDDY

Please enter your current weight

CLOSE

190

32

male

F.I.T Bud

F.I.T.
BUDDY

Please enter your height

CLOSE

190

32

male

F.I.T Bud

F.I.T.
BUDDY

Please enter your goal weight

CLOSE

Goal Weight(lbs):

32

male

F.I.T Bud

F.I.T.
BUDDY

Please enter your waist size

CLOSE

190

Waist Size(in):

male
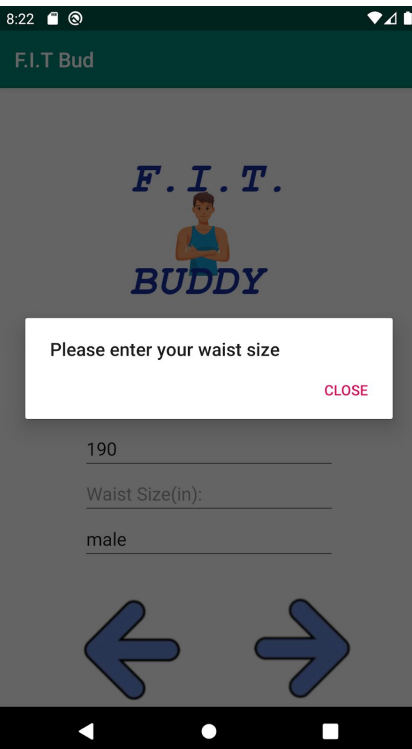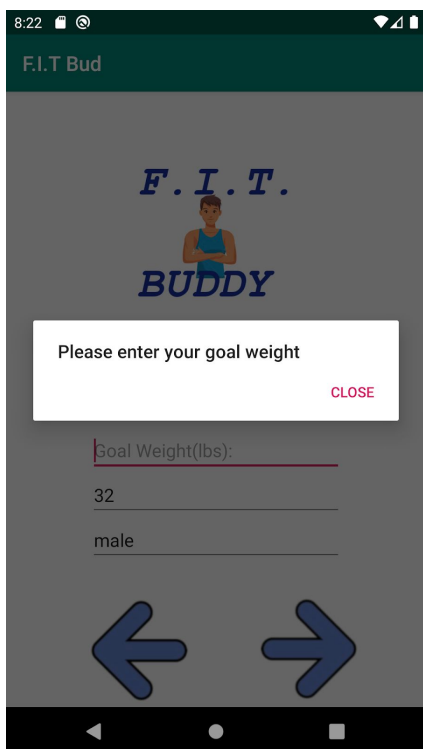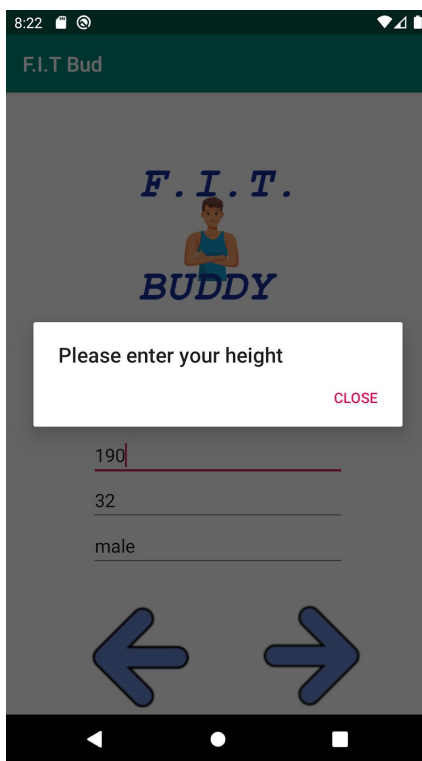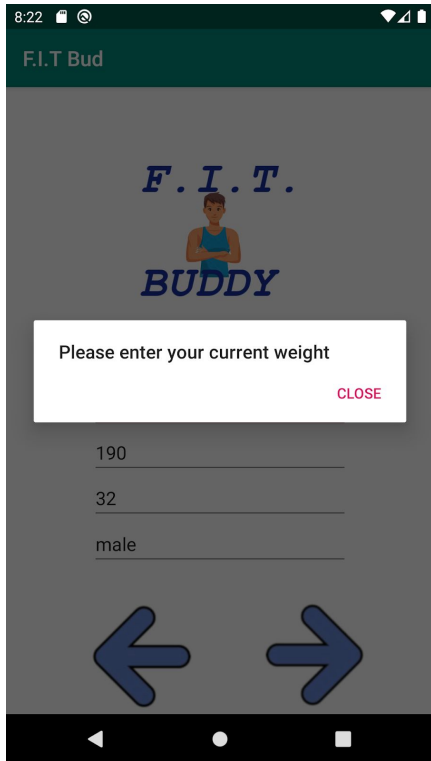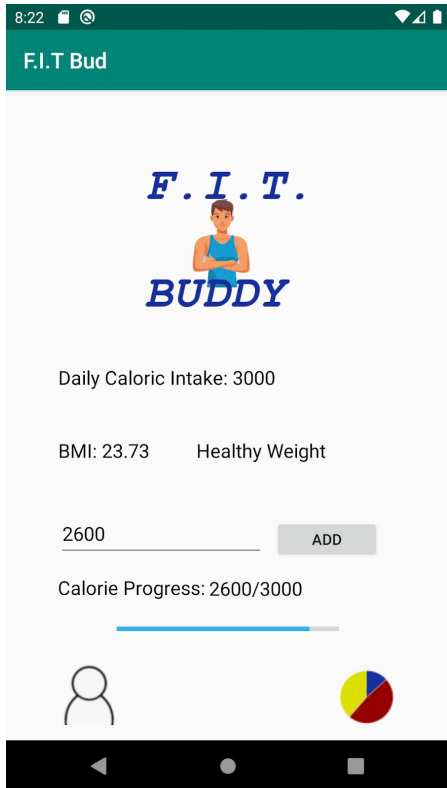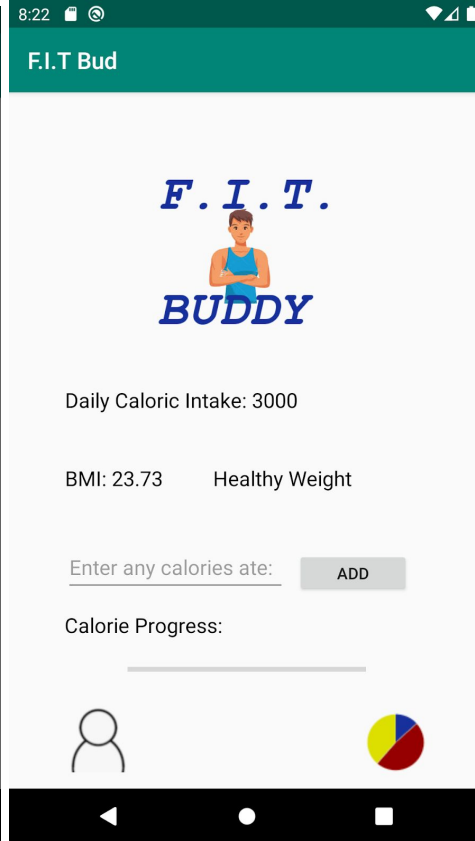
Sprint #3

