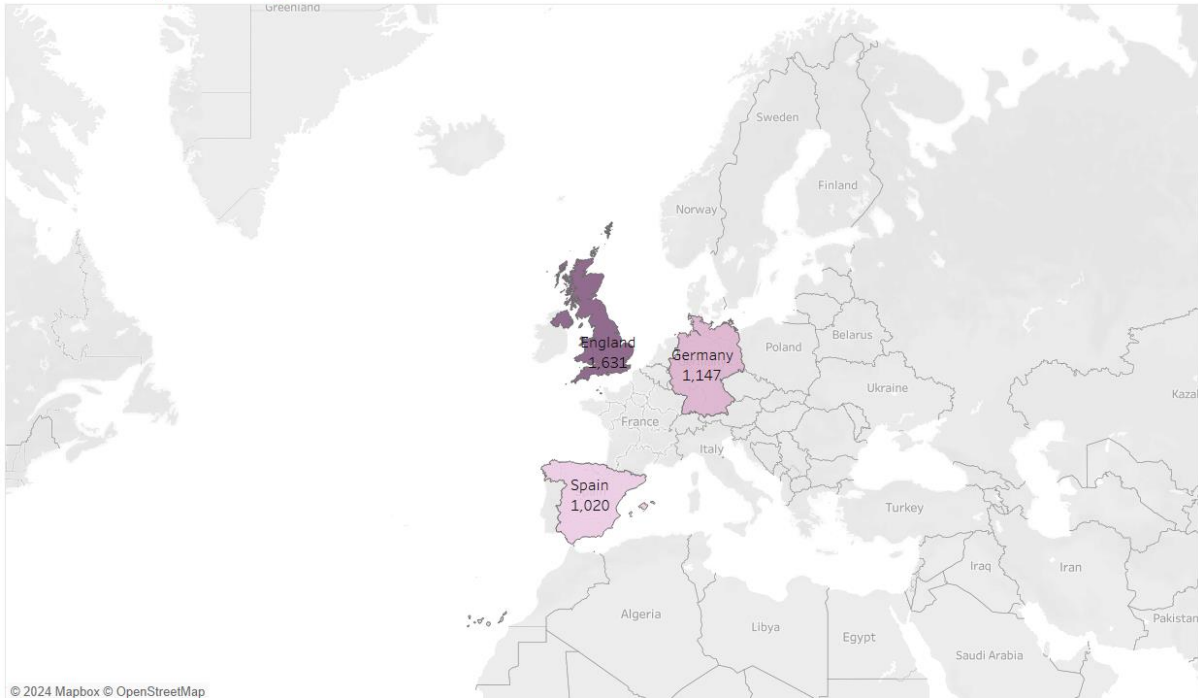


## Final Exam:

### 1. The World's Top Footballing Nations:

The World's Top Footballing Nations

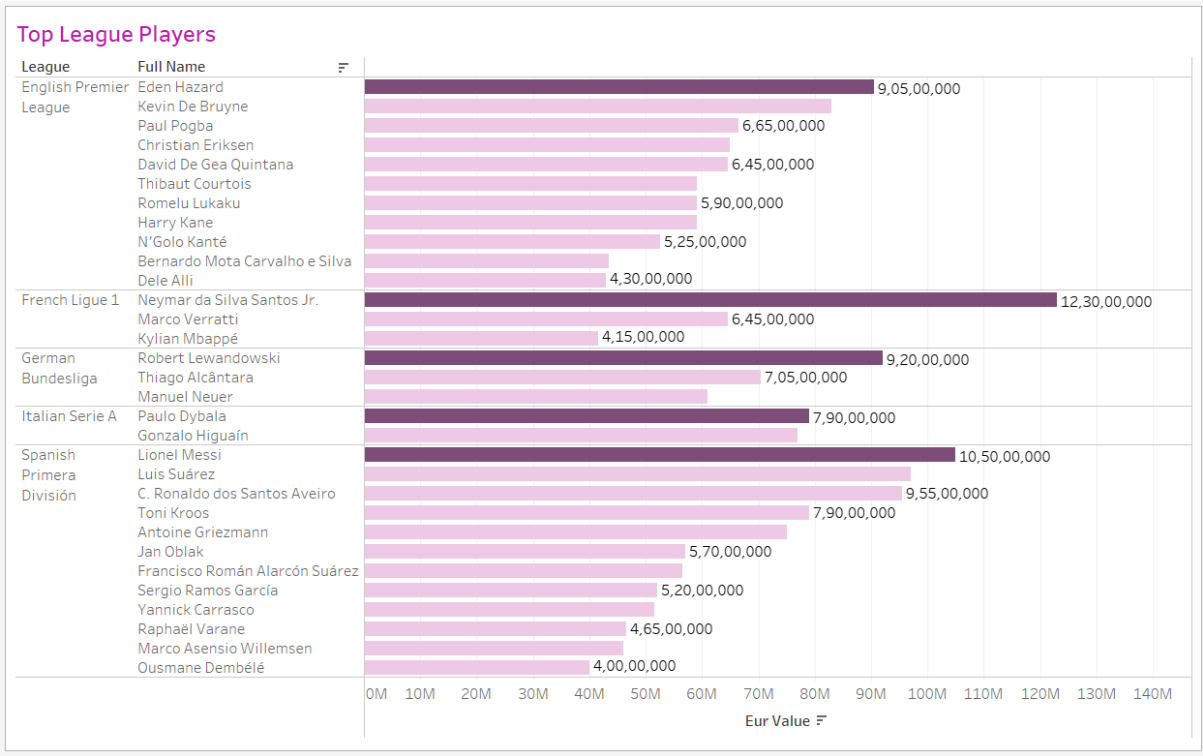


The above chart showcases the world's top footballing nations, known for their strong footballing traditions and high-level competitions. These countries produce some of the best players and teams globally, making their matches and tournaments highly engaging for football fans worldwide. Additionally, they have a rich football history with legendary players and iconic moments that have shaped the sport's development, creating nostalgia for long-time fans and educating newer fans about the sport's heritage.

The data provided in these charts can assist clubs in selecting players from these nations and generate more interest among fans and audience. Among all the nations, the data shows that

England has the highest number of players with 1631, followed by Germany with 1147, and Spain with 1020. England's dominance, in particular, reflects its deep-rooted football culture and extensive player development infrastructure.

2. Top League players:



In team selections, top league players are highly skilled and have proven their abilities in competitive environments. Including them enhances the chances of assembling a strong and competitive team that performs well in matches and tournaments. Moreover, these players often have a large fan base due to their popularity and achievements, leading to increased fan engagement and excitement among supporters.

Additionally, top league players bring leadership qualities and experience to the team, playing a crucial role in guiding younger or less experienced players and elevating the team's overall

performance. In the above chart, we have selected the top league players based on their Eur Value. The visualization allows filtering based on specific leagues or all leagues, providing a comprehensive view of the data as shown above.

The bar chart showcases the top players from various major football leagues and their market values in euros. Neymar from French Ligue 1 holds the highest market value at 123,000,000 Euros, followed by Lionel Messi from the Spanish Primera División and Paulo Dybala from Italian Serie A. This visualization highlights the significant financial worth of elite players across different leagues, underscoring their high value and importance to their respective teams.

