Database of Thrones (DOT)

Problem Statement

Rose-Hulman Institute Of Technology CSSE333 Database Systems

Ben Efron

Collin Trowbridge

Katie Lee

Trent Punt

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Contents**

[**1 Executive Summary** 3](#_Toc408327855)

[**2 Introduction** 3](#_Toc408327856)

[**3 High Level Problem Summary** 3](#_Toc408327857)

[**3.1 Elevator Statement** 3](#_Toc408327858)

[**3.2 Primary Success Criteria** 3](#_Toc408327859)

[**3.3 Scope** 3](#_Toc408327860)

[**3.3.1 Within Scope** 3](#_Toc408327861)

[**3.3.2 Outside Scope** 4](#_Toc408327862)

[**4 Detailed Problem Statement** 4](#_Toc408327863)

[**4.1 Function** 4](#_Toc408327864)

[**4.2 Form** 4](#_Toc408327865)

[**4.2.1 Availability** 4](#_Toc408327866)

[**4.2.2 Usability** 4](#_Toc408327867)

[**4.2.3 Performance** 4](#_Toc408327868)

[**4.2.4 Security** 4](#_Toc408327869)

[**4.2.5 Maintainability** 4](#_Toc408327870)

[**4.3 Economy** 4](#_Toc408327871)

[**4.3.1 Marketability** 4](#_Toc408327872)

[**4.4 Time** 4](#_Toc408327873)

[**4.4.1 Historical** 4](#_Toc408327874)

[**4.4.2 Current** 4](#_Toc408327875)

[**4.4.3 Future** 4](#_Toc408327876)

[**5 Key Stakeholders** 4](#_Toc408327877)

[**6 References** 5](#_Toc408327878)

[**7 Glossary** 5](#_Toc408327879)

Version Information

|  |  |  |
| --- | --- | --- |
| Version | Date | Comments |
| 1.0 | 1/6/2015 | Initial write-up |

# **1 Executive Summary**

This document’s purpose is to describe the problem that our project will solve. This document contains a high level problem summary that serves as an explanation of what problems our project will attempt to resolve. Along with the problem statement, we have designed an initial Entity Relationship (ER) diagram for our database.

Game of Thrones is a TV phenomenon airing on HBO that is widely popular and continuing to grow rapidly. However, many people get lost in the vast amount of data that comes with watching the TV show. The enormous number of characters, plotlines, and battles can be extremely hard to follow. Our solution is to store this data in a database and make it easily available on a well laid out website for any fans who are interested in clarifying any confusion in Game of Thrones.

# **2 Introduction**

This document describes our Database of Thrones management system. We also include our Entity Relationship diagram. After this document, we will continue designing our system and begin implementing our solution. After our solution has been implemented, we will have a final presentation. The relational schema we create will show foreign keys and table layouts for us and the final presentation will demonstrate our completed solution as well as describing how we came to our particular solution.

# **3 High Level Problem Summary**

## **3.1 Elevator Statement**

We are designing a database system that will organize and present the massive amount of data contained within the Game of Thrones universe in a coherent and useful way.

## **3.2 Primary Success Criteria**

Our main goal is to create a way to provide users with information about the Game of Thrones universe without spoiling events or confusing users. This will require good organization of data and a well-designed User Interface (most likely a web page). This project's success depends on the completion of this database and interface by the end of Winter Quarter 2015.

## **3.3 Scope**

### **3.3.1 Within Scope**

Data from the show ONLY:

1. Characters

2. Kings

3. Houses

4. Cities/Regions

5. Battles

6. Boobs per episode

### **3.3.2 Outside Scope**

1. Details from the books

2. Show ratings

3. Actor/Actress details

# **4 Detailed Problem Statement**

## **4.1 Function**

1. Organize and store data on Game of Thrones in a clear and logical manner.

2. Ability to search and or lookup characters

- Dead/Alive

- Introduction/Death dates

- Social Standing

3. Ability to search for houses

- Domain

- Location

- Members

4. Ability to search for battles

- Participants

- Winner/Loser

- Survived

5. An embedded Westeros map that is interactive.

6. A feature to display family trees of select houses.

7. A user polling system for visiting users to vote on changing polls.

8. An ability for users to declare their progress in the series in order to protect

## **4.2 Form**

### **4.2.1 Availability**

-Database backed website that has a java applet embedded for family tree functionality.

-Different levels of availability for users that are at different stages in the series.

-Users can access with web connection from English speaking countries.

-No log in required - any visitor has almost full access to the site on first and subsequent visits

### **4.2.2 Usability**

-Quick search times

-User friendly

-Organized data that is easy to view

-UI that is easy to navigate

-Supports major browsers up to date

### **4.2.3 Performance**

-Able to support a moderate amount of traffic

-Returns results fast and efficiently

### **4.2.4 Security**

-No log in, so no personal information is needed

-Minimum input allowed for user

-search box

-user polls

-series progression

-No file uploading

### **4.2.5 Maintainability**

-System will be easy to maintain and update

-Minimal amount of changes in data after first release

-Database structured with least amount of redundant data for easy updates

## **4.3 Economy**

### **4.3.1 Marketability**

Popularity of Game of Thrones has soared throughout the world and has recently taken over The Sopranos as the most popular television show on HBO, grossing an average of 18.4 million viewers per episode across all platforms [1]. This shows there is an overwhelming interest in the series and there will be a gigantic audience for our solution.

## **4.4 Time**

### **4.4.1 Historical**

In the past, people relied on memory to track data and information about Game of Thrones. For the beginning of the series that wasn’t a problem, but as the number of characters and amount of other data grew, people began to lose track of information. Some people may write information down on paper, but it is thought that most just remember whatever they remember or return to watch again any episodes with information they forgot.

### **4.4.2 Current**

Currently there is a large group of people that continue to be confused about Game of Thrones or forget what is happening or has happened in the Game of Thrones series. People want and need a system to track data about the series and keep up with accurate information. Current solutions are either confusing, inefficient, or poorly formatted.

### **4.4.3 Future**

In the future, our Game of Thrones database will be used by viewers in the US. Fans will more easily be able to follow along with the series as it progresses.

# **5 Key Stakeholders**

Sriram Mohan Project Advisor

Katie Lee Team Member

Ben Efron Team Member

Trent Punt Team Member

Collin Trowbridge Team Member

Game of Thrones Fans End Users

# **6 References**

[1] ‘Game of Thrones’ whacks ‘The Sopranos’ to become HBO’s most popular show ever - http://insidetv.ew.com/2014/06/05/game-of-thrones-sopranos-ratings/

# **7 Glossary**

(ER) Entity Relationship Diagram - a common method of drawing out a relational database