Sprint Backlog

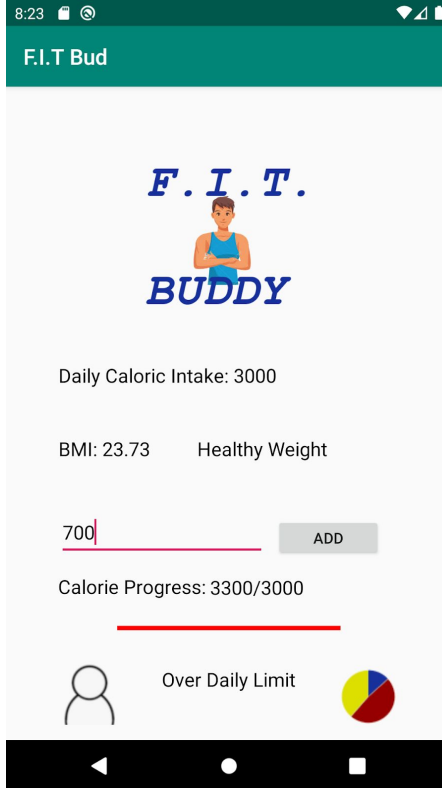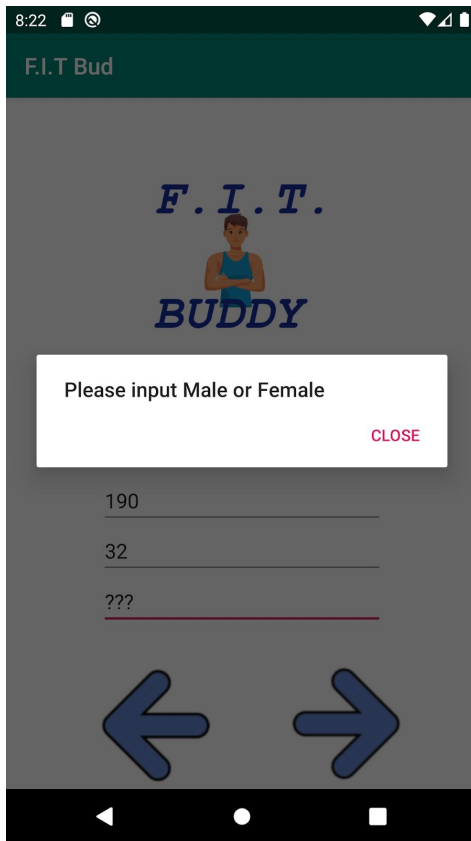| Story ID	Story / Task	Estimated Hours	Actual Hours
4.2	Display food types for goal	10	11
4.4	Edit user info page	6	pushed back
4.5	Save state calorie counter page	4	4
4.6	Display workout information	8	9

