Appendix

Vidhya Narayanan Pierson Period 3 Computer Science 22 March 2022

Appendix A: MLA citations

- "Money Manager App in Flutter with Charts, Hive DB | v2 Coming Soon." Www.youtube.com, www.youtube.com/watch?v=VOWy5-zTeWk&t=201s.
 Accessed 21 Mar. 2022.
- 2. "[FLUTTER] Updating Money Manager App with Charts, Hive DB | V2." Www.youtube.com, www.youtube.com/watch?v=gaxXoxvLzMA&t=1276s. Accessed 21 Mar. 2022.
 Source 1 & 2 really helped me develop the structure for my app, and you can that in the structure of many of my pages and classes
- 3. "How to Sort/Order a List by Date in Dart/Flutter?" *Stack Overflow*, stackoverflow.com/questions/57000166/how-to-sort-order-a-list-by-date-in-dart-flutter.

 Accessed 21 Mar. 2022.
 - When organizing the information by date, this source was crucial towards actually understand how to use the sort feature, and helped me develop my plot points
- Khan, Shaiq. "Draw Graph in Flutter." Medium, 11 Apr. 2021,
 medium.flutterdevs.com/draw-graph-in-flutter-e15982c63167. Accessed 21 Mar. 2022.
 The whole app is graph based, so this source was essential
- "Hive DataBase with TypeAdapter in Flutter." Medium, 15 Mar. 2021,
 medium.flutterdevs.com/hive-database-with-typeadapter-in-flutter-7390d0e515fa.
 Accessed 21 Mar. 2022.

6. "Handling Local Data Persistence in Flutter with Hive." *LogRocket Blog*, 6 Aug. 2021, blog.logrocket.com/handling-local-data-persistence-flutter-hive/#:~:text=Initialize%20Hiv e&text=Note%20that%20if%20you%20are. Accessed 21 Mar. 2022.

Although sources 1 and 2 incorporated hive, actually initializing wasn't ever elaborated on, meaning that I had to learn from these sources how to make the database work w my flutter app

 "Flutter Datepicker Widget Example Tutorial – CODES INSIDER." CODES INSIDER, 26 May 2021,

codesinsider.com/flutter-datepicker-widget-example-tutorial/#:~:text=DatePicker%20is% 20a%20material%20widget. Accessed 21 Mar. 2022.

8. "How to Use Conditional Statement within Child Attribute of a Flutter Widget (Center Widget)." Stack Overflow,

stackoverflow.com/questions/49713189/how-to-use-conditional-statement-within-child-attribute-of-a-flutter-widget-cen. Accessed 21 Mar. 2022.

Learning how to use conditional statements was important in filtering out "good" vs. "bad" data.

Appendix B: Consultations

Format of Questions:

- 1. Question given to the Client
 - a. The Client's/Advisor;s Response
 - b. My Response

First Client Meeting Results:

- 1. What is the main goal you are looking for in an app?
- a. Uhh well since I do track it would be kind of nice to have an app that I could track data using, you know? Probably something that could generate graphs whenever you input data because we already have athletic.net to just give us the numbers
- b. I get what you're saying, but what type of graph would you want it to be?
- a. Probably a line graph? I've always found those the easiest to look at compared to bar charts and stuff
- 2. What type of design would you like the app to have?
 - a. Hmm well first off I'd probably want a screen that I could put my name in so that the app could greet me each time I used it, I think that'd be sweet. Maybe there could be one page where you input the data and then it takes you to another page with all the graphs and stuff
 - b. When you say all the graphs "and stuff," what do you mean? How many graphs do you want there to be?
- a. Well considering how I only do three events, shot [put] disc[us] and javelin, it would probably be helpful to have different graphs for each event? And maybe it could be divided up by month so that one month will have a certain graph for that month's results and same for the other months
- b. Yeah thats a nice idea! Wow, it's like you are designing the app for me! I'll keep that in mind while I code it
- 3. Do you have any requests for what the app's color scheme should be?

- a. Blue, 100% Probably a deep, dark blue mixed with a more faded light blue tone? I think that would look really visually pleasing!
- b. It's a good thing you said that because that's honestly exactly what I had in mind as well, except with a bit more black, but dark blue sounds good!
- 4. Do you have any other requests in mind?
 - a. Yeah. I want to be able to change my name.
 - b. Why would you want- [interuppted]
- a. Just do it, please.
- B. Okay!

