Fitness and Health Production App for Students

Name

Course

Institutional Affiliation

Date

Fitness and Health Production App for Students

1. PROJECT OVERVIEW

We are making a fitness app to help students become healthy and fit. It will be available on mobile phones and will enable a person to know water intake, food intake, and exercise. Others go as far as checking and monitoring blood pressure. They enable diets to be monitored and they can determine calories consumed per food, also carbohydrates proteins, and fats are calculated. A food diary enhances discipline. People can also monitor themselves and the conditions that he/she is experiencing to determine if there is improvement or deterioration. For example, during COVID-19 oxygen monitor was used to monitor and detect the deadly virus.

The application will provide health and fitness tips to students to ensure a healthy body. Pedometer apps can help determine on average how long you walk in a day and the distance covered. Personal health coaches often come with the application as the user will get to interact with them and learn about diet and various fitness activities. The app will also keep students motivated to keep on track with their various fitness goals and ensure no one is left behind.

2. RATIONALE

The project is needed to determine under consumption or overconsumption of nutrients among students and avoid wastage. Foods rich in fats and calories are also identified. Health production application for students to ensure that they take the daily recommended nutrients. From my chart, on Thursday my daily goal for calories is 1880 and my food intake for calories is 1946. This means that I am over-consuming calories above 66. For carbohydrates, my daily goal is 235 and I have consumed 247, this means that I consume carbohydrates above 12. For fats, my daily goal is 63 and I am consuming 53, this means I am under consuming fats by 10. For proteins, my daily goal is 94 and I am consuming 95, this means I am over-consuming proteins by 1 gram. For sodium, my daily goal is 2300 and I am consuming 1421g, this means that I am under consuming sodium by 879g. For sugar, my daily goal is 71g and I am consuming 50g, this means that I am under consuming sugar by 21g.

The main source of fats is pizza, fried eggs, yellow cake, pancakes, meat, potatoes, and roasted goat meat. Chicken and biscuits have a moderate amount of fat. For calories, potato avocado, pancakes, marble cake, rice, beans, meat, and yellow cake provide most of the percentage. I am

gaining weight as outlined in the graph.

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3. STAKEHOLDERS

Stage	Stakeholders	Quality improvement processes	Examples of Quality Improvement processes.
Development	Developers' users, clinicians, and standard bodies.	Involves clinicians and users	BSI standard RCP Checklist MRC digital development
Uploading app repository	Owners	Verify techni9cal aspects Verify CE mark Verify privacy Verify developer qualifications	For Apple stores, the developer has to be the product license holder.
App reviews and ratings	Raters	Explicit Crowd wisdom RCP Checklist Can fall	
Selecting app repository	App repository owners	User training required CE mark Quality	Check CE requirement App risks evaluated
	Users	Risks	RCP Checklist

		Reviews	Doctors' consultation Curated app repository iMdicalApps review
Self-management by users	Users	Caution exercised	RCP guidance
removal from app repository	Regulators and app repository owners	Reviews and reports addressed and lack of evidence investigated	Acne apps banned Apple's position on health apps.

Target Market-Campus Students

Partners

I.   Parents
II. Students
III. Friends
IV. Teachers

4. ASSUMPTIONS.
   i.   Users will always know the exact nutritional value of the food they consume.

5. MARKET

There are a couple of apps that keep track of diet intake, we take a look into some of them. Lifesum is an integrated platform that keeps track of the calories that one consumes. It has integrated recipes and a shopping list. Sparkpeople is a calories intake tracker that includes an exercise journal, meal planner, and fitness challenges. MyNetDiary keeps track of all nutrient intake specific to any diet. It allows users to set a weekly weight loss rate. Lose is an app that

mainly focuses on weight loss, it helps users keep track of their calories intake and allows users to create their recipes.

6. USER REQUIREMENTS

SURVEY.

