



Code Plateau Fellowship;

Data Science Track Competition

GROUP 3

CONTEXT

- ▶ The Tanzanian tourism sector

OBJECTIVE!

- ▶ The objective of this competition is to explore and build a linear regression model that will predict the spending behavior of tourists visiting Tanzania. The model can be used by different tour operators and the Tanzania Tourism Board to automatically help tourists across the world estimate their expenditure before visiting Tanzania.

VITAL QUESTIONS

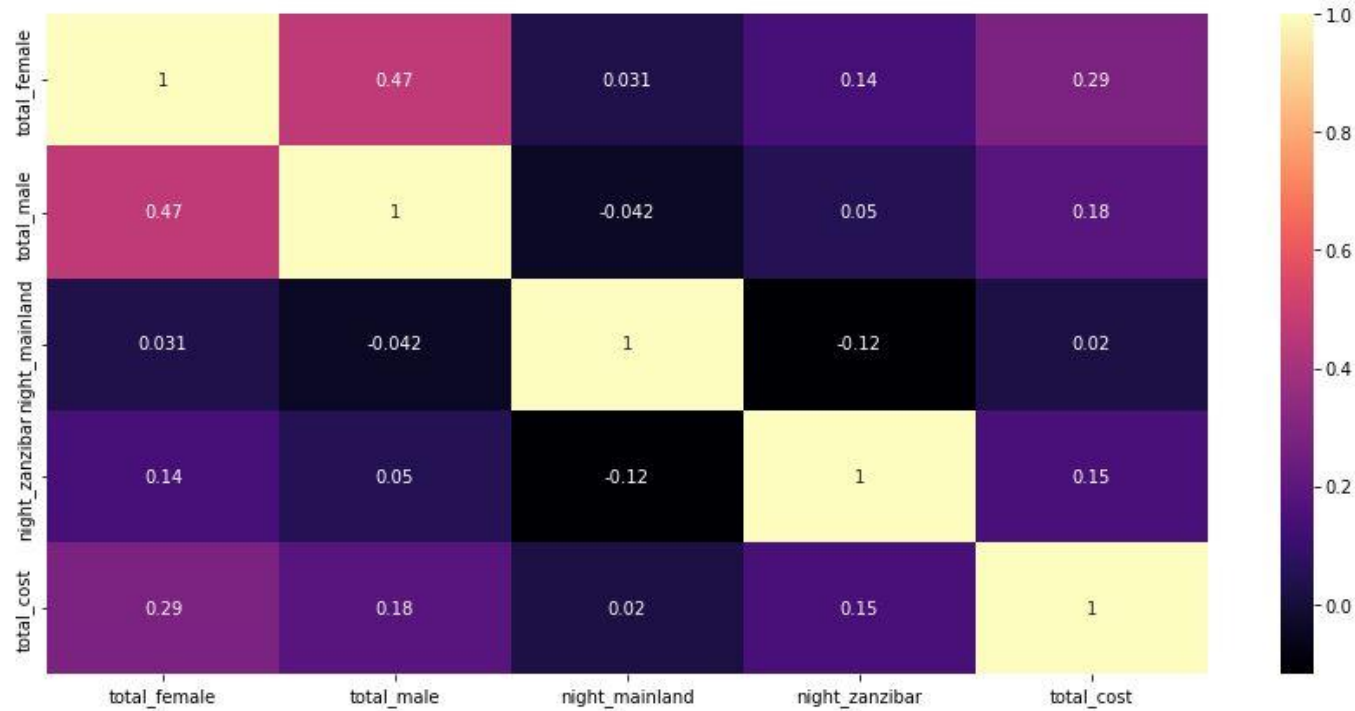
- ▶ How much a tourist can spend when visiting Tanzania.
- ▶ What factors can influence the prediction of total Cost to be spent by tourist when visiting Tanzania?

APPROACH

By developing Machine Learning Model to estimate the total cost tourist can spend when visiting Tanzania.

