

Knitting Journal

For the Tech Basics II project, I created an MVP that builds on my Tech Basics I project: the “Knitting Journal”. Therefore, I have oriented myself on the main features of my Tech Basics I project: namely a “Log In”; the “Diary”, in which you can write your updates and progress on current knitting projects; the “Projects”, where you can view all of your previous projects / diary entries; the “Project Generator”, that gives project ideas by randomly choosing a color and project; and the “Inspiration”, that gives inspiration on projects and also contains instructions on how to knit these specific projects.

Additionally, for the MVP I added the section “Tips & Tricks” to have more general information and tips for knitting and a “Log Out”-Button.

In order to create the MVP, I had to think about how the final result should look like as streamlit has a very different interface than Tkinter. I decided to create a “Welcome”-page that gives general information on what the MVP’s purpose is and contains the “Log In”-button to get to the “Log In”-page. After a successful log in the main app starts. I decided on using the sidebar function to give an overview of all the features available.

For most of the logic I was able to build upon the code from last semester or at least use it for orientation, however, that was not possible with the “Log In” page due to the “Log In” not working properly in the last project. When pressing the button, it immediately went to the main page, which showed all the features. For this project I wanted to have a “Log In” page that actually works, so that you are only able to access the features after creating an account and logging in. To achieve that I used the log in page we did in class for orientation.

While doing the MVP a few challenges occurred:

The first one was about editing the text in streamlit to make the app look more appealing to the user. Therefore, I used the `st.markdown` function, which allowed me to change the size, color, etc. of my texts. To understand and make use of all the possibilities `st.markdown` offers I used the following reference: <https://www.youtube.com/watch?v=OWWGhqL5yIY> and improved some design with the help of ChatGPT.

The second challenge that occurred was not about the visual but for the actual logic to work, namely saving information in order to use or show it for later use. This function is very important for my code as it is needed for most of my features to work properly. To understand

how to use that, specifically the `st.session_state` function, in the code I used the following reference:

https://docs.streamlit.io/develop/api-reference/caching-and-state/st.session_state as well as ChatGPT.

Another challenge that I was facing during the process of coding was about uploading images and files to streamlit. The general command `st.file_uploader` was easy to implement in the code. Nevertheless, I had some difficulties with opening or resizing the images. To fix these problems I used ChatGPT.

Eventually, the MVP fulfills its functions and does not contain any placeholders that have been there in the project from Tech Basics I.

Image References:

Scarf: <https://in.pinterest.com/pin/746049494554274139/>

Beanie: <https://www.pinterest.com/pin/281543722783987/>

Pullover: https://www.instagram.com/p/DA8_KU_RlWs/?img_index=5

Gloves: <https://www.zalando.ee/lascana-sormkindad-blau-l8351a000-k11.html>