First Advisor Meeting Results (After showing my UI sketches and UML diagrams)

- 1. What do you think about my plan?
 - a. Its a nice layout, but I think it's important that you have a good timetable to work with. I did a project like this in college and I ended up procrastinating the whole thing.
 - b. That does sound like you! I'll try my best to keep a good schedule and use the classtime the teacher gives. But I'm talking about the app design
- a. I think you should separate the graphs by month instead of by event, having one page with different graphs for the same event seems kind of confusing don't you think?
- B. Yeah, I guess you are right
- 2. What do you think I should use for my database?
 - a. I'd definitely recommend using either firebase or Hive. Firebase is good for apps where you will need to log-in, which I recommend because it looks very professional. However,

- Hive is really lightweight and easy to implement and learn how to use. Read a few articles and you're set
- b. Alright, thank you so much!
- 3. Do you think it's a good idea for me to learn how to use dart and flutter or should I stick to Java?
 - a. Well, it seems like you've been picking it up pretty fast, honestly, I think you should just do what is best for the app. You have more than enough time to work on this project so you really have no excuse NOT to learn it
 - b. I don't know why you have so much faith in me but okay! I will learn it

Second Client Consultation (After First round of coding was finished)

- 1. Now that you've walked through the app, what do you think?
 - a. Hmm, this is okay but I don't really like how the the page to input information is located right on the homepage with all the graphs. It looks cluttered. Adn you still didn't add the feature where I could change my name! Besides that, the color scheme is really nice, and I like how each page can display multiple graphs and the way the tabs are subtle. Overall though, I still think you need to work on your spacing to make it less clunky looking. (All reference client makes to initial design can be seen in appendix C)
 - First off, thank you! Secondly, I'll make sure to add the name feature and try and make the homepage that displays the graphs and the info input page separate.
 Thank you so much for your time
- 2. (This time, I asked the same question after adding the fixes) What do you think of the app?
 - a. It looks awesome, I can't wait to start using it

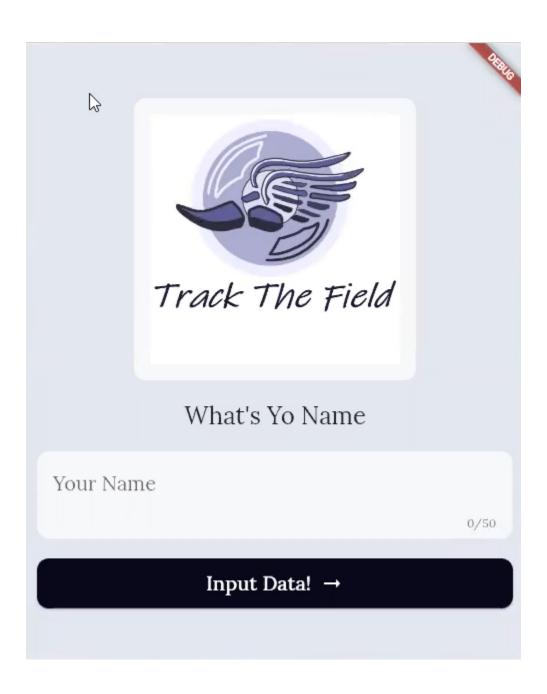
b. Let's go!

Appendix C: UI Progression:

Initial Concept



Final UI Design:

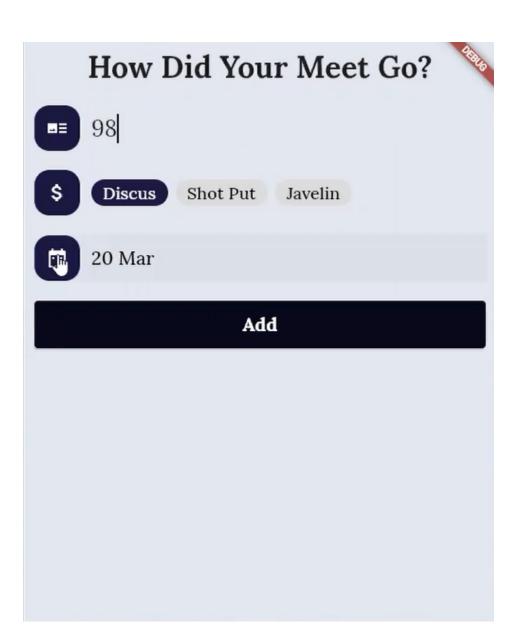






You haven't inputted any data yet! Let's fix that









TrackTheField -Ensuring Excellence

January

February

R

March

Shot Put

The whole point of this app is line graphs - you need at least two values each month per event

Discus

The whole point of this app is line graphs





January

February

March

Shot Put



The whole point of this app is line graphs you need at least two values each month per event

Discus