3. The worlds most Renowned Players

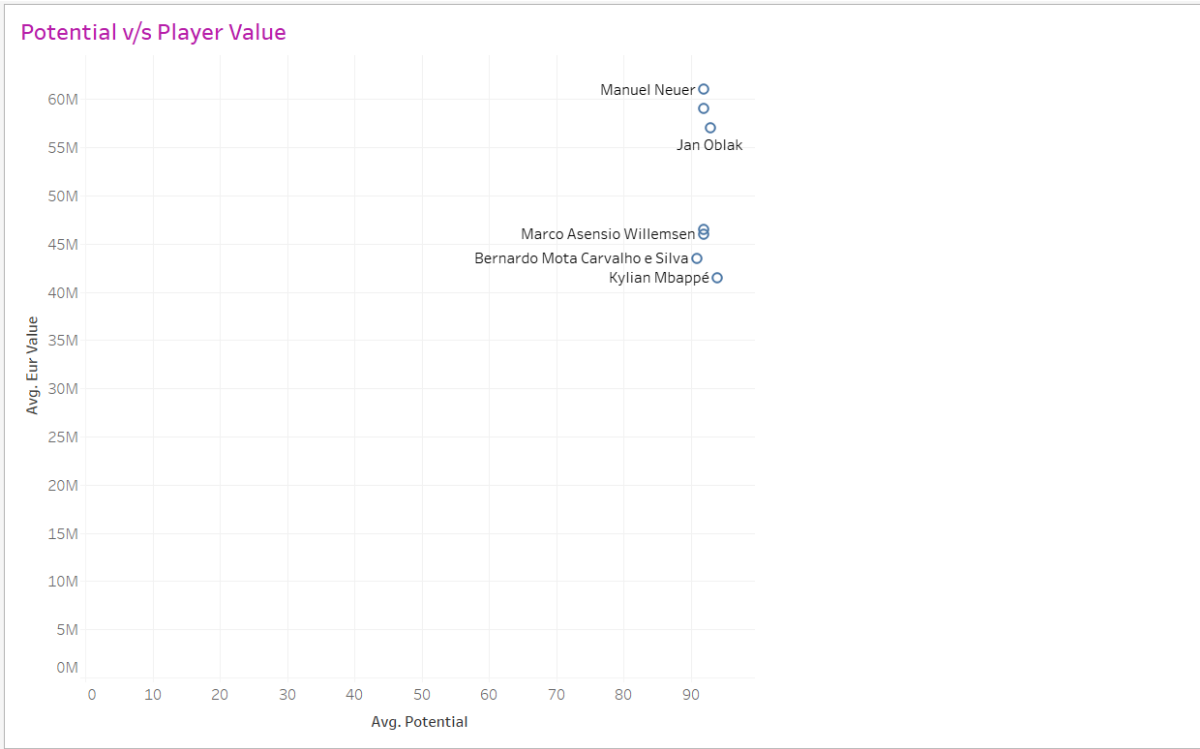
The World’s Most Renowned Players

C. Ronaldo dos Sant..	5
Danny Rose	5
Lionel Messi	5
Luis Suárez	5
Manuel Neuer	5

Selecting the world's most renowned players for a team is crucial due to several factors. Firstly, renowned players are distinguished for their exceptional skills, talent, and consistent performance, elevating the team's overall competitiveness significantly. Additionally, these players bring invaluable experience from participating in numerous high-pressure situations, enabling them to provide essential leadership both on and off the field. Their composed decision-making during critical moments can be the determining factor between success and failure.

Moreover, beyond their on-field prowess, renowned players enhance the team's marketability and global appeal. Their star power attracts sponsors, media coverage, and a massive fan base, resulting in increased revenue streams and commercial opportunities for the team. The combination of on-field excellence and off-field appeal makes selecting renowned players a strategic move with multifaceted benefits for the team. In the above table, we can see the top 5 renowned players each with the highest international reputation rating of 5. Notable players like Cristiano Ronaldo, Lionel Messi, Luis Suárez, and Manuel Neuer are recognized for their exceptional global impact and influence in the sport.

