

INSTITUTO INFNET

ESCOLA SUPERIOR DE TECNOLOGIA

GRADUAÇÃO EM CIÊNCIA DE DADOS



Desenvolvimento Front-End com Python (com
Streamlit) [24E3_1]

AT

Alunos: Gustavo Carneiro Alves.

2024

Link

https://github.com/GustavoAlvesInfnet/gustavo_alves_DR1_AT

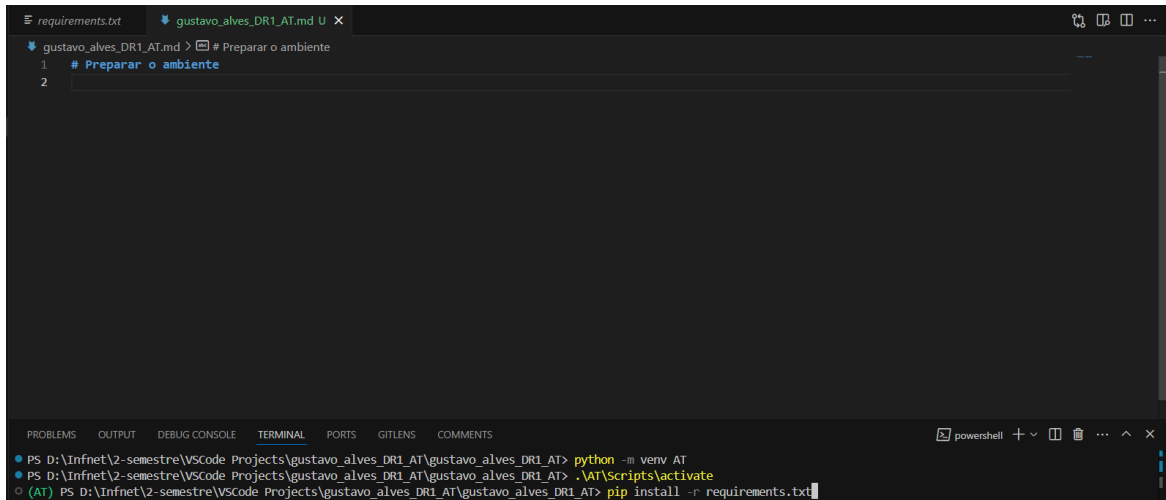
Github:

Link

<https://gustavoalvesinfnet-gustavo-alves-d-mainfootball-analysis-ojyba.streamlit.app/>

Streamlit:

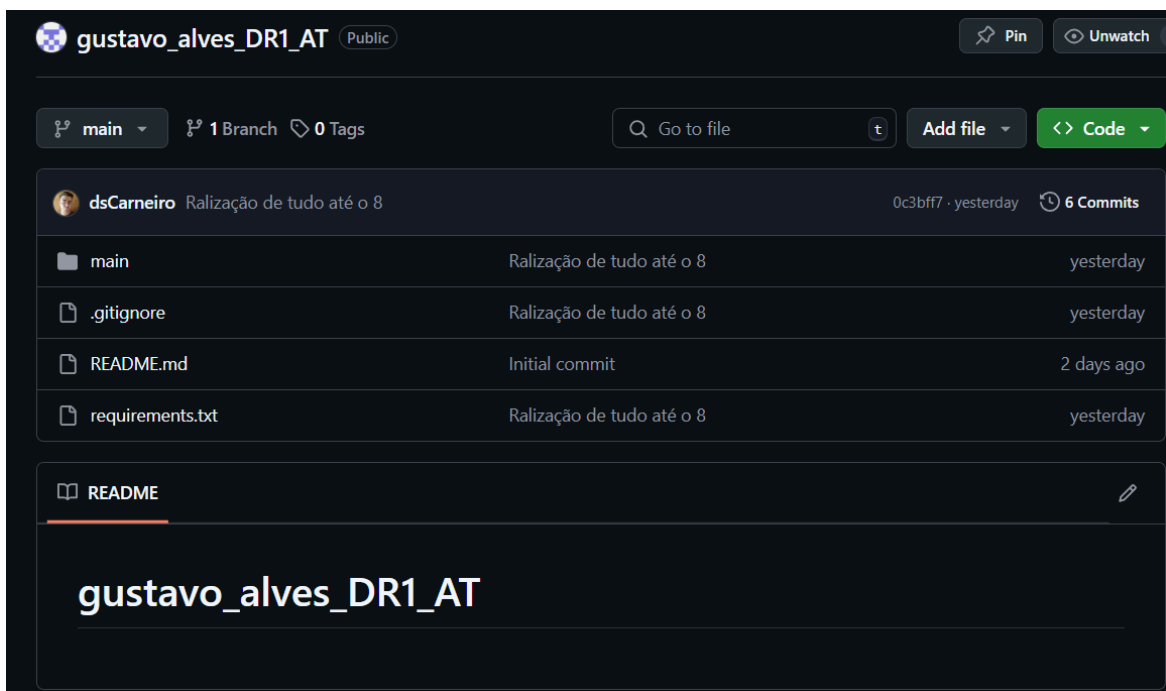
1



```
gustavo_alves_DR1_AT.md > # Preparar o ambiente
1 # Preparar o ambiente
2

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS GITLENS COMMENTS
PS D:\Infnet\2-semester\VSCode Projects\gustavo_alves_DR1_AT\gustavo_alves_DR1_AT> python -m venv AT
PS D:\Infnet\2-semester\VSCode Projects\gustavo_alves_DR1_AT\gustavo_alves_DR1_AT> .\AT\Scripts\activate
(AT) PS D:\Infnet\2-semester\VSCode Projects\gustavo_alves_DR1_AT\gustavo_alves_DR1_AT> pip install -r requirements.txt
```

2 https://github.com/GustavoAlvesInfnet/gustavo_alves_DR1_AT





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DR1 AT - Análises de Futebol

Explore os dados sobre as partidas e torneios

Selecione a competição

1. Bundesliga ▾

Selecione a Temporada

2023/2024 ▾

Selecione a partida

2024-04-14 - Bayer Leverkusen vs Werder Bremen ▾

Download dos dados da partida

[Informações sobre a partida](#) [Formulário sobre os jogadores](#) [Tabelas](#)

Informações sobre a partida 2024-04-14 - Bayer Leverkusen vs Werder Bremen na competição 1. Bundesliga na Temporada 2023/2024