We are developing to help students stay fit and healthy by helping them keep track of their nutrients intake, their exercise routines, and give health training through the app. We request you to fill out the questionnaire below to help us understand what to include in the applications it makes them useful, interactive, and usable.

Q1. Should we include meal suggestions for users according to their profile and goals?

☐ Strongly agree ☐ Agree ☐ Neutral ☐ Disagree ☐ strongly disagree

Q2. Should we include exercise challenges for the user to compete?

☐ Strongly agree ☐ Agree ☐ Neutral ☐ Disagree ☐ strongly disagree

Q3. Should we include features to let users set goals for diet, exercise, and weight loss?

☐ Strongly agree ☐ Agree ☐ Neutral ☐ Disagree ☐ strongly disagree

Q4. Should we include a reminder for meals and exercise time?

☐ Strongly agree ☐ Agree ☐ Neutral ☐ Disagree ☐ strongly disagree

Q5. Should we include a feature to let users share their progress, targets, and activities?

☐ Strongly agree ☐ Agree ☐ Neutral ☐ Disagree ☐ strongly disagree

Q6. Should we include a feature to track users' goals and activities and give them advice on how to achieve them?

☐ Strongly agree ☐ Agree ☐ Neutral ☐ Disagree ☐ strongly disagree

Q7. These are the features we plan to include in the app, do you think they are relevant to the user to help them stay fit and healthy? Give us your thoughts

_____

_____

Q8. What other features do you think we should include in the app?

_____

_____

_____

7. ANALYSIS: Tabulate and analyze the results of the survey:

A. Rank your features by importance based on the survey results.

Feature	1	2	3	4	5	Total
Q1	4	5	2	0	0	46
Q4	0	5	4	1	1	45
Q2	7	2	0	2	0	38
Q6	2	1	3	3	2	27
Q3	1	8	1	1	0	25
Q5	2	1	3	3	2	22

B. Outline any features that were dropped and any features that were added.

Dropped feature: Allowing users to share their progress, targets, and activities

Added features: Meal planners to help users plan their meals for one week, access to recipes, Geolocation Integration

C. List your final set of features categorized into HIGH, MEDIUM, and LOW priority

High Priority

1. Give meal suggestions for users according to users' profiles and goals

2. Reminders for meal and exercise time

3. Exercise challenges for a user to compete

4. Geolocation Integration

Medium Priority.

1. Customizable user interface.

2. Let user set goals for diet, exercise, and weight loss

3. Meals planner.

Low priority.

1. Track users' goals and activities and give them advice on how to achieve them.

2. Access to recipes

4. USER SCENARIO: Create a user scenario for a "typical user":

A. **Include background information of the user (make-up age, gender, education).**

This application is designed for people who want to maintain a healthy lifestyle by keeping track of their diet, and exercise and receiving health advice and training from professional health coaches, it is meant for anyone regardless of their gender, age, or level of education.

B**. Include a picture of the user.**

C. **Identify a minimum of five user needs and express them as goals.**

1. The application should allow users to log in using their email and password.

2. The application should have a simple and user-friendly user interface.

3. The application should allow users to have live online sessions with their health coaches.

4. The application should give users' dietary and exercise reports for any period they want.

5. The application should allow users to customize the user interface.

6. The application should notify users when they are sticking to their set targets.

PART 3: INITIAL WIREFRAMES AND INTERACTION DESIGN

SKETCHED MAIN WIREFRAME DIAGRAM:

