

## Criterion A: Planning

**Client:** Mr. Udom Tavonvunchai

### **Problem statement**

Mr. Udom Tavonvunchai, a retired parent, needs a program which can track his physical activity over a period of time and analyze which activities are most effective in losing weight.

### **Defining the problem**

Udom Tavonvunchai (the client) is a retired parent who spends most of his time working with digital information and participating in physical activity. He is an investor and also still manages property, staying in contact with any clients who call him from time to time. Apart from this, he also spends much of his time on the stock market. During his leisure time, he enjoys streaming movies and tv shows on Netflix, biking, and tinkering with remote controlled cars and helicopters.

When asked what the most annoying thing about his daily activities were, Mr. Tavonvunchai replied that he would have preferred it if there were an easier way of tracking the stocks he held an interest in on the stock market. He would also like it if there was a way to track his physical activity, perhaps through some sort of application, and evaluate which activity was most effective in helping him lose weight. After thorough discussion, through multiple interviews with my client, I have come to the conclusion of creating a program which will track Mr. Tavonvunchai's physical activity, analyze the data collected, and make suggestions at the end of the week as to which activities (swim, bike, or walk) he should spend more time in next week.

### **Criteria for success**

Things that it does

- Takes user inputs of daily activities and does calculations with the data inputted.
- Takes in user inputs about how they feel after doing said activities.
- Stores data entries and sorts it so that the user may view previous data entries at any given time.
- Recommends the amount of time the user should spend in each activity next week.

User Friendliness

- Clean, easy to read labels that help the user understand the functions of different textboxes and buttons.
- Organized tabs which are able to convey their specific function to the user so that the user may easily navigate through the program without confusion.

Error/Exception Handling

- Handles too much input and invalid input.
- Handles invalid calculations.

### **Rationale for the proposed product**

For this project, due to the fact that the program will be highly personalized for the client, I have chosen to create a dedicated program using a specific programming language instead of a website. The program will only take in inputs which are based solely on the three activities in which my client usually carries out as daily exercise. These activities include biking, walking, and swimming. The program will have to store my client's personal data locally and must also automatically sort and organize data based on my client's needs.

I have decided to use Java for the following reasons because:

- I am familiar with Java.
- It runs on multiple platforms.
- It is free to use and requires no licensing.
- Java is constructed to be easy to use thus making it easier to code, handle errors, and learn as opposed to some other programming languages.

**Word Count:** 366

Interview 1: Introductory Interview with Client (**NOT INCLUDED IN WORD COUNT**)  
General Scenario Questions

What do you currently do now that you are retired?

I am an investor and still manage property, so I spend a lot of time receiving calls from clients and checking in with the stock market.

Do you have any hobbies or activities you do in your spare time?

In my spare time, I enjoy watching movies and tv shows (Netflix), biking, and playing/fixing/tuning with remote controlled cars and helicopters.

How often do you do these activities?

I'll usually watch shows and movies on Netflix, but I'll occasionally go out to Central Chaengwattana to eat and watch a new movie. I probably bike around twice a week inside Nichada but I am looking to do this more often as I am trying to lose weight.

Is there a certain activity you do more than others?

Currently, I spend most of my time in front of the computer watching tv shows, movies, reading online news, or browsing forums.

Are there any software programs you currently use?

I use a program on the PC which cleans out any unused junk. I also use an app on the phone which keeps a log of my purchases depending on whatever I input.

Possible Problem/Solution Questions

What particular thing is most annoying about what you do?

Probably not knowing when a client may call for help and having to check in with the stock market from time to time because it doesn't notify me on how the stocks which I invested in have changed.

What's most annoying about your hobbies?

There isn't much that's annoying, I guess when it comes to losing weight, I'm not quite sure as to how effective what I do or eat is and how much different diets or exercises contribute towards weight loss.

What kind of information do you work with?

Lots of digital information. I do have a lot of files and physical information as well, though. I keep both types very well organized. I have a certain system when it comes to naming digital files, each file name includes it's date of creation which makes things easier to access and sort.

How do you presently store and work with that data?

The data that I mostly work with nowadays is digital data. I don't really access any physical documents much unless I have to.

Are there any difficult or multi-step calculations that are involved in any part of your work, which would be good automated?

I guess some sort of notifying app which updates me on how my investments on the stock market have changed. Also, maybe some sort of program which takes my input for any activities which contribute towards weight loss and calculate how much I've loss, perhaps maybe even suggesting or recommending what I should do next.