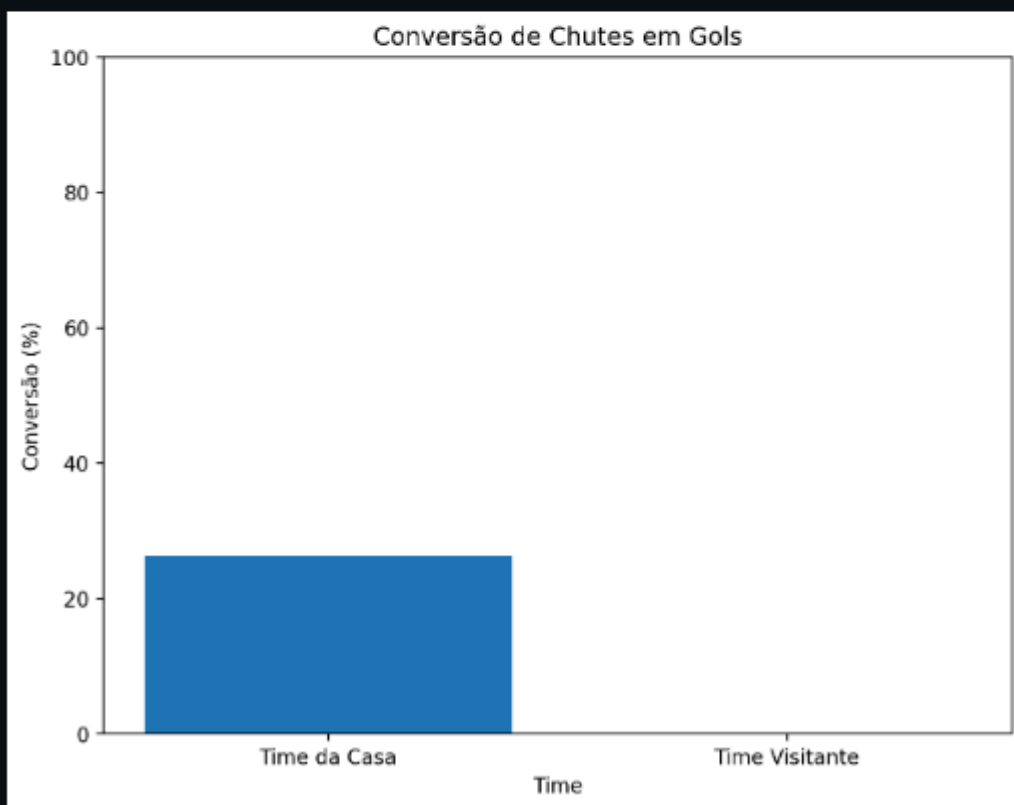
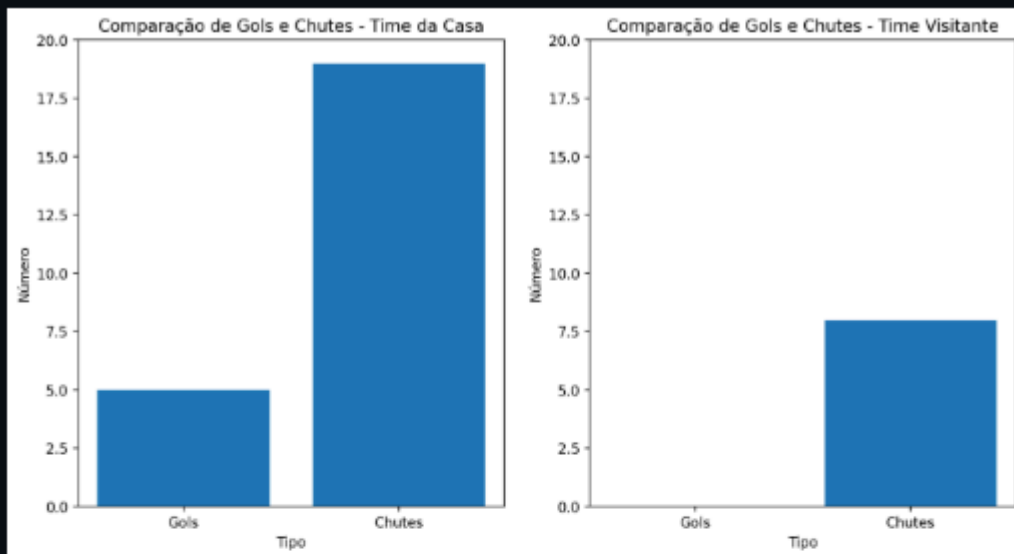
Time da Casa	Time Visitante
Bayer Leverkusen	Werder Bremen
Gols:	Gols:
5	0
Passes	Passes

Eventos

	50_50	bad_behaviour_card	ball_receipt_outcome	ball_recovery_recovery_failure	block_deflection
0	None	None	None		
1	None	None	None		
2	None	None	None		
3	None	None	None		
4	None	None	None		
5	None	None	None		
6	None	None	None		
7	None	None	None		
8	None	None	None		
9	None	None	None		