2. SKETCHED SECONDARY WIREFRAME DIAGRAM:

navigation bar

App name

enter new diet

get diet suggestion

dietary report

dietary tips

navigation bar

App name

start new exercise

exercise report

exercise tips

3. DIGITAL MAIN WIREFRAME DIAGRAM:

FITNESSAPP

MyDiet

Exercise

MyGoals

random diet/excercise tips
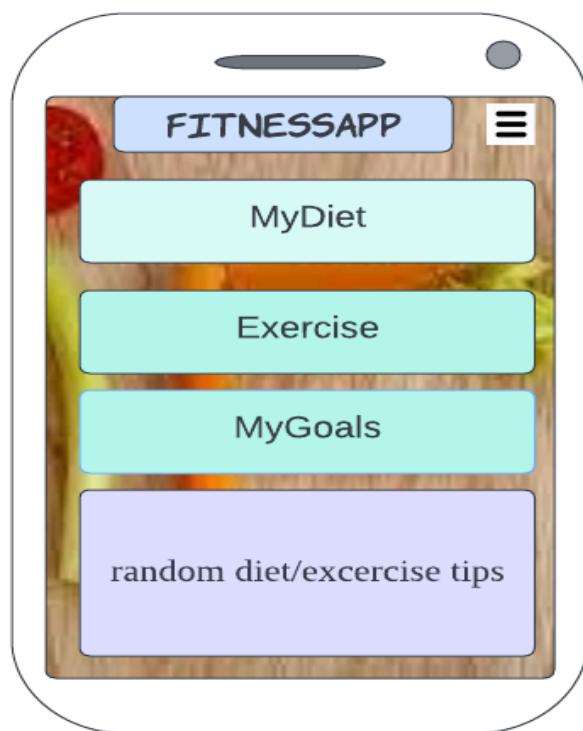
4. DIGITAL SECONDARY WIREFRAME DIAGRAM

FITNESSAPP ☰

DIET

enter new diet

get diet suggestion

get diet report

quick diet statistics

FITNESSAPP ☰

EXERCISE

start new exercise

get exercise report

quick exercise statistics

FITNESSAPP ☰

MYGOALS

diet

exercise

new competition
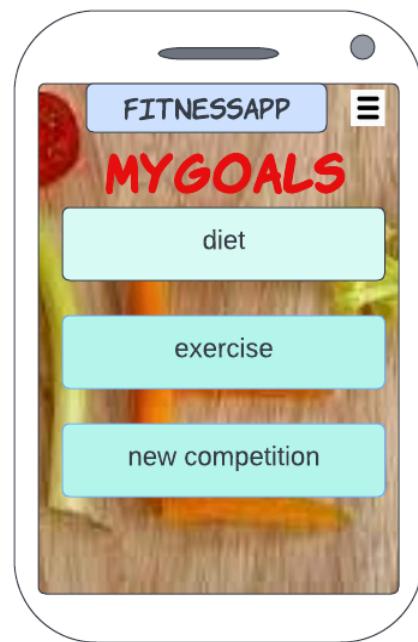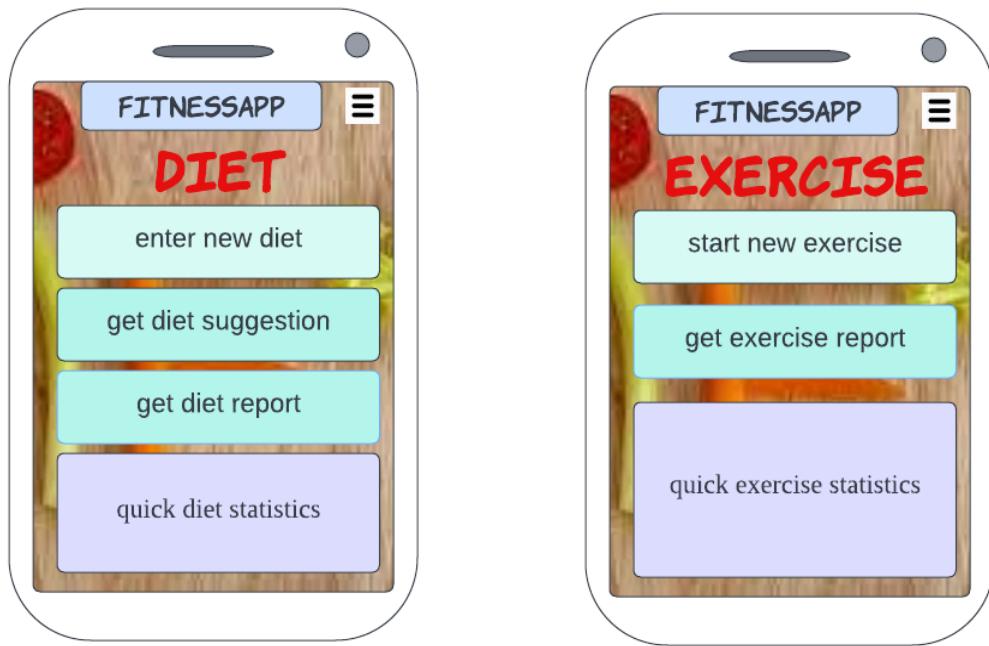
5. CONCLUSION.