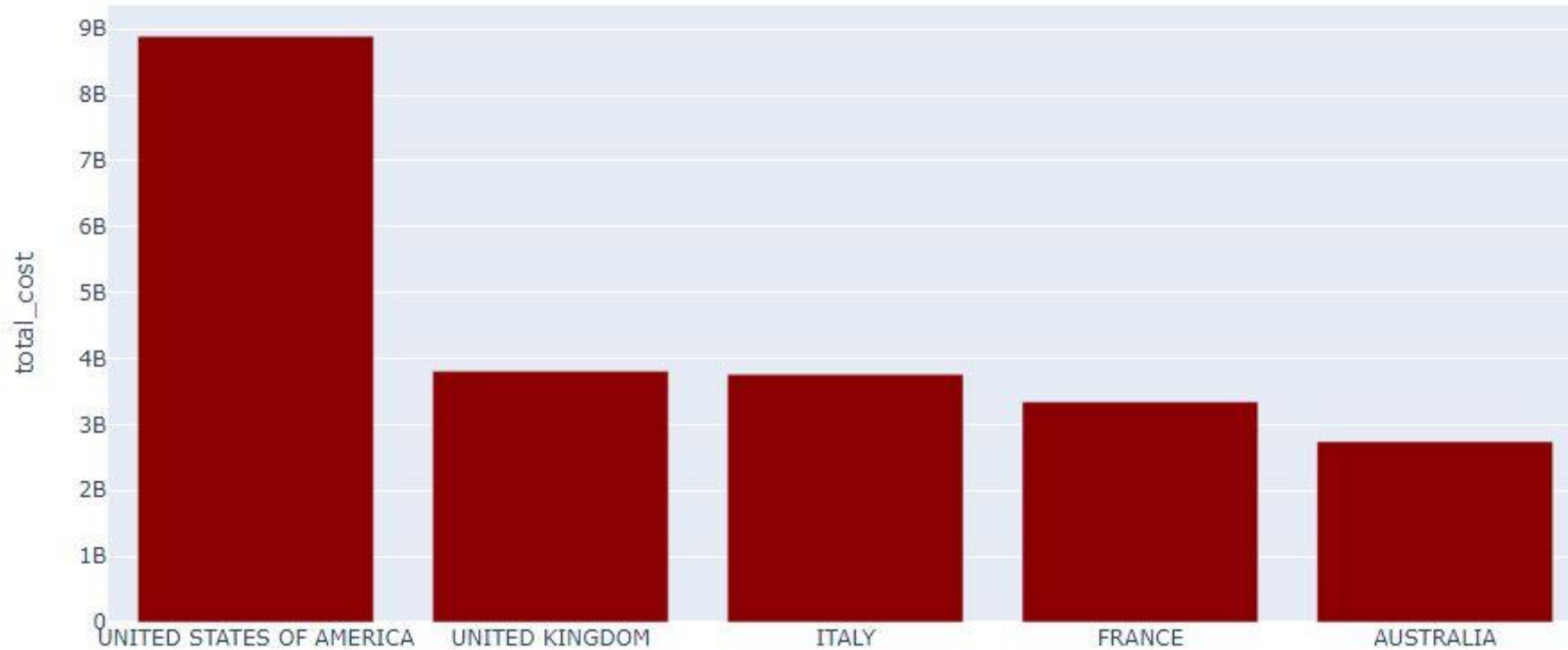
CORRELATION

```
In [11]: plt.figure(figsize=(15,7))  
sns.heatmap(df.corr(), annot=True, cmap="magma")  
plt.show()
```

