Deaths in Game of Thrones

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# ABSTRACT

This report describes the project develop for the Information Visualization course at Instituto Superior Técnico. The project consists on a visualization about the deaths of the *Game of Thrones* TV show and their relation with the book collection *A Song of Ice and Fire*. It is developed using HTML, CSS, JS and d3.js.

The visualization allows to analyze all the deaths along the different episodes and analyze the different conditions where they occur such as killing method, allegiance of the involved or location of the death.

Abstracts should be about 150 words and are required.

## Author Keywords

Information Visualization; InfoVis; Game of Thrones; A Song of Ice and Fire; Deaths; Kills.

## ACM Classification Keywords

H.5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous; See<http://acm.org/about/class/1998> for the full list of ACM classifiers. This section is required.

Human-centered computing: Visualization: Visualization application domains: Information visualization

# INTRODUCTION

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This document describes how to prepare your submissions using Microsoft Word on a PC or Mac. Specific instructions about accessing menu items in Word refer to the PC version of Word 2013.

# Related Work

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# The data

The data was obtained from two different datasets being the first one about the deaths in the TV show [1] and the second one referring to the deaths that occurred in the book collection [2].

Initially, we kept all the data from the first dataset and joined the columns of the second with an outer merge. Then, we removed some lines to keep only the characters that have died in the TV show and appeared in the first dataset.

We removed the repeated columns and introduced two derived measures to analyze if the character appeared in the books and to differentiate the deaths of the animals.

As part of the cleaning process, we removed repeated characters that appeared with different names, corrected wrong values and introduced the missing values based on research on some wikis dedicated to Game of Thrones [4] and A Song of Ice and Fire [5]. Also, it was added sentinel values for the missing values that didn’t apply.

During the implementation, some changes were made to adjust the data to the problems that start appearing and that were not predicted at first.

Considering that we are treating the killer and the killed characters in the same way, we introduced columns with the characteristics of the killer. All this information was manually introduced based on our knowledge from the TV show and the previously mentioned wikis.

Additionally, we transformed the columns related to the death in the book into the estimated death, converting the chapters into episodes according to the narrative [3].

To simplify the representation of the deaths of the animals, we introduced the allegiance “Animal” and changed this value for all.

To keep the legibility of the chord diagram, considering that we had 278 characters, we had to introduce two new columns with the names that would be represented. The characters with higher number of kills are represented by their name and the remaining are aggregated by their allegiance.

To represent the points in the map, it was introduced two columns with the coordinates of each location. These coordinates were estimated considering the annotated maps that we found online.

Finally, we removed the columns related to the introduction of the character in the book and the death year considering that it didn’t follow the theme of the visualization. Also, we ended up deleting the two derived measures initially introduced, considering that we could represent the same data without them after the modifications.

What data did you think you’d get and ended up not finding? Which compromises did you make? Also, be sure to mention scalability issues. Did you have to filter things out? Aggregate them?

# Visualization

A

## Overall Description

A

## Rationale

A

## Demonstrate the Potential

A

# Implementation details

A

# conclusion & future work

A



Figure . Sample of a wide figure. Be sure to place at the top or bottom of the page. Ensure that important information is legible in both black-and-white and color printing. Image: CC-BY-ND ayman on Flickr.

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* Try to avoid long or complex sentence structures.
* Use common and basic vocabulary (e.g., use the word “unusual” rather than the word “arcane”).
* Briefly define or explain all technical terms that may be unfamiliar to readers.
* Explain all acronyms the first time they are used in your text—e.g., “Digital Signal Processing (DSP)”.
* Explain local references (e.g., not everyone knows all city names in a particular country).
* Explain “insider” comments. Ensure that your whole audience understands any reference whose meaning you do not describe (e.g., do not assume that everyone has used an Android phone, or a particular application).
* Explain colloquial language and puns. Understanding phrases like “red herring” may require a local knowledge of English. Humor and irony are difficult to translate.
* Use unambiguous forms for culturally localized concepts, such as times, dates, currencies, and numbers (e.g., “1-5- 97” or “5/1/97” may mean 5 January or 1 May, and “seven o’clock” may mean 7:00 am or 19:00). For currencies, indicate equivalences: “Participants were paid ₩22, or roughly US$29.”
* Be careful with the use of gender-specific pronouns (*he*, *she*) and other gendered words (*chairman*, *manpower*, *man-months*). Use inclusive language that is gender-neutral (e.g., *she* *or* *he*, *they*, *s/he*, *chair*, *staff*, *staff-hours*, *person-years*). See the *Guidelines for Bias-Free Writing* for further advice and examples regarding gender and other personal attributes [9]. Be particularly aware of considerations around writing about people with disabilities.
* If possible, use the full (extended) alphabetic character set for names of persons, institutions, and places (e.g., Grønbæk, Lafreniére, Sánchez, Nguyễn, Universität, Weißenbach, Züllighoven, Århus, etc.). These characters are already included in most versions and variants of Times, Helvetica, and Arial fonts.

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Figure . Use high-resolution images, 300+ dpi, legible if printed in color or black-and-white. Number all figures and include captions below, using Insert, Caption.

Use a numbered list of references at the end of the article, ordered alphabetically by last name of first author, and referenced by numbers in brackets [1,3,4].

| Objects | **Caption – pre-2002** | **Caption – 2003 and afterwards** |
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# ACKNOWLEDGMENTS

Sample text: We thank all the volunteers, and all publications support and staff, who wrote and provided helpful comments on previous versions of this document. Authors 1, 2, and 3 gratefully acknowledge the grant from NSF (#1234-2012-ABC). This is just an example.

# REFERENCES

1. Deaths in the TV show *Game of Thrones*. Retrieved September 26, 2020 from <https://data.world/makeovermonday/2019w27/workspace/file?filename=game-of-thones-deaths.xlsx>
2. Deaths in the book collection *A Song of Ice and Fire*. Retrieved September 26, 2020 from <https://www.kaggle.com/mylesoneill/game-of-thrones?select=character-deaths.csv>
3. *Game of Thrones* Episode Chapter Coverage. Retrieved October 25, 2020 from <https://joeltronics.github.io/got-book-show/bookshow.html>
4. *Game of Thrones* wiki. Retrieved October 25, 2020 from <https://gameofthrones.fandom.com/>
5. *A Song of Ice and Fire* wiki. Retrieved October 25, 2020 from <https://awoiaf.westeros.org/>
6. ~~Ronald E. Anderson. 1992. Social impacts of computing: Codes of professional ethics.~~ *~~Soc Sci Comput Rev~~* ~~10, 2: 453-469.~~