Review

[Screenshots, etc go here. This is where you discuss the product, describing what was done this sprint (potentially shippable product increment) and what was planned for the sprint but was not done.]
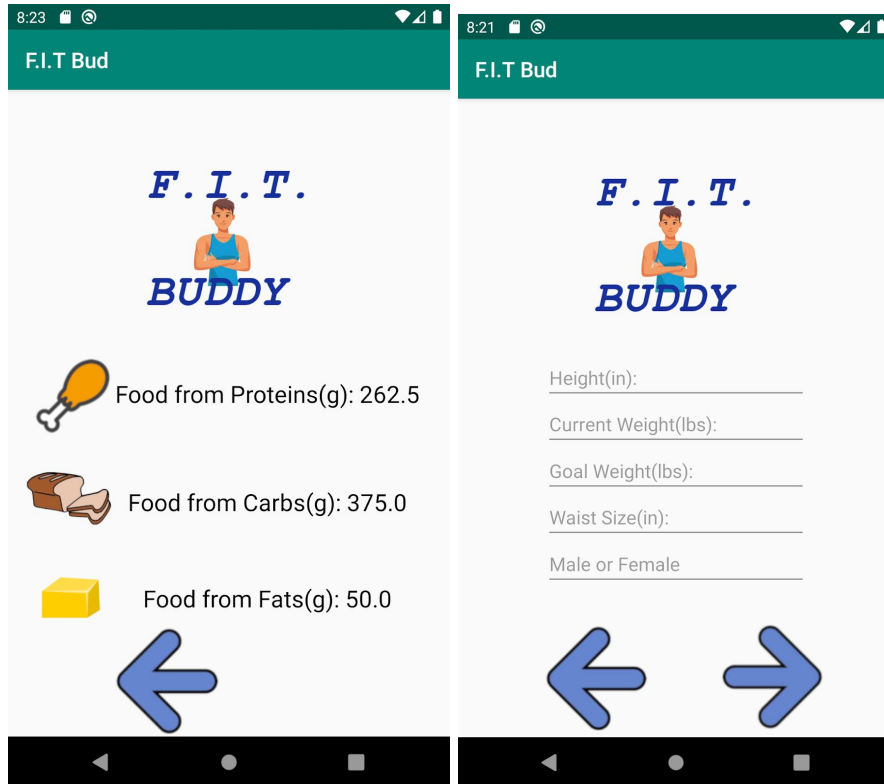
F. I. T. BUDDY

Total Proteins(g): 245

Total Carbs(g): 350

Total Fats(g): 46.67

F. I. T. BUDDY

Type	Food	Weight	Calories
Protein	Salmon	8 oz	470
Protein	Almonds	1 oz	165
Protein	Tuna	8 oz	250
Fats	Eggs	3.5 oz	160
Fats	Chia Seeds	1 oz	135
Fats	Dark Choc.	1 oz	165
Carbs	Bread	3 oz	225
Carbs	Orange	6 oz	80
Carbs	Asparagus	8 oz	43

F. I. T. BUDDY

Type	Food	Weight	Calories
Protein	Steak	6 oz	460
Protein	Chicken	8 oz	540
Protein	Ground Beef	4 oz	375
Fats	Yogurt	10 oz	168
Fats	Walnuts	1 oz	185
Fats	Olives	3.5 oz	125
Carbs	Rice	4 oz	150
Carbs	Oats	2 oz	220
Carbs	Bread	3 oz	225

Workout Type	Time(Min.)
Choose your Own	4
Leg Press(5x10)	7
Cannonball Squats(3x10)	6
Dumbbell Lunges(3x10 each)	8
Calf Raises(4x15)	4
1 Min. Wall Sit(3x1)	3
Leg Extensions(5x10)	8
Front Squats(3x10)	5

Workout Type	Time(Min.)
Choose your Own	1
RDL's(3x10)	6
Cannonball Squats(3x10)	6
Dumbbell Lunges(3x10 each)	8
Calf Raises(4x15)	4
Leg Extensions(5x10)	8
Squat(5x5)	12

Workout Type	Time(Min.)
Push-ups(5xME)	5
Diamond Push-ups(3xME)	4
Choose your Own	1
Mountain Climbers(3x20)	4
Wide Push-Ups(3xME)	4
Pull-ups(5xME)	7
30 Sec. Wall Sit(4x1)	3
Dips(5xME)	5
Up-Downs(4x10)	6
30 Sec. Air Squat(4xME)	3
Tuck Jump(3x6)	3

Retrospective

[This is where you discuss the process. What went well (and are you planning to do more of that?) What didn't go so well (and do you have a way to do less of that)? What changes are you planning to make in how you plan & carry out the next sprint?]

