***Game of Thrones Analysis Summary***

**Introduction**

The American fantasy drama television series ‘Game of Thrones’ has been extremely popular worldwide. Not having seen the series has become the exception and fans all over the world are waiting for the last series to be released in April.

The HBO TV show has been inspired by George Martins book ‘A Song of Fire’. Readers and viewers get captured into the story line as the suspense of the plot is continuously being help up. What causes this is the uncertainty of the storyline. Actions in the story seem unpredictable. The readers/viewers are constantly being surprised by plot twists. This feature differentiates ‘A song of fire’ and ‘Game of Thrones’ from other novels and TV series. Main characters die unexpectedly, and it seems impossible to predict who will survive.

Utilizing a dataset of approximately 2000 characters, the challenge has been approached to evaluate how ‘unpredictable’ it actually is and whether there are any patterns that indicate whether a character is more or less likely to survive.

A KNN model was chosen to best predict whether a character would die or survive and References supported an appropriate handling of the data (Fandom, n.d.).

**Key insights**

Even though seeming ‘unpredictable’ to the reader, the data shows patterns that indicate a character’s death or survival. The K Nearest Neighbor model predicts with an 81% accuracy the survival of the characters and is based on the variables that include information about the house of the character, the culture, gender, popularity, number of dead relations, title and in which books the character appears. Overall, the most influencing characteristics are the popularity and appearance in the fourth book. Concerning houses and culture, characters that are from the house Targaryen, from the Nights Watch or from the Valyrian culture are more likely to die throughout the story. Further, male characters are exposed to a higher risk of dying than females and lastly, the number of dead relations influences a character´s own death as well.

Building a KNN predictive model based on these variables and verifying its accuracy and precision with a confusion matrix and a classification report provides insight on how often the model predicts correctly overall and how often it is correct when it predicts Survival/Death. Having an 81% accuracy overall, the model is better at correctly predicting a character’s survival (93%) than a character’s death (80%), supporting the authors intention of keeping uncertainty despite some patterns. The accuracy of 81% of the KNN model was additionally validated by utilizing a cross validation technique that states an average accuracy of 79%.

**Implementation recommendations**

Even though it seems impossible for the reader to predict a character’s survival, this model proves that in fact it is not actually impossible. This predictive model has been built for the curious reader that can not wait to know his favorite characters survival. Most important information is how popular the character is, in which book he/she appears in and which house and culture he/she is from.

**Bibliography:**

**Fandom** (n.d.) Game of Thrones Wiki.   
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