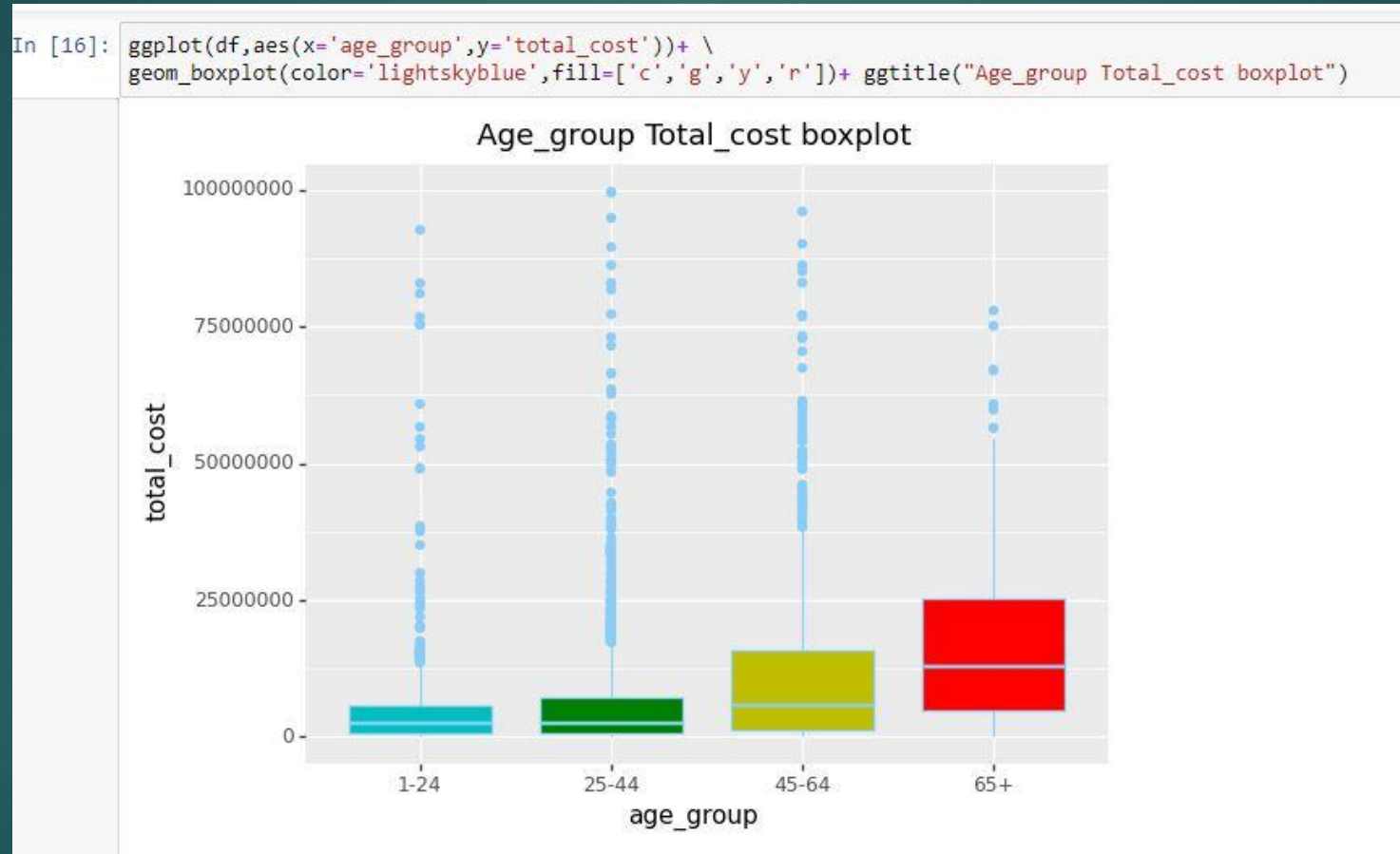


The top five countries with highest spending

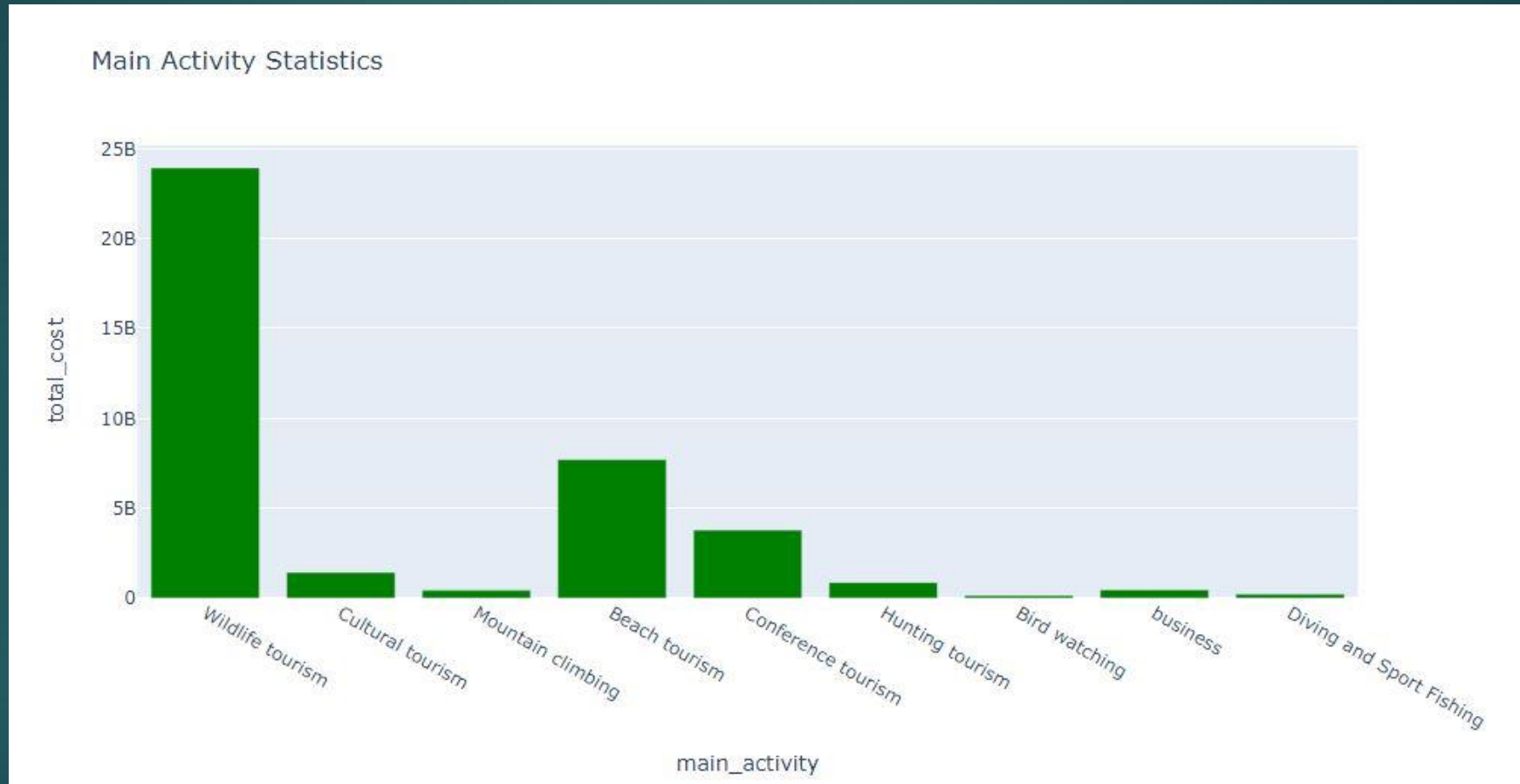
TOP 5 COUNTRIES WITH THE HIGHEST SPENDING



- The highest age-group spenders is the 25-44 followed by 45-64 age-group and the 65+ group spends the least.