Wireframing is an essential tool relating to an app or web development. It makes it easy for one to scheme through the website structure easily without being limited to issues relating to images and colors. From the experience I had, I believe creating a wireframe helps to save a lot of time in the end and makes the development process easier for both the client, designer, and the developer.

Wireframing has a vast array of benefits that are beneficial to a designer or a developer. First, it helps to provide clarity when working on a project. As it allowed easy interaction between the various interfaces for the app. Second, it helped to bring out clients' needs better by providing designers and developers with their main focus areas. Third, wireframes allow easy communication of ideas to team members by showing them how various interfaces relate and work together. Lastly, it makes it easy to learn the elements that need to be coded, the sizes for those elements, their location, and how the layouts are to adjust on different screen sizes.

The greatest lesson I learned is that perfection takes time. For one to design and develop a good wireframe, it takes continuous practice and time. It is not a skill that one can just wake up and learn without dedicating much of their time to it. Next, I learned that teamwork is essential more so when working on a big project. Members within a group are gifted with different skills, hence working in unity makes the development process a lot faster compared to when there are disagreements. Lastly, when it comes to development, each person is entitled to express their view and provide a rationale for it, because the design is all about creativity, hence everyone needs a chance to speak out their minds.

PART 4: USER FEEDBACK / TESTING

PREPARATION

Moderator: Hello, my name is [moderator] and it is nice having you. Can you tell me what motivated you to do exercises and keep fit?

User: [response]

Moderator: How long have you been doing exercises and keeping fit?

User: [response]

Moderator: Can you share with me what your experience has been so far

User: [response]

Moderator: It seems you are well versed with the whole aspect of keeping fit. Can you share your views on how you view my app design?

User: [response]

Moderator: Is there any additional information that you would like to share with me?

User: [response]

Moderator: Thank you so much for taking your time your time to talk with me. Have a good day

User: [response]

RESULTS

Users' feedback were varying based on how long they had ventured into keeping fit. Most of them admitted to having found a difficult time when they were starting their healthy living experience but with time, they came to enjoy the whole experience and found it less stressful than initially. Those who were still new to the whole idea of keeping fit, found some of the exercises to be hard and stressful. Most admitted that my wireframe was simple and easy to navigate, such that even a layman could easily use the app. Sporting apps need to be simple since users will be spending less time on them. They suggested that during development it would be great to have tutorials on how to do the various exercises, then, if possible, to have a live section where users can interact from the comfort of their homes when they were working out. For those who needed to check up on their nutrients suggested we collaborate with satisfied medical personnel to assist in ensuring that people were not misdiagnosed based on what they saw and followed from the app.

