



Data Analytics

Micro Project - FIFA Analytics

Introduction:

You and your team are employed at a data science company working together with different football clubs to further develop their inside into the club and the performance of the players. One day your company receives an offer from the EA-Sports who are currently developing a new marketing strategy for their new FIFA-Game. They would like you to find out if it's possible to predict a players performance based on the stats, they have carefully chosen in FIFA based on their former performances. You have been provided with the "data.xlsx" dataset and are now tasked to try to predict a players real life performance based on their FIFA stats and evaluate your results.

Tasks:

Your project should include the following points and should also be included in your project presentation:

- **Data Understanding and Cleanup:** Describe your dataset and give an insight into the data you're working with. This should also include visualization and giving an insight into its most important features.
- **Choosing a model:** Choose a model for your specific problem. This should include a definition of the prediction problem. Compare different models and explain which model you have chosen and why it's the best suited one for your project. Does the EA FIFA player profile match to the performance in real life? EDA, which features are best suited to compare the artificial and real-life data?
- **Evaluation:** Talk about the experiences you have collected during your project. What were your biggest challenges, how did you overcome them and talk about your biggest lesson learned during the project. Can FIFA be used as a digital twin of real-life football?
- **Creating a presentation:** Your presentation should include and represent the most important aspect of the tasks named above. It should also include a brief description of the single steps that you've taken to achieve your goals.

(Note: This project is meant to give you a head on approach on data analytics. Also, creative solutions such as feature engineering, the collection of additional data, etc. are welcome and will have a positive impact on the amount of bonus points you will earn from this project.)

Additional information:

The dataset you were provided with is split up into different sub tables. The “Gesamt” table provides you with the real-life performances of the players while most of the other tables give you information about their FIFA stats.