Overall the coding process went well, I was able to use some concepts I've been picking up from other classes, like Intro to AI ;), to randomly generate workouts based off of how much time you have to workout as well as what type of workout you've chosen. I also randomly generated 3 examples of food for the 3 main macronutrients to display the user with the ability to refresh/randomize both the foods and the workout you're generated. Oddly enough the largest hurdle for accomplishing these goals was the amount of research I had to do on workouts, how long they'd take and soon how many calories they'll burn (next iteration hopefully). On top of this researching how many calories were in what foods as well as what foods were "healthy" examples of those macronutrients took time to figure out. Also in this iteration I fixed the macronutrients display so that it wouldn't have never ending decimals using decimal format, I also found this error while testing my food examples page. Next sprint I plan on redesigning where the user inputs their info so I can push that parcelable extra to every other new activity in order to calculate how many calories you burned to update how much you should eat in that day on the calorie tracker page which is why I have to delay the editing of user info once again.
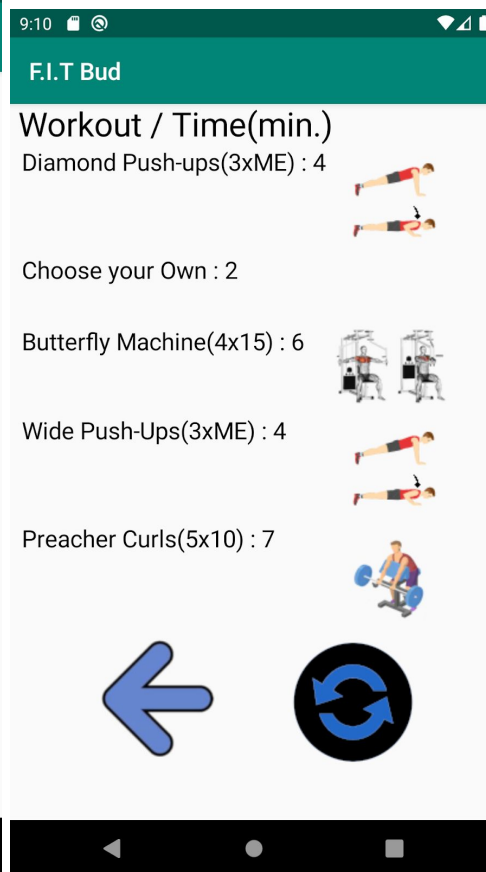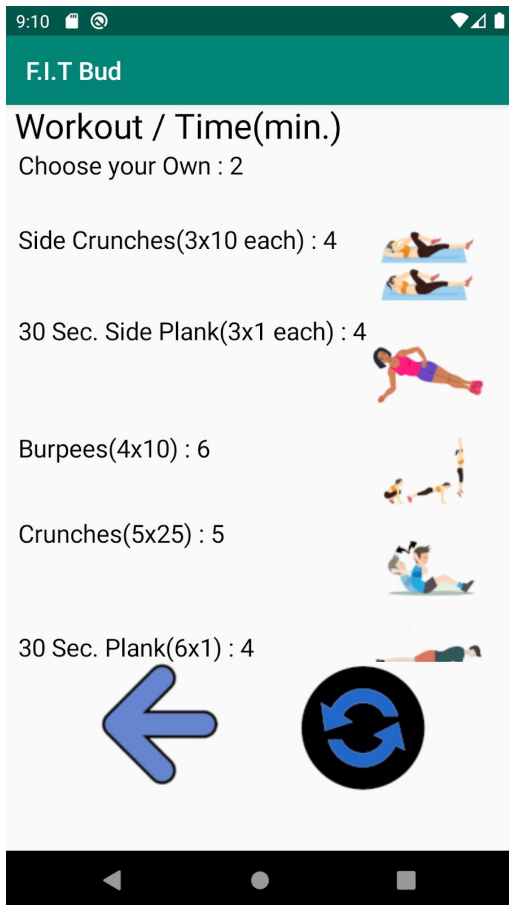
Sprint #4

Sprint Backlog

Story ID	Story / Task	Estimated Hours	Actual Hours
5.1	Count calories burned	10	pushed back
5.2	Edit User info	6	8
5.3	Pictures of workouts	10	12
5.4	Pictures of food examples	12	pushed back

Review

[Screenshots, etc go here. This is where you discuss the product, describing what was done this sprint (potentially shippable product increment) and what was planned for the sprint but was not done.]