CONCLUSION

Based on the users' comments, it was clear that my wireframes were simple and conveyed directly what was required from users. The layouts were simple and quite easy to use for most of the users. Since most of the users had used such similar apps in the past, they made the following recommendations; first, they need to see a picture of a person doing some sort of exercise within

the app. Such that, once a person sees the app, they can immediately know that the app is for fitness. Next, they recommended that each exercise needs to be accompanied by relevant instructions whether written or in video form. This is essential in helping a user know the right way to work out a specific exercise correctly. Lastly, the app needs to have timers, to help the users time themselves for specific tasks, or help them easily schedule various workouts within the exercise app. Usability testing is vital, more so when it comes to learning about users' needs. It provides a chance for the target market to express their views of what they expect from the app, and how the app could be designed better to suit the users' needs.

Part 5: REVISED WIREFRAMES

WIREFRAME DIAGRAMS

Original secondary wireframe

New secondary wireframe

WIREFRAME CHANGES

Based on the initial design which I had created, there were very few changes that needed to be made. My original designs were simple and the elements were quite well making it very easy for users to use and navigate through the app. I strove for consistency while trying to make a few adjustments by using reusable symbols and styles. The use of consistent UI elements on the various screens ensured getting a consistent design. I took a lot of time to create the original wireframe based on the user needs I got from the survey feedback, hence after testing most found the design to be very appropriate and require minimal changes.

APPLICATION CHANGES

The changes that were done on the application wireframe were minimal and were related to the styling of the buttons and writings. The location for most of the items was still retained since few concerns were raised about the layouts of the elements. Changes were done to one of the

button names, to hide its initial performance. In the event new changes may be required to be made to the app, then they will be easily incorporated to suit the users' needs.

Part 6: FINAL DESIGN PROJECT

PROJECT SUMMARY

The project entailed developing a health and fitness app to help students become fit. It also aims at providing students with knowledge about their consumption of various nutrients. The apps will also be providing daily health tips that students can use to better their health. The app not only targets students but also teachers, parents, and the general public on persons interested in keeping fit. Through the app, users will be able to monitor their nutrient levels and learn those nutrients that they are overconsuming or those they are under consuming, for them to make the necessary adjustments. Through the app, we target to make the users of the app live healthier lifestyles by helping them evade most of the recurring lifestyle diseases that result from body inactivity.

LEARNINGS

Module two was meant to learn users' needs based on the feedback they were to provide on the survey and questionnaire presented to them

Module three entailed designing the initial interfaces of how the app would be. It was meant to help know where different elements were to fit in the app and how they were to interact to satisfy users' needs.

Module four was essential in learning the users' feedback based on the wireframe designs that were presented to them. Also, get feedback on the areas that they thought needed to be rectified to suit their needs better

Module five showcases the new wireframe designs based on the feedback gotten from the target audience.

Module six sums up what the whole project is all about and the various steps undertaken to make the project a success, together with the changes made till the completion of the project.

CONCLUSION

The major changes that were made during the design phases were the layout designs. Shaping the different elements and layouts that were to be embraced within the app took most of the time. Since the layouts are what attract users to the app and can either retain them or disgust them. So having a well-designed layout was very essential during the design phases, and shaping the various elements was key to ensuring the wireframe was appealing to the target audience.

What caught me by surprise was how the whole aspect of wireframing is done. I have always thought that wireframing was as simple as drawing diagrams on words. However, I realized wireframing is a skill set that needs continuous practice, for once skills are polished. I learned that simplicity, consistency, and alignment are the key to the successful design of wireframes. Wireframes need to be simple but creative, this can be done by utilizing the most basic shapes. I realized that if one decided to venture a lot into visual creativity, it would just result in a lot of time loss while visual creativity is not essential to the success of a wireframe.

To better my wireframing skills, I would require to keep my wireframes to be simpler, to avoid unnecessary complications. The second would be to utilize better sample data that has been verified. Third, for easy understanding of the annotations, it would be great to add annotations wherever appropriate for them to be easy to read and understand. Third, would be to use the grid system technique to group the different components while keeping them structured simply. Lastly, it is to get users' feedback on time, to make the necessary adjustments soon enough rather than making the changes when the deadlines are soon reached.