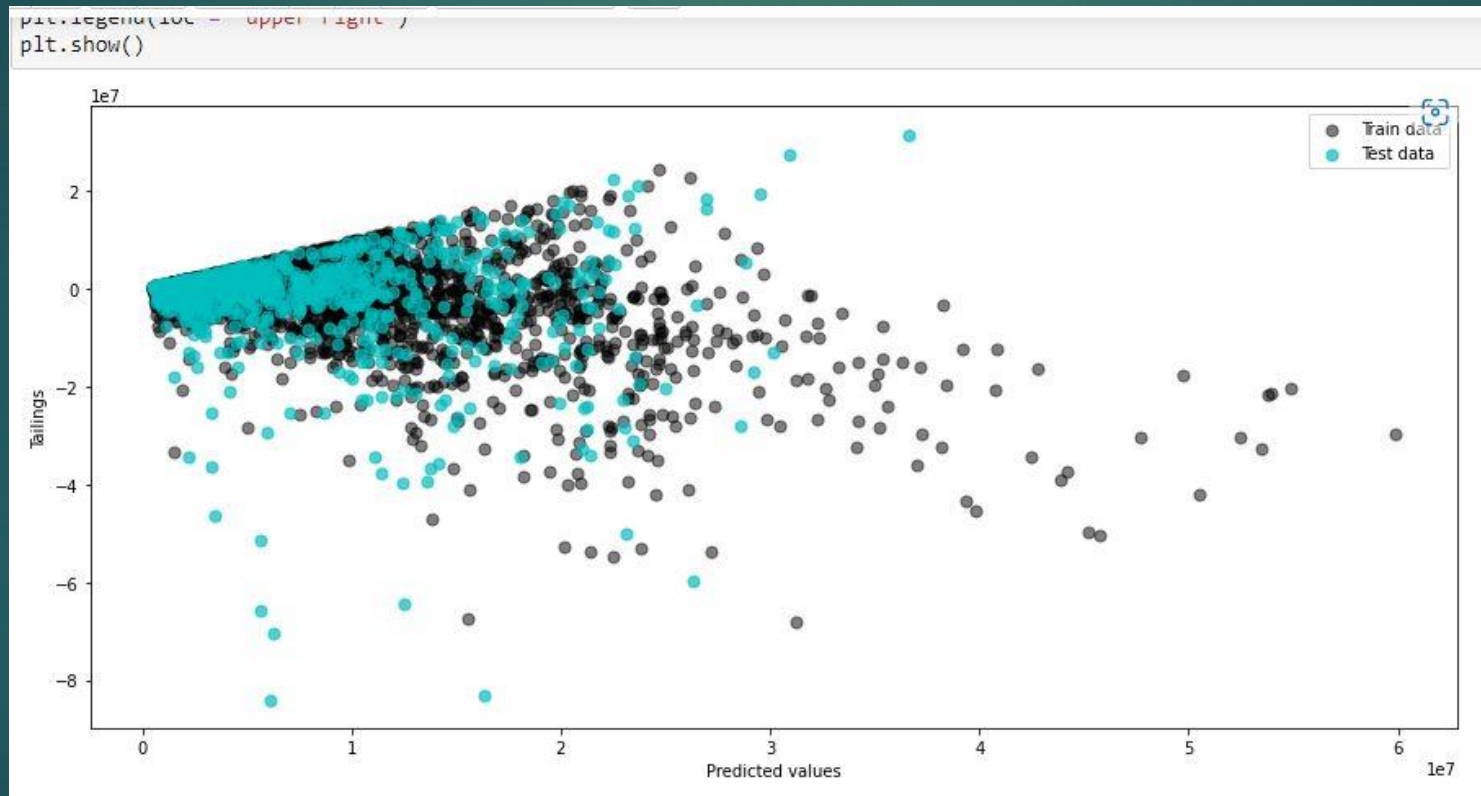



- ▶ The most profitable tourism sectors in Tanzania are mainly “Wildlife tourism”, followed by “Beach tourism”,



INSIGHTS AND RESULTS

- There's satisfactorily a good result from the visualization below between the training model and the predictions.



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- ▶ The most profitable tourism sectors in Tanzania are mainly “Wildlife tourism”, followed by “Beach tourism”, therefore it would be wise and worthwhile for investors to focus on them more. Tourist spending was more with Friends/Relatives, followed by with Spouse and children, therefore there's need for focus on developing facilities to suit these group of people. Tourist below 65 years old spend more, so it is worthwhile to encourage this age group to come to Tanzania. Most profitable visiting countries are: USA, United Kingdom, Italy, France, Australia etc.
 - ▶ The most preferred payment mode by tourist is Cash.
 - ▶ Tourist spend more number of nights at Tanzania mainland than Zanzibar.