



Concept

,,Hamburg Football Buddy”

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Course: Technological Basics 2

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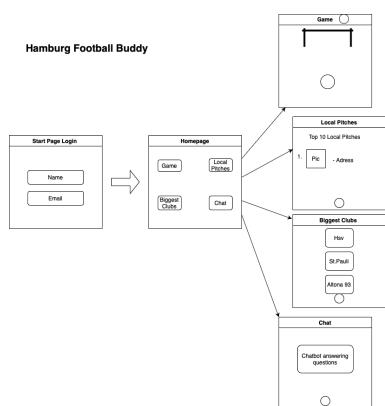
Matriculation No.: 3030622

Introduction

For many people in Germany, football is very important and it is seen as the most popular sports. Hamburg has also a large football tradition and has some of the most famous clubs in Germany. There is a huge community around football in Hamburg. There are a couple hundred clubs and thousands of football players in Hamburg. This could be a little bit overwhelming, especially for people who are new to the city. Since I'm also a great football fan by myself and also played football for a long time, I also encountered the problem many times to be in a new city and have some basic questions about football in this city. Questions like which are the biggest clubs one should know or where are the best football pitches in the city are very common for a football fan, who is coming to a new city. So I thought of an easy to understand app which helps football fans / or people interested in football which are new in Hamburg to get a better understanding of the local football in Hamburg. Also the app should just be easy to use and also fun while using. That's how the whole idea of the „Hamburg Football Buddy” started.

Methodology

For this app / GUI I used the Tkinter library. Since there are a lot of options in Tkinter on how to approach this basic idea of the „Hamburg Football Buddy”, first of all it is important to specify what exact functions the GUI should have. So for that I used Draw.io to design a graph which shows the exact path of the user journey and also which functions I wanted to have in the GUI.



So this graph really helped me because then I knew exactly what I wanted to build and how each step should look like at the end. After this part I checked again

everything we did in class together and what could be helpful for me for these specific functions. Also I did a tiny research again which basic options are available in Tkinter.¹ After the little research I was more clear about what functions I would choose for this project. I decided that my focus is mainly on a fun game and on good information in the „biggest club” and „local pitches” section. I didn't want to make it too fancy or complex because the GUI should be easy to use and very understandable. That is why I also decided to not integrate the chatbot function, as I first planned, because I didn't feel it was necessary for the app and wouldn't be very useful. Also I wanted just to focus on HSV and St.Pauli because these are the biggest clubs. Also I decided to not use pictures of the football pitches on the page „local pitches” because I couldn't find pictures of the football pitches I mentioned. So to build my app I chose the tkinter libraries as we were supposed to do. Then I installed pygame and imported random to create the gaming parts and that was all I needed in order to build the functions. In general I tried to have more fun with my work this time and be more creative than in techbasics1. Since football is important to me, everything was going with more ease for me and I enjoyed the process of developing. Still in the beginning I was a little bit overwhelmed by the possible functions the app could have, because football is such a broad field. This was a little bit challenging but then I just thought about which functions I would find helpful as a football fan by myself and also focused on Hamburg and making the app local and fun.

Design

Since my main goal was to create an easy to use and helpful little app for football fans which are new to the city of hamburg, I also wanted to make it simple design wise. My focus was more on clear information and an easy user journey in the app. Still I wanted to give it a local touch by using pictures and informations of the biggest local football teams in Hamburg, which are HSV and St.Pauli and also by giving information about the top 10 local football pitches in hamburg.

¹ <https://www.geeksforgeeks.org/introduction-to-tkinter/?ref=lbp>

In the first step I ask the user for commitment by asking if they love football, which they obviously need to answer with yes. This felt like a fun start into the app for me. By pressing the yes button, the user gets to the homepage where it is very clear and easy to navigate. Each button leads to a new page. The two main information parts are the sites „biggest clubs” and „local pitches”. On the „local pitches” page I decided to make it very minimalistic and completely focused on the information, by creating a list of labels with basic information and also a ranking with a rating of stars to show the user, which are the best local pitches. Information about the best local pitches to play football on in Hamburg, is very helpful because when you are new to town, you don't really know where it is best to play football.

On the „biggest clubs” page I wanted to give the user a feeling of the two biggest clubs in Hamburg, which are HSV and St.Pauli and also give a feeling about how different they are compared to each other. This should also give the user a vague idea how the rivalry between these two clubs is. After giving information to certain topics, the user should decide if the user is more „Team St.Pauli” or „Team HSV”. This should again give the user a funny experience and make the page more vivid, rather than just giving pure information. After the user chooses which team the user prefers, the user gets to a new page. These two pages are a little Mini game, where the user sees the logo of each club flying around in their stadium while playing the hymn of the each club. This helps the user to get a better feeling of the two clubs.

On the last „game” page I just tried to be a little bit creative and make the app more fun in general by creating a simple football game, where the user needs to score a goal. To make it harder for the user, there are a lot of defenders which are not allowed to contact, otherwise the game restarts. Furthermore the goal is moving fast from side to side and with every score the goal is even moving faster so the level of difficulty increases. Another difficulty is that the defenders are placed randomly and sometimes even stand right in front of the goal, which makes it harder to score. The game is of course branded in brown and blue, like St.Pauli and HSV.

