

## Web-project Pair D Proposal

Data Set: Board-game-data.csv

Source: <https://www.kaggle.com/mrpantherson/board-game-data>

This data set describes a variety of features of different board games which were recorded on the website [BoardGameGeek.com](https://boardgamegeek.com). The data was collected in March of 2017, and posted on Kaggle.com, a website which offers a variety of data for public use and can be used for academic projects according to their terms and conditions. The data itself includes information on the game such as the name, the category (meaning the subject matter of the game), the recommended minimum age of players, the number of possible players, the length of gameplay, the game's designers and the year in which the game was released. There is also data about the physical game itself (such as the weight of the game in its box) as well as data about BoardGameGeek's ratings and rankings of the listed games.

The intended audience for our application is board game enthusiasts, game designers, and party organizers. Each of these user types will have a different reason for wanting to access this data. Board game enthusiasts would want to discover new board games to play and acquire information about those games. Board game designers would like to see the trends for popular board games, on the basis of characteristics such as intended age range, number of players, and mechanic of gameplay. Party organizers want to find suitable and popular board games for certain number of players in a desired period of time. Potential board game players might be friends of board game fans, board game party participants or people who just want to find a game to play with friends to kill time. They will be interested in which game to play within the constraints of time and the number of players and getting to know the basic information about the board game.

A list of key functional requirements:

- The system must be able to search the database by various criteria such as:
  - Number of players
  - Length of play (duration of time)
  - Appropriate age
  - Category
- The system must handle a range of input types, allowing users to leave some options blank and only take into account selected categories in the search.
- The system must be able to generate a random board game if the user decided to click the "Surprise Me" button
- The system must be able to display all possible parameters through various drop downs
- The system must be able to present lists of the games fitting the input criteria, sorted by ranking, rating, length of play
  - These lists will include photos, game name, designer, mechanics, age recommendations, number of players, and average playtime

- The system must link to additional pages with more information
- The system must have the ability to select and present a random game from the database

A list of possible extensions, functional requirements to be implemented if all else is functioning in time:

- The ability to compare a few games directly

A list of non-functional requirements:

- The website displays useful/ interesting (ex. instructions) information to the user about how to use the website (Usability requirement), to ensure the users can search the data easily
- The website displays results within 2 seconds after click to ensure that the user does not leave the website (Performance Requirement)

A list of the key features, in order of most to least significant:

- A search function which has multiple filters/categories, and lists games that fit the given criteria in a format that includes the title, possible number of players, average playtime and game category
- Drop down boxes which allow the user to select different parameters
- A search button that once clicked, will lead to results page
- A 'Surprise me' button which, once clicked, leads to a results page for a randomly selected game
- A sort by function in the results page which will allow the user to sort their results based on rating, recommendation, number of players, length of play etc.
- The website could compare and display several user-selected board games in a greater details (if time permits)