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Mobile App Development

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Term Paper

When I first created the survey to brainstorm app ideas I received many app ideas that did not seem feasible with my current knowledge about app development. One entry on my survey was "I wish my phone never track me 😔". To my knowledge, the only way that would be possible would be to turn off your phone and not use the internet. To my knowledge, pretty much everything connected to the internet can be used to track you and what you do. As long as you are signed in or are using a device that you own, your internet history and activities can be traced back to you. I do not know any ways currently that you could make it so your own phone can not track you, but there is probably a way that I still have yet to learn.

Another app idea that was submitted to me in my survey was an "Intuitive organizational app to manage calendar, emails, credit cards, bills etc etc". To my knowledge, Google is already a very intuitive organizational app that can manage all your calendar, emails, credit cards, bills, etc with their multitude of apps on the market. The apps that would enable all this organization are Google Calendar, Gmail, Gpay, just to name a few, which most of the time come pre-installed on android devices. Apple probably has its own counterparts, but the confusing part to me was how to make an alternative that would be more intuitive than Google's offerings. With Google,

everything is connected to your Google account, which makes it very accessible wherever you have an internet connection, and I could not think of a way to make it more intuitive, because if I could, I would probably have applied to get a job at Google and get paid to help them out. Then comes the concern about security. Even if I could create an app that did all these things much better than the current offerings, I do not know how I could make it secure. I would have to be able to store all this sensitive information such as emails, credit cards, and information about bills on your device, so this option was out of the question.

The third submission that I received in my survey was "Effective Marketing". That was all they gave me and I did not understand what they meant by that. Effective marketing in what way? Do they want me to have an app that teaches people how to effectively market? If so, why not just find some things on Google or find a video on Youtube? This was when I finally discovered that the consumer is lazy. The people filling out my surveys wanted everything to be done for them, they did not want to do the research themselves, they wanted everything to be handed to them on a silver platter.

The fourth submission was "Something like duo push but it automatically logs you into something without having to type your user/pass in." After I read this, I just skipped it because google already does that with their autofill feature. I have been told that this feature is not very safe to use because if someone were to hack your account, then they would have all your information. I also know that there are websites online that you can sign up for a subscription to have your passwords automatically generated, saved and autofilled so that you will always have a safe password for all your accounts. With my current knowledge, I do not know any way that I could be able to make a more safe and secure app that stored, autofilled and automatically logged

you into something that was more secure than what Google or other online websites already offered.

The fifth submission to my survey that I received asked me to create an app that could "Take a picture of a circuit schematic and it automatically gives voltage reading expected and other measurement." When I first read this, my first thought was finally a good app idea. After I thought about this idea for a while, it then came to my mind that I would have to probably learn about computer vision or artificial intelligence in order to complete this task. I came to this conclusion after thinking about how I would even accomplish this. How would I get the resistor resistances, voltages, and a bunch of other things in order to calculate voltage readings expected and other measurements? Then came the answer to my second question on my survey "Is there an app that can currently solve your problem? What do you like about that app?". The person then wrote that there was another app that did this named Multisim, so I looked it up. After doing some research about Multisim, I learned that it does not take pictures of a schematic, but it is an app where you build the circuit out in their program, which then calculates all the voltages and other measurements that you need. In order to create an app that allows the user to take pictures of schematics, and get their desired output, I would have to relearn physics, computer vision, probably artificial intelligence or machine learning, and then get all these things working together in order to make something that the user wanted. I decided that this app idea was not for my team members and I.

After brainstorming a bunch of ideas, my teammate Tere and I came up with two ideas. One app idea was an app that would give you directions to the closest and cheapest gas station with a single click, without having to search for anything. The second idea was a combat sport matching app, which would match you with other people with similar sparring experience and

knowledge, based on your profile, in order to find a sparring partner. The first idea already had

an app that did something similar to this, called GasBuddy. This app would help you find the

closest gas station, and would also give you discounts on gas prices, such as $0.25 off per gallon.

With these offerings, we would not be able to make a much better app than that, which could also

compete. This then led to the decision to create the sparring partner matching app, which we

decided to call Sparring Buddy (name still to be determined).

So to begin our process, we first created a layout of how we wanted the app to look and

feel. We created a png file that was a mock up of what the layout would look like.
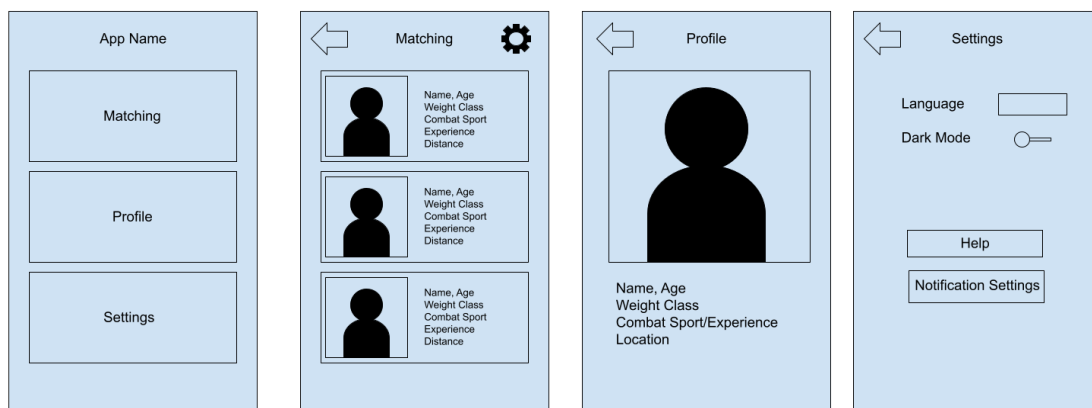
After that we did research on what APIs we would need in order to create this app. We then

decided that we would need location APIs and database APIs in order to store the users profile so

that we could match two different people up. We also wanted to add a chatting function in order

for the users to chat with the matches so they could decide where to meet up and spar. We looked

at a bunch of database APIs such as SQLite (Save data using SQLite | Android Developers) and

android.databases (android.database | Android Developers). We also looked online at how to

make chatting apps. We looked at videos and websites such as [How To Build an Android Chat App using a Chat API - Step by Step Guide (mirrorfly.com)](https://mirrorfly.com).