

**Leuphana University Lüneburg**

**“My Friendly Coworker”**

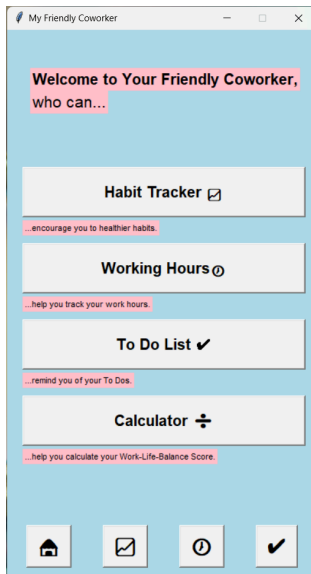
**Finished MVP for an app supporting work-life-balance**

Report for the seminar  
“Tech Basics II, Stream B”

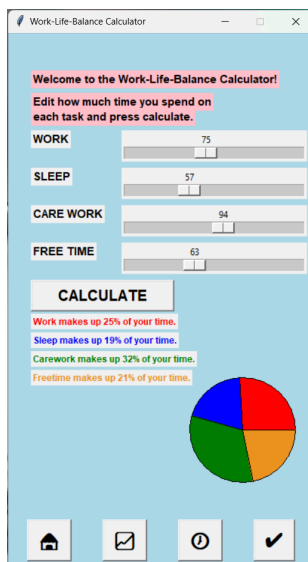
Module “Technological Basics II”  
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## Introduction and Design



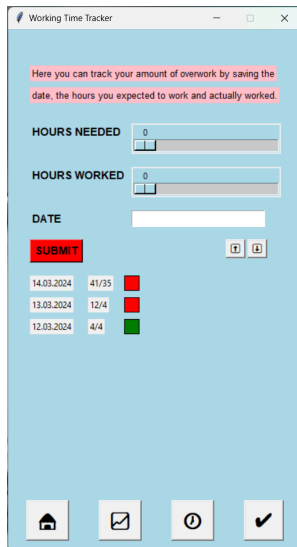
As the struggle with Work-Life-Balance has accompanied me and many other people, I decided to create an app based on what friends said about, what they struggle with, when it comes to maintaining a good Work-Life-Balance. The app should help you with your orientation in daily work life and to collect data for you to analyze about your work behavior. I pitched the app in class and I am continuing my project from Tech Basics I.



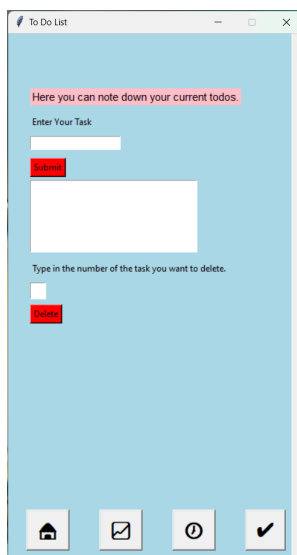
The main functions are firstly the calculator that is for data visualization and is supposed to help you as a planner tool to try out different ratios of work hours to sleep hours to free hours and care work hours, which is everything that you do at home, caring for the household or the family. Through the visualization, you get feedback and hopefully it helps you better imagine your days and how you spend them in total and can then rearrange accordingly.

The screenshot shows the 'Habit Tracker' app screen. It has a light blue background and a white header bar with the title 'Habit Tracker' and window controls. Below the header, there's a welcome message: 'Here you can track your habits by submitting a new habit and ticking the ones you did.' The main area contains a form with a date input field (value 3/2024), a text input field for 'Enter Your Habit for the Week!', and a section for 'Enter the frequency' with a 'Submit' button. Below this, there are two rows of habits: 'jogging' and 'drink water'. Each row has a checkbox and a frequency input field. The 'jogging' row has a checked checkbox and a frequency of 5 (represented by five small squares). The 'drink water' row has a checked checkbox and a frequency of 3 (represented by three small squares). At the bottom, there's a navigation bar with four icons: a home icon, a document icon, a clock icon, and a checkmark icon.

Then there is the habit tracker, where you can save habits you want to implement in your daily life every month. Then every time you act out one of these planned habits, you can check a checkbox in the app and track your progress. This can help implement good habits, like drinking more water or making more pauses, depending on the user's own needs.



There is also a tracker, to write down your work hours everyday, so you can keep track of overtime. It is supposed to show you a green light, if you have worked exactly as much as you were supposed to, then a yellow light, if you worked less and a red light if you worked more than needed. Through looking through your entries, you can then see whether you maybe need to change something about your work hours and address this accordingly.



And lastly, there is the to-do-list app, which is just a simple editor, where you can write down some todos and delete them, when no longer needed. This is just to add a tool for planning during daily life and keeping all the information together in one app.

The design is supposed to be in a smartphone format and very clean and with no distractions from the functions. The functions should be explained as a reminder for the user, even when the user probably is familiar with all the functions from other apps. It is also supposed to be fast and easy to understand.

## Methodology and Limitations

I created all the functions of the app, based on what we learned in the seminar about Python and Tkinter. The todo app was one of the first created and it is heavily based on a todo app I found on the internet, but all the code used from other sources is clearly cited in the code. And normally I just used the documentations of tkinter to find out about widgets I could use. I decided to split the code into multiple scripts, as

it was easier to work with and provided me with the opportunity to learn how to organize my code and work on separate functions in separate files. As I already had developed the main page in the first semester and also the switching between the frames, I could now concentrate on the functions and work through them by first always creating a definition that creates all the widgets for the page, then continuing with making more definitions that get executed, when the buttons are clicked and then I experimented with how to store and access the data from the entry fields the best, so that they are still there even if the page reloads. I also made a function for the reloading process, as I used that quite often. And I disabled the possibility to resize the window, as I did not optimize it for other formats.

When friends tested the app, they said that it was simple and good to use, especially since you can easily switch between the pages through the shortcut on the task bar on the bottom.

My biggest limitation was that I could not figure out how to remove the taskbar from the home screen, but this would be for future development and I will definitely give it another try, when I have no time pressure. The data is also only stored in the session and is not retrieved when closing and opening the app again, but I was not able to implement that with pandas, so another time, when I am not limited by the class's contents, I would try to work with json files to make it work.

In total, this project helped me further develop my understanding in python and tkinter and how to organize myself to develop a MVP that can be used to showcase the functions and sell my product.