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App-Development Report

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1. Introduction & Feedback

The project for our MVP began with the idea of bringing people and pets together with the intent of creating and sharing happiness. As we both are very fond of cats and dogs and share the experience of an endorphin boost through cuddling a furry friend we wanted to build an app that incorporates this. Living as a university student and struggling with owning a pet, the thought of pet-sitting came to mind. In China, the market for dog-walking services has been rapidly growing through college students offering their time to entertain pets and expecting no money in return. The concept of sharing happiness, not money, solidified our approach and we came up with the name of our app "Petorphine". This app should be a place for busy pet owners that are desperate for a break and pet lovers in need of some petorphine to meet and help each other.

After presenting our idea in the seminar, the feedback we received gave us a clear view into which direction we should continue to develop our project. While the idea of pet-sitting and sharing happiness was well received, the focal point of positive feedback and excitement came from our plan called "Track & Pet". This should be a feature within our app that allows the user to track any available pets within their proximity and be able to stop by for a quick petting and happiness boost. An app for pet-sitting had already been done many times but the ability to track and cuddle pets was entirely new. The focus of our app was for pet-sitting and -petting to become easy and free. A community that exchanges happiness and petorphine.

About the feedback of GPS triggering safety issues to both the owners and the pets, we had limited the target audience to university students and staff, hopefully creating a more safe and trusting environment for the users. Receiving more feedback from other testers, the lack of review page had been mentioned which supposedly users should be able to check and get reminders of when and where their pet sitting would occur. Even though the map on the app right now is merely a simulation, advice of highlighting frequent or popular users and pets were given. Also, to further advance the GPS map so it can incorporate more interactive features like a profile would pop up.

Same as the advice we have received from the class, testers had also shown affection to the idea of quick and easy petorphine boost. More positive feedback came from our photo gallery and the profiles of best pet-sitters being publicly shown. This creates a feeling of familiarity and safety within our app's community. In the future it would be a great option for

users to upload more of their own photos and interact with other users without needing to match.

2. Efforts & Limitations

While one big part of our app was the idea to track pets within a user's area, the implementation of that turned out to be much harder. The goal was to create a functioning and interactive MVP, therefore we had to make due with the features which the streamlit platform provided. The interactivity focus shifted from a system to track the locations of pets as well as the concept of finding a match for the pet-sitting service, to the overall exploration of our idea and app. Since the execution of a tracking service via streamlit was not possible with our obtained knowledge, we decided to mimic this feature. We built a map to simulate the location of pets and included an interactive option for the user to turn their own pets location on or off. This should represent our original idea even without the actual tracking service working. We explored the streamlit library and additionally learned new skills from youtube videos to create our app.

One limitation presented itself through one of our laptops, which lacked the ability to function properly with the streamlit platform. Unfortunately many streamlit features did not work and the launched display of our app looked entirely different in comparison to the other laptop. Fortunately due to pairing as a group we were able to primarily work on one laptop, however this meant that separate and individual work on the project was much harder to accomplish. In the end we opted for completing most of our features together and not only combining parts once finished.

The last problem we encountered was the deployment of our app on streamlit. Streamlit did not let us execute our entire code so we had to leave out some code from the login page to be able to deploy it. Because we worked with firebase to save the users login data we had trouble hosting since it doesn't recognize the module of firebase. When executing the code via pycharm the option to save data worked smoothly and the limitation only arose while deployed in streamlit.

3. Bibliography

References:

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https://catinaflat.de/

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"Pet Sitters & Dog Sitters in Hamburg." n.d. Pawshake: https://en.pawshake.de/petsitters/hamburg-hh

"Streamlit • a Faster Way to Build and Share Data Apps." n.d. https://streamlit.io/

Code References:

Code to build streamlit map:
https://docs.streamlit.io/library/api-reference/charts/st.map

Code to build streamlit toggle:
https://docs.streamlit.io/library/api-reference/widgets/st.toggle
Code to build streamlit columns:
https://docs.streamlit.io/library/api-reference/layout/st.columns

Code to build streamlit balloons:
https://docs.streamlit.io/library/api-reference/status/st.balloons

Code to build streamlit info box:
https://docs.streamlit.io/library/api-reference/status/st.info

Code to build streamlit warning box:
https://docs.streamlit.io/library/api-reference/status/st.warning

Code to build streamlit warning box:
https://docs.streamlit.io/library/api-reference/status/st.success

Code to build streamlit date input widget:
https://docs.streamlit.io/library/api-reference/widgets/st.date_input

Code to build streamlit time input widget:
https://docs.streamlit.io/library/api-reference/widgets/st.time_input

Code to build streamlit profile:
https://www.youtube.com/watch?v=_Um12_OlGgw&list=PL-gsZF1Q4TxvGJf5HZwO7jYKlcfJJyrZ9&index=2&t=477s

Code to build streamlit login section:
https://www.youtube.com/watch?v=pdzGoozLEHU

Code to build streamlit login authentication with firebase:
https://www.youtube.com/watch?v=h-k4FBCkLDs

4. Eidesstattliche Erklärung

Eidesstattliche Erklärung Liv Gahleitner Matrikelnummer: 3047958 und Ching Pui Ying Matrikelnummer: 3049008. Hiermit versicheren wir, dass die Arbeit – bei einer Gruppenarbeit der entsprechend gekennzeichnete Teil der Arbeit – selbstständig verfasst und

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