4. Potential vs player value:

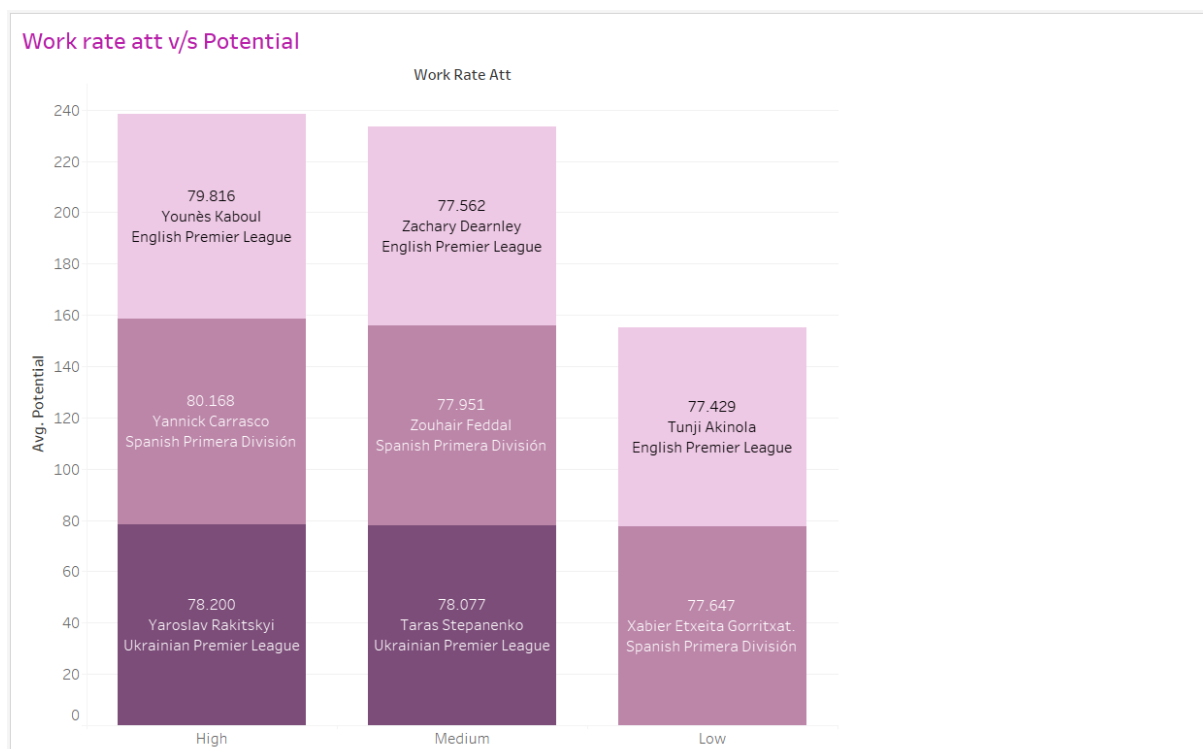


The plot above represents a Potential vs. Eur Value plot. The main objective of this plot is to identify players with high potential but low Eur Value. The purpose is to select players for the team who offer outstanding performance at a relatively low cost. By including such players in the team, it becomes possible to get the best value for money.

The plot allows filters to be applied on both Eur Value and potential, enabling the selection of players based on their Eur Value and the highest potential. For instance, in the above graph, Kylian Mbappe stands out as he has the highest potential of 94, but his Eur Value is relatively low at 42M.

This visualization is particularly valuable for teams with budget constraints or those looking to invest in young and promising talents. Identifying players with high potential at a lower cost can lead to significant returns in terms of on-field performance and future market value.

