GAME OF THRONES

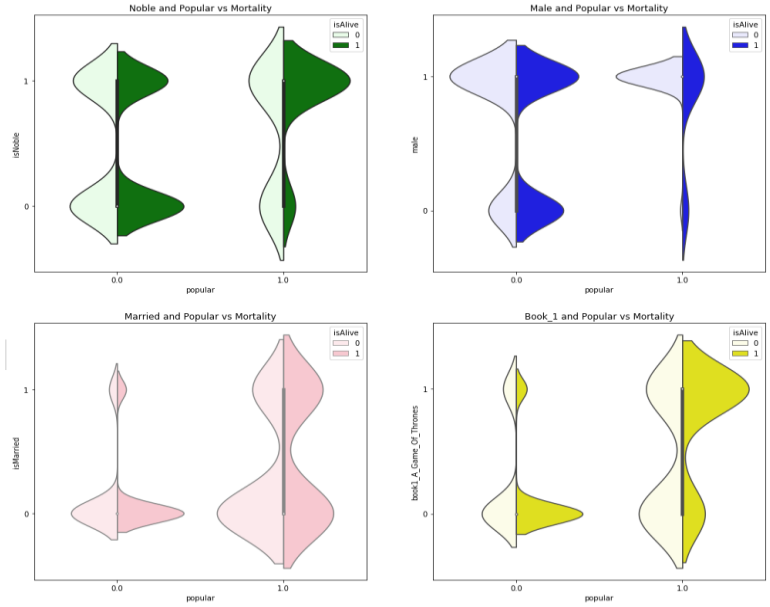
Machine Learning Project

- The Problem

There are 2,000 characters in the book series A Song of Ice and Fire. It's a story of a constant duel for the ultimate iron throne in the fictional land of Westeros between two prominent and powerful families: The Starks and the Lannisters. Many of the characters die along the way as they are betrayed, killed in epics battles, or also die due to natural causes. Our problem involves finding out patterns in these scenarios and see if we can find a way to predict who is most likely to die and what measures they can take to survive. We can also say that the problem here involves our favorite characters dying and the measures that we think they can take to survive.

- Key insights that are actionable

The exploratory data analysis sets up my claim about the how I came up with actionable insights.



Using the Violin Plot above

- Noble and popular most likely alive
- Popular appearing in book1 most likely alive
- Not popular appearing in book1 most likely dead
- Single and not popular most likely alive
- Single and popular probably dead

Recommendations

As you can see maximizing your chances of surviving the Game of Thrones is super easy: Just be a **Popular Married Female Noble** and get yourself written into **book 1** (**Cersei Lannister**, **Asha Greyjoy**, **Daenerys Targaryen**, **Sansa Stark**, **Selyse Florent**)

The 2 most important features out of all are Popularity and Book_4_feast_for_crows, which means that these two contribute the highest in predicting whether someone lives or dies.

The best testing AUC score I achieved for the Decision Tree was 0.808

Bibliography

https://awoiaf.westeros.org/index.php/Main_Page

https://gameofthrones.fandom.com/wiki/Game_of_Thrones_Wiki