Tech Basics 1 - Project Documentation

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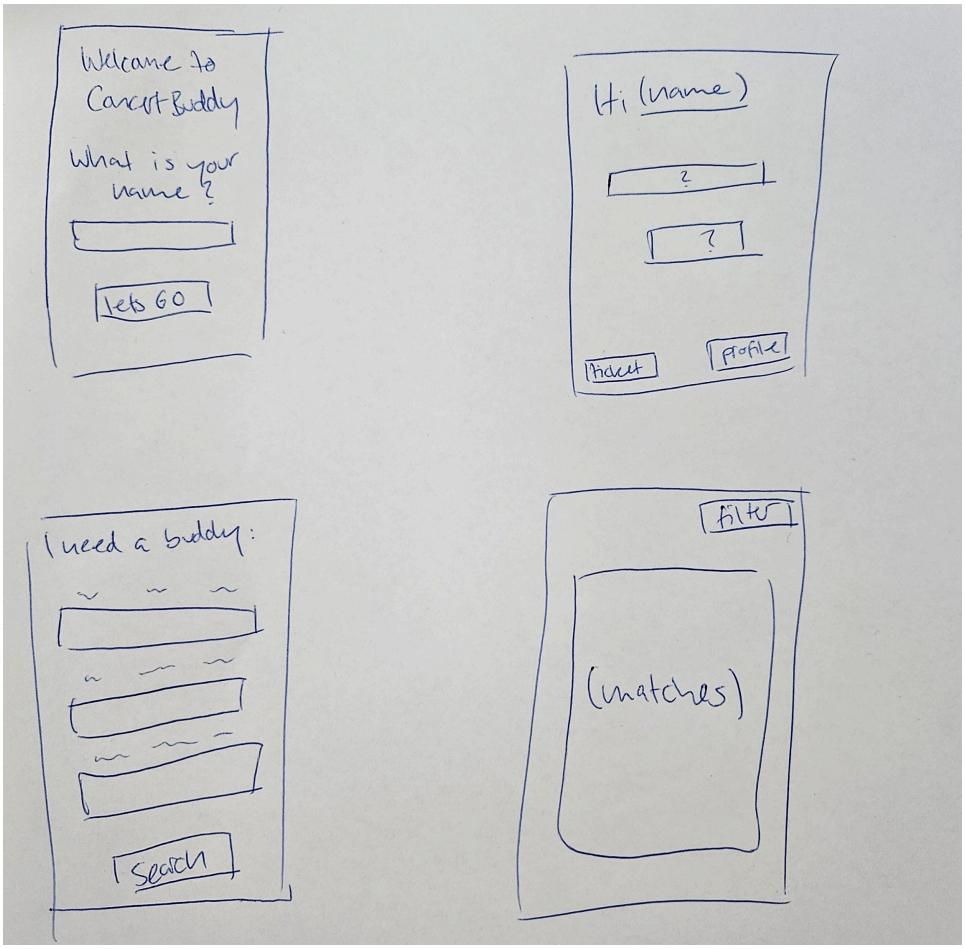
Sketches



Development process and challenges

The idea for this project originated from the fact that I like to go to concerts and often do it alone. But sometimes it is nice to get to know new people through the experience of going to a concert together. The basic idea of the project is quite simple. By adding the application of choosing interests, I wanted to make sure that potential users had things in common with their matches. Even if you like the same artist and go to their concert together, it could be kinda uncomfortable if you do not match otherwise.

When I started working on *ConcertBuddy*, the first thing I did was to set up a basic Tkinter window. I defined the size, added a background image, and just made sure that the overall layout was ready to build on. After that, I focused on the first page where the user gets a welcome message and can sign up by entering their name, age, and gender. This was basically the entry point into the app.

Once the input fields were in place, I added a button that takes the user to the next page. To make the navigation smooth, I had to destroy the old widgets and replace them with new ones. At first this was a bit tricky, because some elements overlapped when I forgot to properly remove them. After a bit of debugging, I solved it by carefully destroying each widget from the previous page before creating the new ones. On the second page, the app greets the user by their name and asks if they're ready to find a concert buddy. Here I also introduced extra options, like going to a ticket sale page or checking out the profile page.

The next big step was to build a page where the user could enter concert details. I added fields for the artist, the location, and the date of the concert. There are also placeholders for choosing interests and seating options, which can later be turned into real drop-down menus. One small challenge here was to keep track of the variables, since Tkinter requires a "StringVar" for input boxes. At first I mixed them up with labels, which caused some errors, but I managed to fix it by clearly separating inputs and outputs into different variables. Even though some parts are still mockups, it gives a clear idea of how the app would collect the important data.

After filling in the concert info, users can move on to the search page. Here I imagined that they would see other profiles of people attending the same concert and be able to swipe left or right to connect. I also included a filter button that would allow users to refine their search by age, gender, or interests. Besides the main buddy-finding feature, I also experimented with additional pages. For example, I created a placeholder ticket sale page, which could later be expanded, and a profile page where I thought of showing Spotify or Apple Music data from the user. This shows how personalization could be integrated in the future.

Altogether, the project developed step by step from a simple Tkinter window into an interactive prototype that shows the basic flow of how people could use *ConcertBuddy* to find someone to enjoy a concert with.

Future developments/limitations

Right now the program is more like a demo and many functions are only shown with text. For example, the filter page only says that the user could filter by age, gender and interests, but it does not really do anything yet. One limitation is that all the data is not saved anywhere. If you close the program, everything is gone. Also, the matches that are shown are not real users, but just placeholder text.

In the future there are many things that could be improved. A next step could be to actually connect the input fields (age, gender, interests) with the search results. That way the filter button would work for real and the user could only see profiles that match what they selected. Another development could be to add a small database or file system, so that profiles and concert information are saved and loaded again.

It would also be possible to make the interface more interactive, for example adding real swipe left/right functionality or connecting the app to an online service where other users are stored. The design could also be improved with more images, icons, and maybe even a responsive layout. Later on, one could think about making a mobile version or turning the prototype into a real web application.