Limitation

Of course I could have built so much more into the app but as I mentioned before I wanted to keep it simple. Still I would like to add some function of community, because football is all about community and the fans. This part I couldn't really show

in my app because I wasn't sure on how to approach this. This could be definitely something which could be built into the app in the future and would be very useful. Especially in the local context of Hamburg, this would make a lot of sense.

References for the Code

1. Code line 379-392 and following where this „QUIT” button and draw rectangle concept is used

<https://www.geeksforgeeks.org/how-to-create-buttons-in-a-game-using-pygame/>

<https://www.geeksforgeeks.org/how-to-draw-rectangle-in-pygame/>

2. Code line 504-509 where the random function is used

<https://www.geeksforgeeks.org/python-randint-function/>

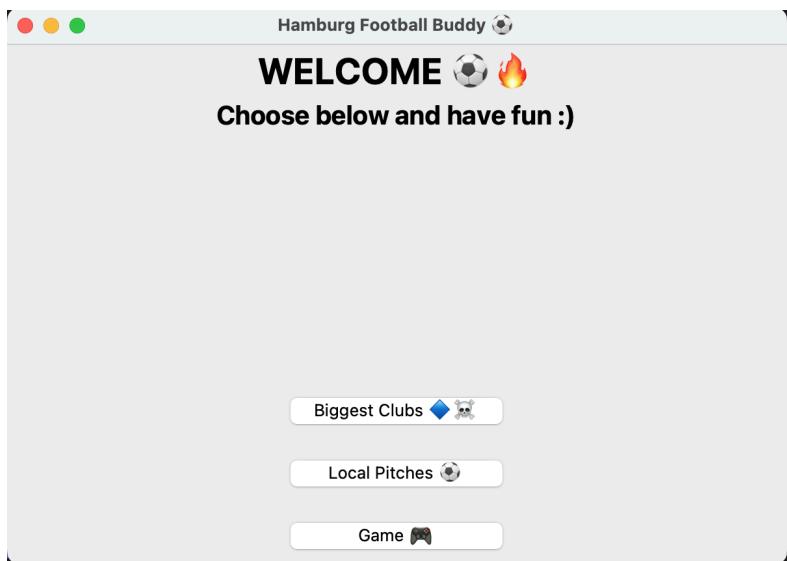
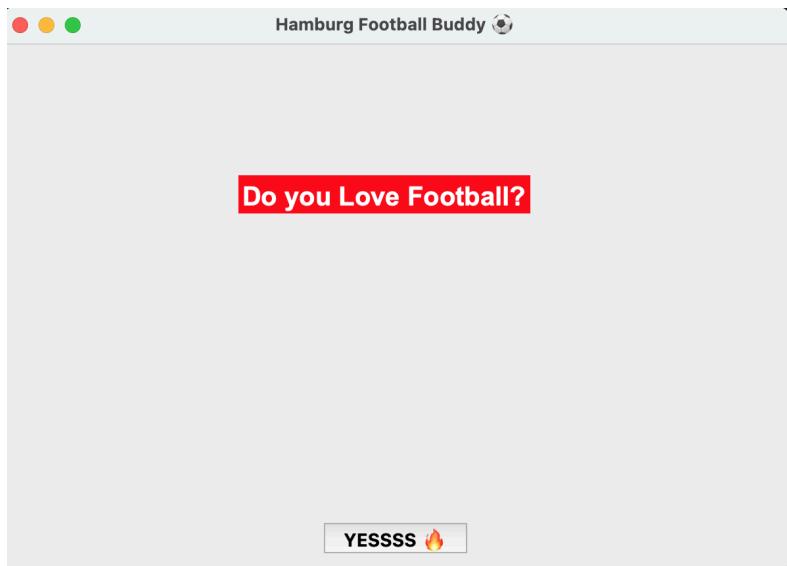
3. Code line 543 - 566 where the mouse is used in the „game”

<https://www.geeksforgeeks.org/pygame-set-mouse-cursor-from-bitmap/>

4. Code line 574-579 and following where this draw objects concept is used

<https://www.geeksforgeeks.org/pygame-drawing-objects-and-shapes/>

GUI Screenshots



Hamburg Football Buddy

BIGGEST CLUBS ♦️ 💀

Are you Team HSV OR Team St.Pauli? 🙄

Founding Year 📆 : HSV: 1887 | St.Pauli: 1910

Trophies 🏆 : HSV: 20 | St.Pauli: 9

Actual Division 🇩🇪 : HSV: second (2. Bundesliga) | St.Pauli: second (2. Bundesliga)

Stadium 🏟 : HSV: Volksparkstadion, Capacity: 57.000 | St.Pauli: Millerntor, Capacity: 29.546