F.I.T Bud

Workout / Time(min.)

Choose your Own : 2

Burpees(4x10) : 6

Calf Raises(4x15) : 4

Mountain Climbers(3x20) : 4

Pull-ups(5xME) : 7

Tuck Jump(3x6) : 3

F.I.T Bud

Workout / Time(min.)

Choose your Own : 1

RDL's(3x10) : 6

Calf Raises(4x15) : 4

Leg Press(5x10) : 7

Dead Lift(5x5) : 12

F.I.T Bud

Workout / Time(min.)

Choose your Own : 2

Side Crunches(3x10 each) : 4

30 Sec. Side Plank(3x1 each) : 4

Burpees(4x10) : 6

Crunches(5x25) : 5

30 Sec. Plank(6x1) : 4

F.I.T Bud

Workout / Time(min.)

Diamond Push-ups(3xME) : 4

Choose your Own : 2

Butterfly Machine(4x15) : 6

Wide Push-Ups(3xME) : 4

Preacher Curls(5x10) : 7

- 19 -
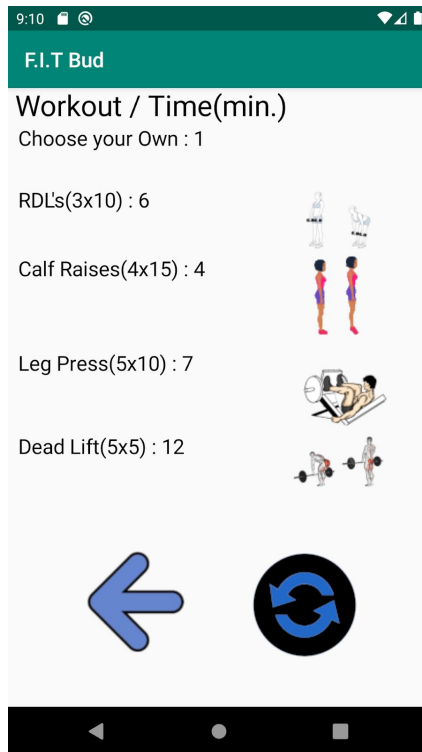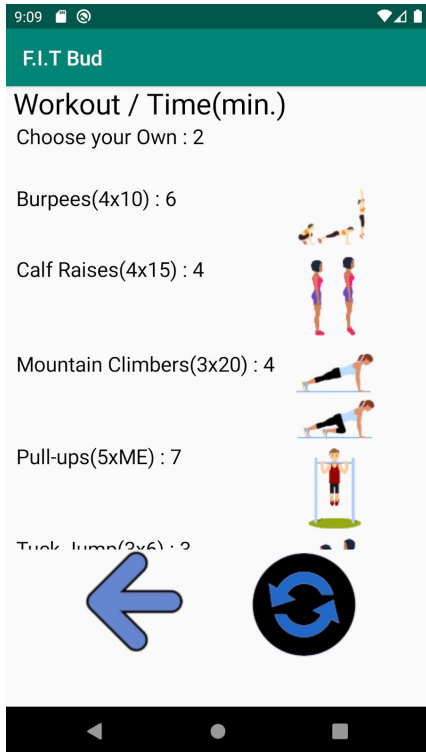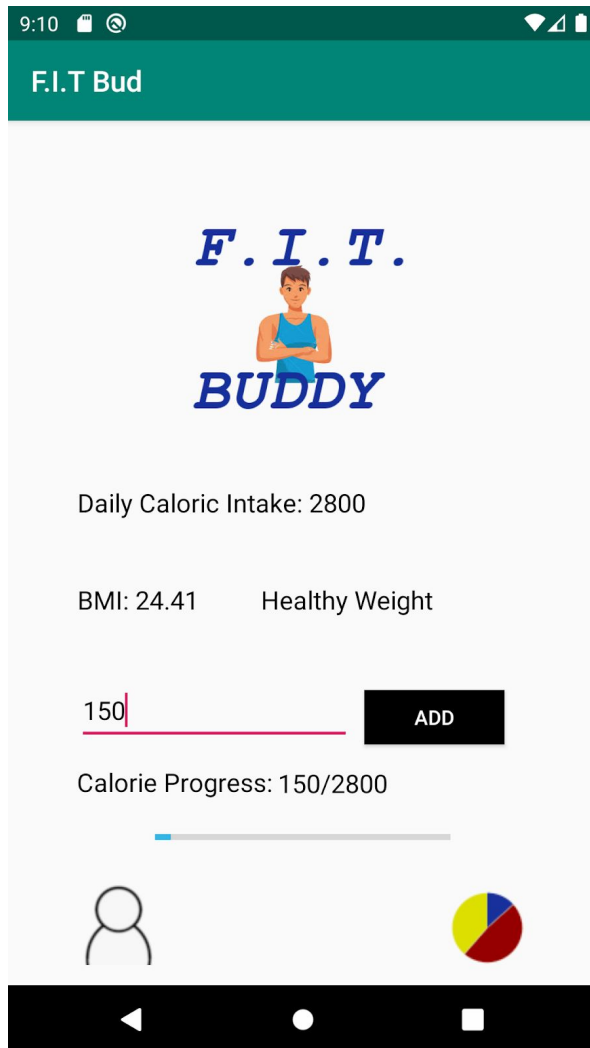
Retrospective