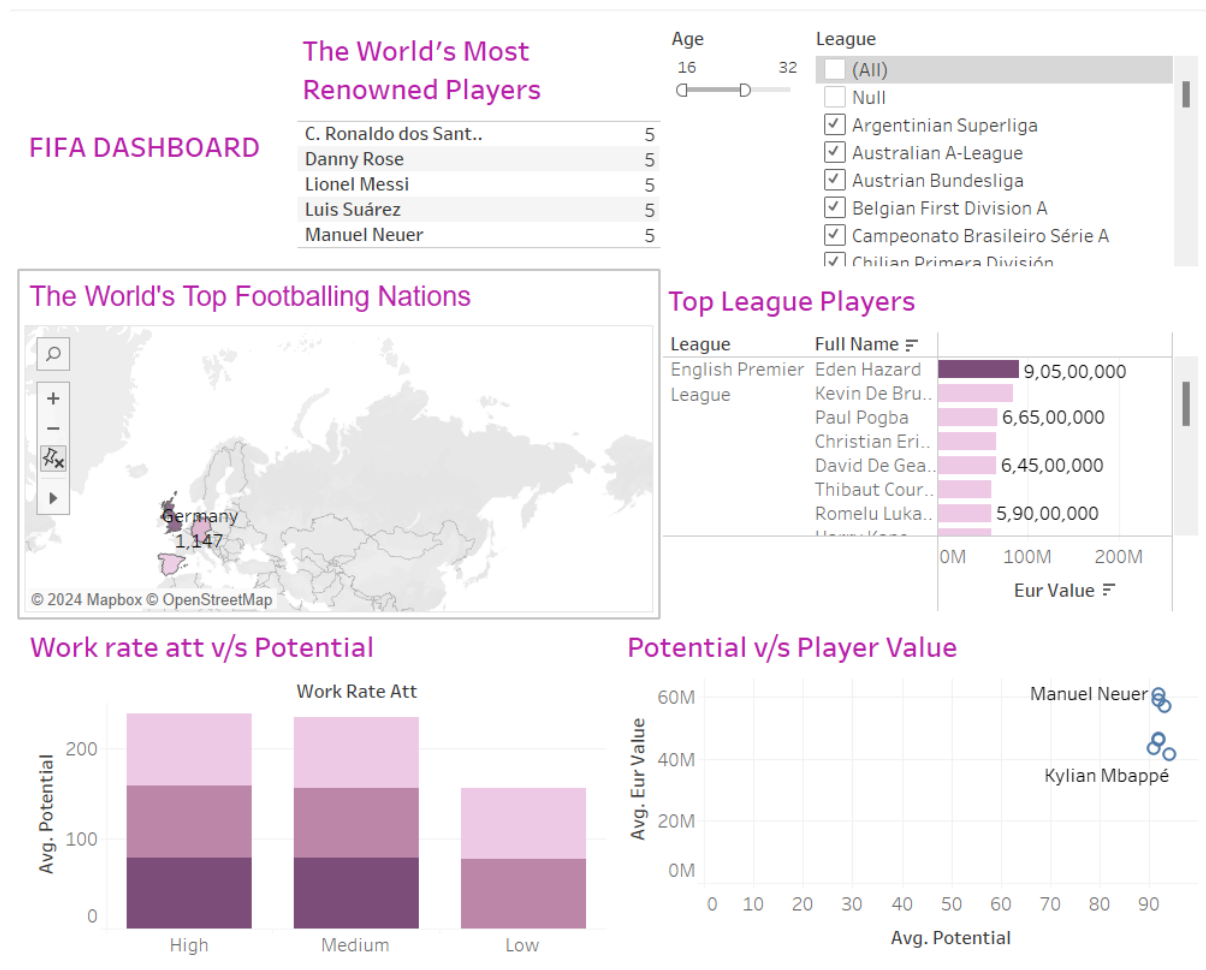
## 5. Work rate att vs Potential:



The stacked bar chart comparing work rate att versus potential shows the relationship between a player's attacking work rate and their potential rating. Players with a high attacking work rate exhibit the highest average potential, indicating that these players are perceived to have significant room for growth and impact in offensive roles. Notable players in this category, such as Younes Kaboul from the English Premier League and others, demonstrate that those who actively contribute to attacking plays are often seen as future stars with considerable potential for development.

On the other hand, players with a medium and low attacking work rate like Zachary Dearnley and Tunji Akinola show slightly lower average potential ratings. Their lower potential ratings suggest that they are not expected to grow significantly in offensive capabilities and are better suited for roles focusing on defensive solidity.