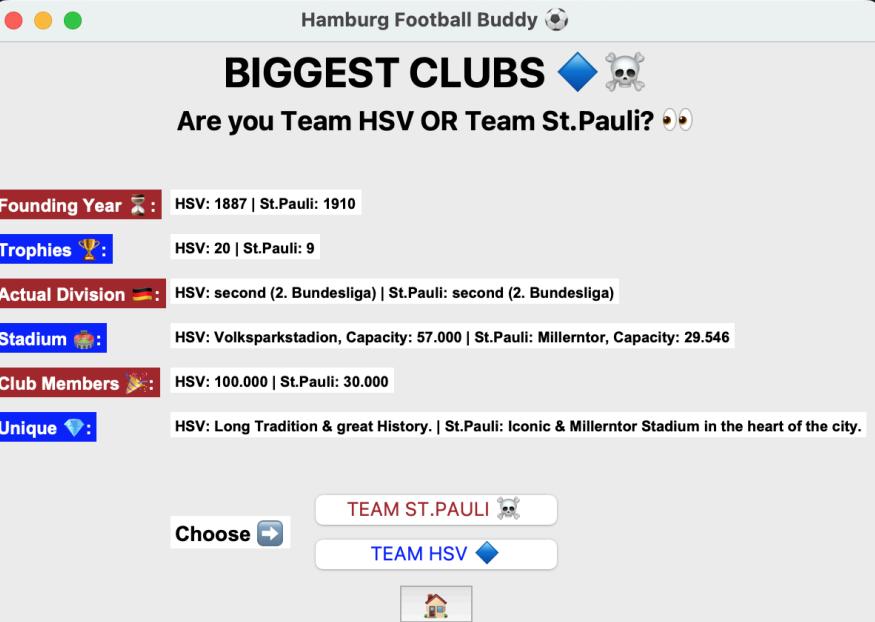
Club Members 🌟 : HSV: 100.000 | St.Pauli: 30.000

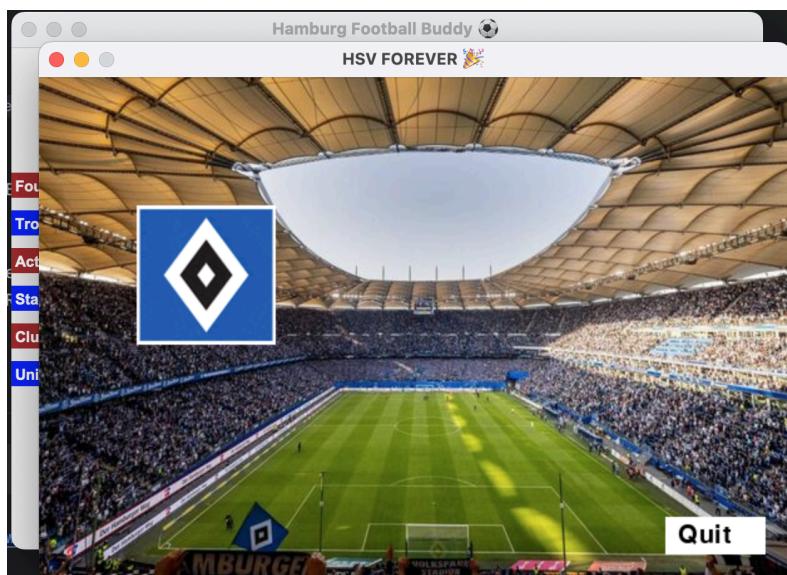
Unique 🎯 : HSV: Long Tradition & great History. | St.Pauli: Iconic & Millerntor Stadium in the heart of the city.

TEAM ST.PAULI 💀

Choose ➔

TEAM HSV ♦️





Hamburg Football Buddy

BEST LOCAL PITCHES ⚽

OUR TOP 10..

- 1 Adress: Laeiszstraße, 20357 Hamburg | Description: Tartan Ground in a cool neighborhood | Rating: ★★★★★
- 2 Adress: Rutschbahn, 20146 Hamburg | Description: Iconic Ground with a tree in the middle | Rating: ★★★★★
- 3 Adress: Kellinghusenstraße, 20249 Hamburg | Description: Completely new & very clean | Rating: ★★★★★
- 4 Adress: Fischers Park, 22763 Hamburg | Description: Green Tartan & always busy | Rating: ★★★★★
- 5 Adress: Brunnenhofstraße, 22767 Hamburg | Description: Cage Football Ground | Rating: ★★★★★
- 6 Adress: Silbersackstraße, 20359 Hamburg | Description: In the Heart of St.Pauli | Rating: ★★★★
- 7 Adress: Sternschanze, 20357 Hamburg | Description: Real Grass & huge pitch | Rating: ★★★★
- 8 Adress: Am Inselpark, 21109 Hamburg | Description: In the midst of a big park | Rating: ★★★★
- 9 Adress: Festland, 22767 Hamburg | Description: Artificial Grass & renovated | Rating: ★★★★
- 10 Adress: Kieler Straße, 22525 Hamburg | Description: Street Football feeling | Rating: ★★★★