[This is where you discuss the process. What went well (and are you planning to do more of that?) What didn't go so well (and do you have a way to do less of that)? What changes are you planning to make in how you plan & carry out the next sprint?]

This sprint was very different from the rest as a majority of my time was spent editing photos to fit them properly and proportionality in my workout generator table. Next sprint I will have to take this into consideration when developing the photos for the food examples. Next sprint I also plan on implementing a "circuit workout" for the body weight workout so instead of just a list of workouts it gives you an order in which to do them and how many sets you will do that order for your inputted time. I also pushed back the calories counted part as it's going to be difficult to pass that user information from one half of the app to the other without the implementation of some sort of database, which I've

already deemed out of scope for this project from the login page portion. Overall I think this sprint went well, but I just need to make sure that next sprint I take more consideration to the amount of time it will take to develop the photos for examples to look prope and fit the screen similarly.
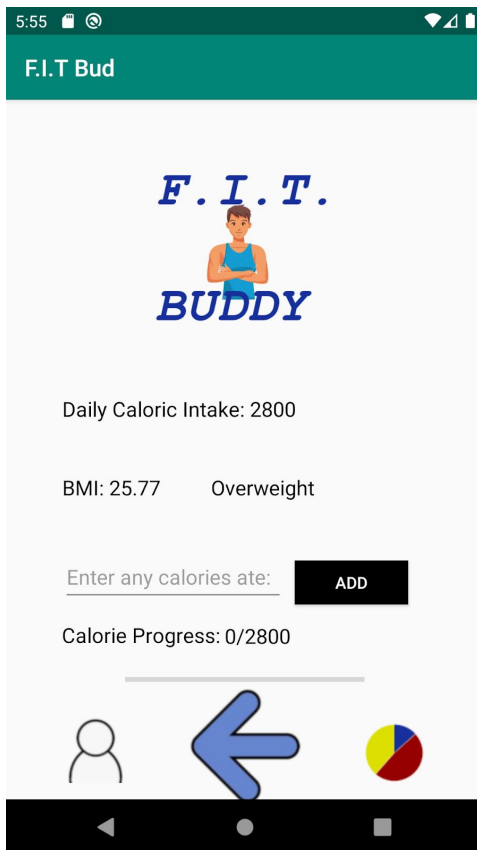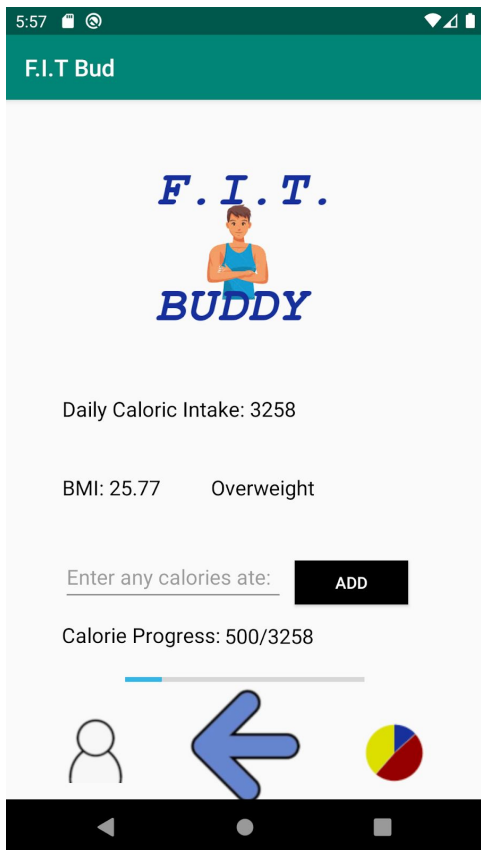
Sprint #5

Sprint Backlog

Story ID	Story / Task	Estimated Hours	Actual Hours
5.1	Count calories burned	12	11
5.4	Pics of food examples	12	10
6.1	Circuit workout for body weight	8	pushed back
6.2	More types of workouts	4-10	4

Review

[Screenshots, etc go here. This is where you discuss the product, describing what was done this sprint (potentially shippable product increment) and what was planned for the sprint but was not done.]