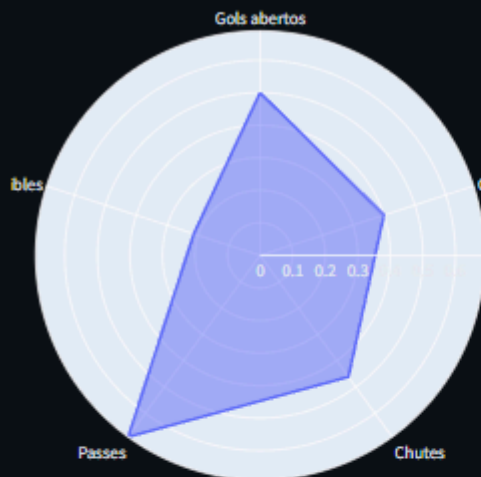


Análises

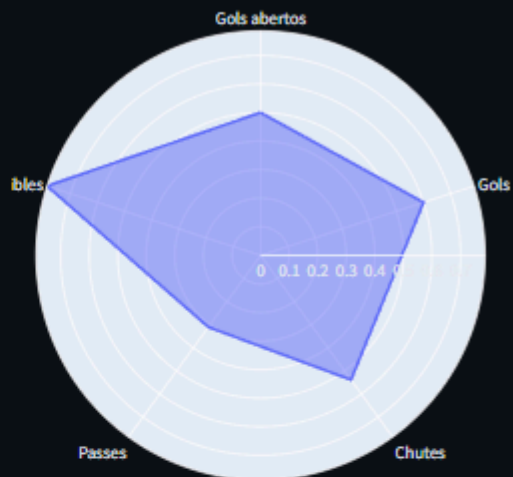


Estatísticas

Messi



Mbappé



Pontuação Final

Messi

2.27

Mbappé

2.73

Conclusões

Ambos possuem estilos diferentes, mas o Mbappé tem uma pontuação mais alta.

O Messi possui muito mais passes enquanto o Mbappé possui mais chutes, dribles e gols.

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Download dos dados da partida

Comparações individuais

Selecione um Jogador do time da casa

Granit Xhaka

Selecione um Jogador do time visitante

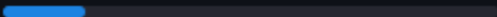
Dawid Kownacki

Selecione as estatísticas que deseja ver

Passes

Atualizar gráficos

Passes de Granit




Informações sobre a partida Formulário sobre os jogadores Tabelas	
Informações sobre a partida 2024-04-14 - Bayer Leverkusen vs Werder Bremen na competição 1. Bundesliga na Temporada 2023/2024	
Time da Casa	Time Visitante
Bayer Leverkusen	Werder Bremen
Gols:	Gols:
5	0
Passes	Passes
649	523
Chutes	Chutes
19	8