Overall, the chart indicates that a higher attacking work rate correlates with higher potential ratings, suggesting that offensively active players are viewed as having greater future impact. Teams aiming to enhance their offensive strategies should prioritize players with high attacking work rates, while those seeking balance or defensive stability might opt for players with medium or low attacking work rates. This understanding can guide coaches, scouts, and managers in making more informed decisions about player selection and development.



**Dashboard:** This is the interactive visualization dashboard, where we embark on a journey through the world of football to explore its top renowned players, formidable footballing nations, and uncover rising stars with potential and value. Our aim is to unlock insights into the brightest talents that shape the sport.

To begin, let's dive into the "Top Renowned Players" section of the dashboard. Here, we showcase the finest talents from around the globe – exceptional players renowned for their incredible skills and consistent performances, earning them a place among footballing legends.

We can use the filters for age and league to discover the game's greatest stars in various positions and leagues, gaining valuable insights into their influence on the sport. Continuing

our journey, we now explore the "Top Footballing Nations" section, where we delve into the world's leading countries with the highest number of players.

Now, we shift our focus to find the hidden talents with the "Potential vs. Player Value" chart. Here we can witness how the dashboard allows us to identify players with high potential but low Eur Value. We can uncover the rising stars with tremendous potential that can be a game-changers for our team while staying within budget. The filters for Eur Value and potential will guide you in selecting the future superstars with immense growth prospects.

Now let's dive into the "Work Rate Att vs. Potential" chart to understand the relationship between a player's attacking work rate and their potential. This visualization reveals that players with higher attacking work rates generally have higher potential ratings, indicating greater room for growth in offensive roles. By examining this chart, we can identify promising talents who are likely to develop into key offensive players, helping to enhance your team's future performance and strategy. This insight is crucial for making informed decisions in player selection and development.

Our Dashboard wouldn't be complete without exploring the impact of "Top League Players" on team dynamics. We can use the filters to explore players from specific leagues and age groups, identifying the driving forces behind a team's success.

On concluding, we can gain valuable insights into football's world of talent and excellence with the help of this dashboard. We can use these visualizations to make data-driven decisions in building our dream team and unlocking the full potential of our football endeavours.



## **Data Visualization Journey:**

During the initial stages of my data visualization process, I immersed myself in comprehending the FIFA dataset's structure and potential insights. My focus was on understanding the significance of columns such as Overall, Potential, Pac, Sho, Pas, Dri, and Def in the context of football. However, I encountered certain entries with zero values for Eur Value and Eur Wage, which raised concerns about data reliability. To ensure the accuracy of my visualizations, I decided to filter out these entries.

After refining the dataset, I carefully selected the most relevant columns to create a cohesive narrative within my visualizations. The inclusion of scatter plots effectively portrayed the relationship between player potential and Eur Value. Additionally, the Work rate att vs. Potential plot provided valuable insights of players who have high potential are likely to be dynamic and influential in the attack. These players often have the ability to make significant contributions to their team's offensive play and have room for growth. The use of bar charts and tables allowed me to present top footballing nations and renowned players in a clear and informative manner.

My chosen audience persona for this project was the Board. By presenting insightful visualizations, I aimed to empower them with valuable information to optimize team selections, identify potential talents, and gain a deeper understanding of the competitive landscape.

Throughout this data visualization journey, I unearthed compelling insights. The "Potential vs. Player value" chart enabled me to identify hidden gems – players with high potential but low Eur Value, making them potentially smart investments for football clubs seeking growth at a budget-friendly cost. Furthermore, the " Work rate att vs. Potential " chart highlighted

players with exceptional attacking skills, providing a valuable selection pool for strategic team management.

The exploration of the football dataset was a thrilling experience, as interactive visuals empowered decision-makers to gain a competitive edge and optimize their team's potential. As the dataset continues to evolve, this visualization project will remain an invaluable tool for football professionals, aiding them in making informed decisions in this dynamic and ever-evolving sport.