Screen 1

F.I.T Bud

F . I . T .

BUDDY

Daily Caloric Intake: 2800

BMI: 25.77   Overweight

500   ADD

Calorie Progress: 500/2800

Screen 2

F.I.T Bud

Workout / Time(min.)

Choose your Own : 2

Stair Runs(5x1) : 5

Jumping Jacks(6x25) : 4

30 Sec. Plank(6x1) : 4

Leg Lifts(4xME) : 5

Run : 10

Screen 3

F.I.T Bud

F . I . T .

BUDDY

Daily Caloric Intake: 3258

BMI: 25.77   Overweight

Enter any calories ate: ADD

Calorie Progress: 500/3258

Screen 4

F.I.T Bud

F . I . T .

BUDDY

Daily Caloric Intake: 2800

BMI: 25.77   Overweight

Enter any calories ate: ADD

Calorie Progress: 0/2800

Workout / Time(min.)
Choose your Own : 0

Leg Curls(5x10) : 8

1 Min. Wall Sit(3x1) : 3

Goblet Squat(5x20) : 7

Front Squats(3x10) : 5
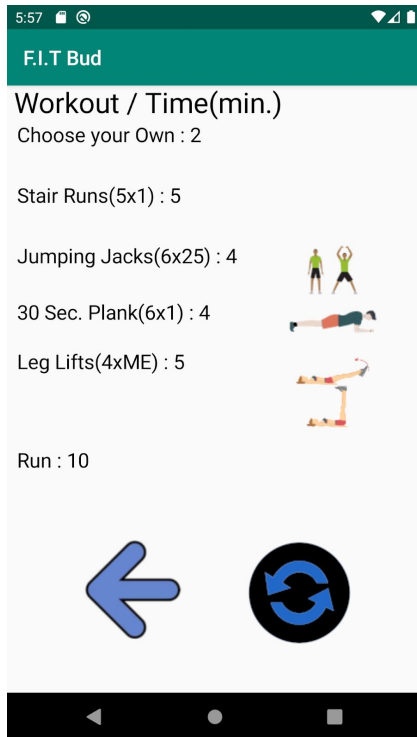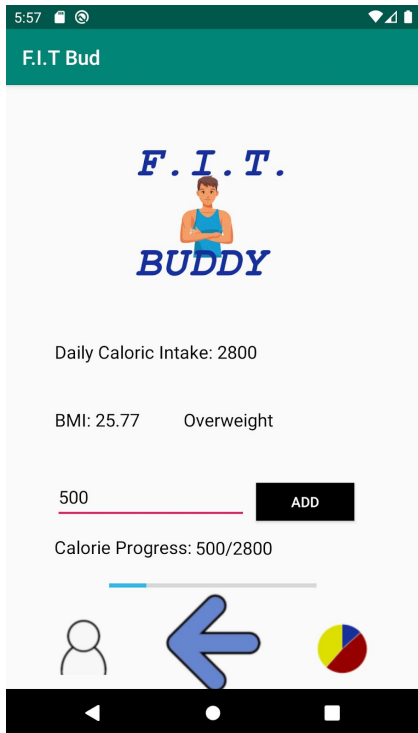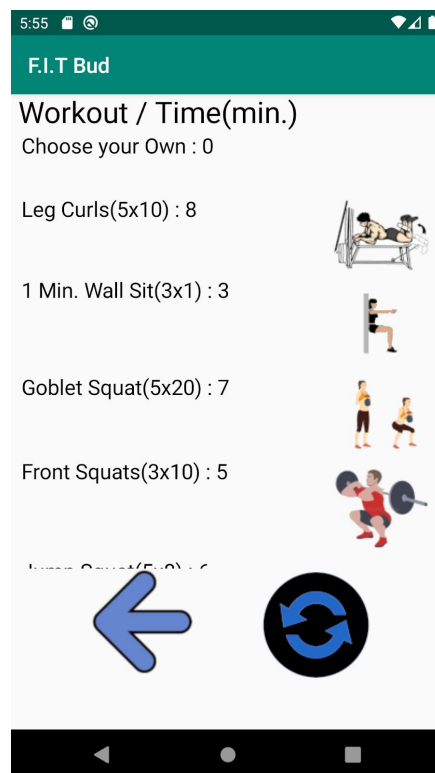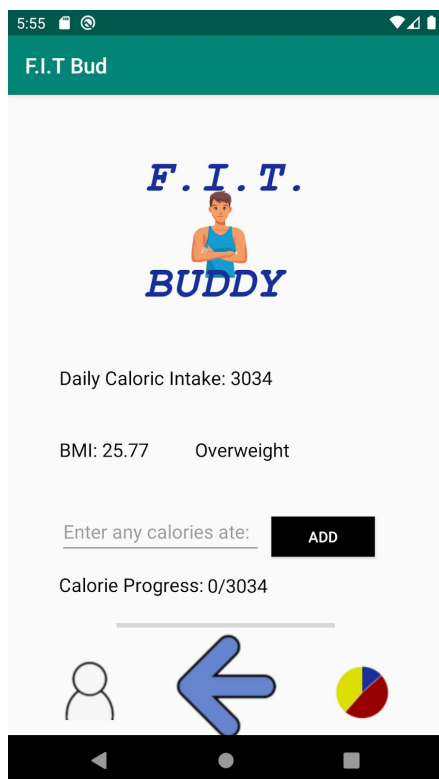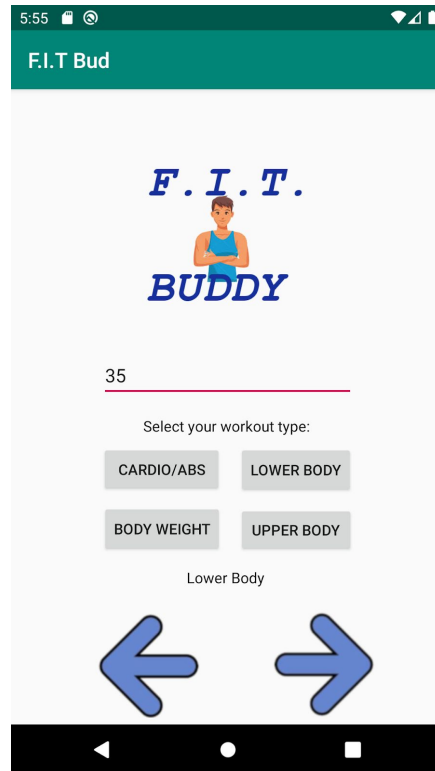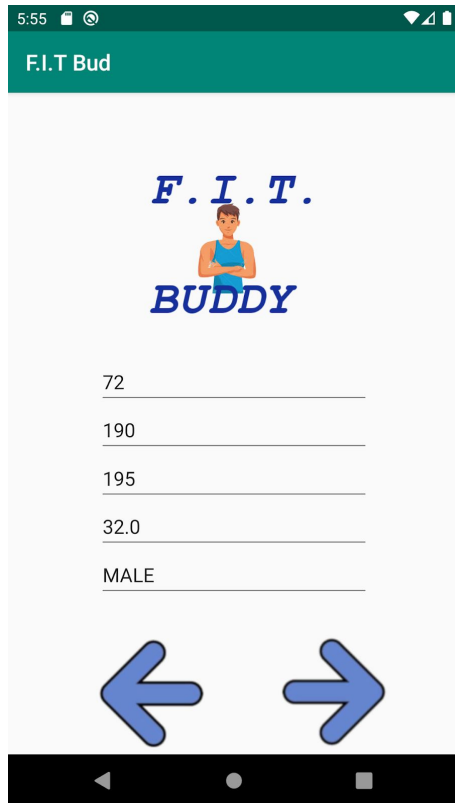
Retrospective

[This is where you discuss the process. What went well (and are you planning to do more of that?) What didn't go so well (and do you have a way to do less of that)? What changes are you planning to make in how you plan & carry out the next sprint?]

This sprint I managed to add more types of workouts as well as pictures associated with those to help demonstrate to the user how to do them. On top of this I found and edited photos for every single food item within the food examples page which took some time. Finally I was able to add the ability that if you were to go to the workout generator section, at any point, the workout you had made for yourself will count how many calories, roughly, that were burned if you completed the workout and adds that to your total amount of calories you need to intake for the day. Next sprint I plan on adding in the capability of adjusting the total macros (carbs, proteins, and fats) that the user should be eating extra if they were to complete the workout. As well as this I want to make some sort of circuit workout generator button instead of making the cardio/abs one just do a circuit workout as I think it will be easier than trying to refactor pre existing code and data structures. On top of this I will continue to add more types of workouts/ food examples with their pictures to go along with it.

Sprint #6

Sprint Backlog

Story ID	Story / Task	Estimated Hours	Actual Hours

Review

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Retrospective

[This is where you discuss the process. What went well (and are you planning to do more of that?) What didn't go so well (and do you have a way to do less of that)? What changes are you planning to make in how you plan & carry out the next sprint?]