Comparações individuais

Selecione um Jogador do time da casa

Danilo Luiz da Silva 

Selecione um Jogador do time visitante

Marko Grujić 

Selecione o minuto dos eventos

0 56 120

Selecione as estatísticas que deseja ver

Passes  

Atualizar gráficos

```

Codeium: Refactor | Explain | Generate Docstring | ✕
@st.cache_data
def plot_passes(match, player_name):
    player_filter = (match.type_name=="Pass") & (match.player_name==player_name)
    df_pass = match.loc[player_filter, ['x', 'y', 'end_x', 'end_y']]

    pitch = Pitch(line_color="black", pitch_color="#799351", stripe_color="#799351", stripe=True)
    fig, ax = pitch.grid(grid_height=0.9, title_height=0.06, endnote_height=0.04, axis=False, title_space=0, endnote_space=0)

    pitch.arrows(df_pass.x, df_pass.y, df_pass.end_x, df_pass.end_y, width=2, color="white", ax=ax["pitch"])
    pitch.kdeplot(x=df_pass.x, y=df_pass.y, ax=ax["pitch"], shade=True, alpha=0.5, cmap="plasma")

    return fig

Codeium: Refactor | Explain | Generate Docstring | ✕
@st.cache_data
def plot_passes_team(match, team):
    player_filter = (match.type_name=="Pass") & (match.team_name==team)
    df_pass = match.loc[player_filter, ['x', 'y', 'end_x', 'end_y']]

    pitch = Pitch(line_color="black", pitch_color="#799351", stripe_color="#799351", stripe=True)
    fig, ax = pitch.grid(grid_height=0.9, title_height=0.06, endnote_height=0.04, axis=False, title_space=0, endnote_space=0)

    #pitch.arrows(df_pass.x, df_pass.y, df_pass.end_x, df_pass.end_y, width=2, color="white", ax=ax["pitch"])
    pitch.kdeplot(x=df_pass.x, y=df_pass.y, ax=ax["pitch"], shade=True, alpha=0.5, cmap="plasma")

    return fig

Codeium: Refactor | Explain | Generate Docstring | ✕
@st.cache_data
def plot_shots(match, player_name):
    player_filter = (match.type_name=="Shot") & (match.player_name==player_name)
    df_pass = match.loc[player_filter, ['x', 'y', 'end_x', 'end_y']]

    pitch = Pitch(line_color="black", pitch_color="#799351", stripe_color="#799351", stripe=True)
    fig, ax = pitch.grid(grid_height=0.9, title_height=0.06, endnote_height=0.04, axis=False, title_space=0, endnote_space=0)

    pitch.arrows(df_pass.x, df_pass.y, df_pass.end_x, df_pass.end_y, width=2, color="white", ax=ax["pitch"])
    pitch.kdeplot(x=df_pass.x, y=df_pass.y, ax=ax["pitch"], shade=True, alpha=0.5, cmap="plasma")

    return fig

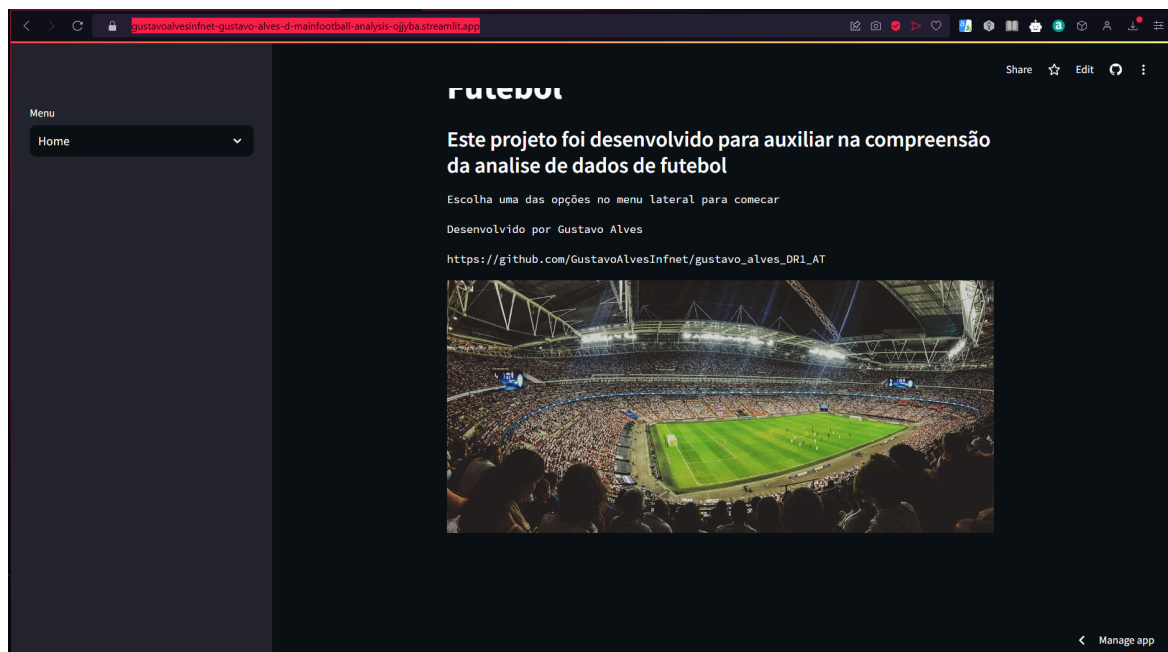
Codeium: Refactor | Explain | Generate Docstring | ✕
@st.cache_data
def plot_shots_team(match, team):
    player_filter = (match.type_name=="Shot") & (match.team_name==team)
    df_pass = match.loc[player_filter, ['x', 'y', 'end_x', 'end_y']]

    pitch = Pitch(line_color="black", pitch_color="#799351", stripe_color="#799351", stripe=True)
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    return fig

```



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Extra: Para rodar o código localmente é recomendável seguir quatro passos:

- Criar o ambiente virtual com: `python -m venv AT`
- Ativar ele com: `.\AT\Scripts\activate`
- Instalar o `requirements.txt` usando pip: `pip install -r requirements.txt`
- Por fim rodar o código usando: `streamlit run .\main\football_analysis.py`