SETTING UP THE GAME TABLE

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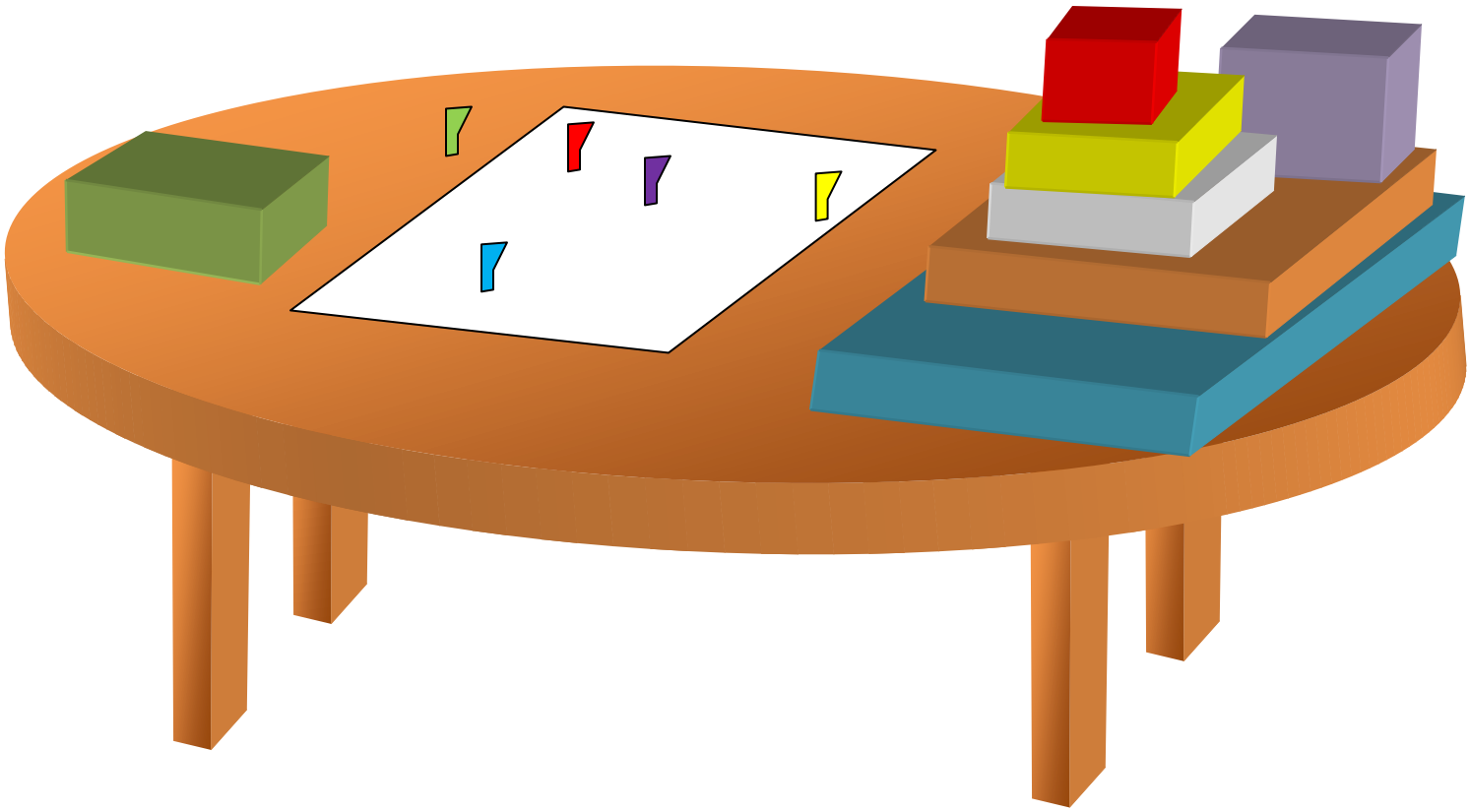

Abstract

This project's purpose is to set up a server that will host my personal website. While the server is nothing special, the main feature will be real-time browser games based off the popular board games my friends and I play. For the final deliverable, only one game will be programmed: "A Game of Thrones Board Game Second Edition" (further referenced as GoTBG). It's a high skill, low chance strategy game similar to Risk and its average play time is three hours. Programming and hosting a copyrighted board game on a website is not breaking any laws so long as it's not being distributed (and I will not distribute any code). To help, all users must create an account that must be approved by me and no game may be played unless I'm participating in the game. While the website is public the game will be private, thus I'm "setting up the game table" and only playing with friends. Other board games will follow suit after graduation as the website will be my personal contact page and "resume", displaying major projects I have worked on in school and will program in the future. Another feature I hope to implement by the end of the project is a simple account database system where users may look at their statistics on games that they've played statistics on game outcomes overall.

Services

Only a few services are currently scheduled

1. Creating an account
    a. The website is public for viewing and contacting me but playing one of the online games will be a private function. To play, users need to create an account that must be approved by me. Once approved, users will have full access to the website. If times permits, I will include options for the user to customize how they perceive the website (colors, arrangement, etc).
2. Play an online board game
    a. The online games on the website are not free to play or downloadable since they're software copies of board games that exist in real life and I own. The flagship board game is "A Game of Thrones Board Game: Second Edition" by Fantasy Flight Games. Others are not planned for the final deliverable but may be uploaded at a later date.
    b. To further the protection of the site from breaking any laws, restrictions on play and distribution will be put into place. The online games I upload to my website shall remain in my "possession". No code will be available. On top of that, no game can be played unless I'm a player or spectator. That simulates a "game table" where the game is "within reach" of me. This also prevents several games from being played at once. Once copyright laws have been looked into further, the restrictions on the online games I play may be reduced.
        i. Another way to explain is that whenever the game is played I'm present. I brought the game from my collection to the game table and when play is concluded, I place it back into the box and bring it home with me.

3. Observing Statistics – Implementing Databasing Schemes
    a. Board Game Statistics
        i. Each online game will have a page describing its statistics. A statistic form may be filled out for a more advanced search.
    b. Personal Statistics
        i. Each user will have a personal page describing their personal statistics and feats from the games they've played. A statistic form may be filled out for a more advanced search.
        ii. Along with viewing personal statistics, a user may change the theme of the website that affects their viewing experience only. Example changes may include but are not limited to: color and formatting.
    c. Statistic Fields
        i. Statistics that may be searched may include but are not limited to: wins, loses, most played game, average game length, most played against played, most played team/color, win/loses when playing a certain team/color, highest score in a specific game, etc

Output

A simple, fast, and efficient website that aims to bring remote players to a virtual game table to socialize, strategize, and have fun.

Input

An account must be created and approved by me in order to access the full website, including games. In order to be approved I must personally know the subject as this website is intended to be private. Some fields during account creation are mandatory while others are optional. Example mandatory fields include: screen name, first name, last name. An example optional field is website formatting and color.

Games may be left running for extended periods of time. A user does not have to continuously "be at the table" but of course that action will obviously slow games down to a halt, especially if the games are turn-based (which GoTBG is). The option to do so does have advantages. If a player has something unexpected come up, they may take care of the event and resume the game at a later time. The entire purpose of the virtual game table is to offer this versatility. By this logic, games may be played at a pace of one turn a day, resulting in a game that may take over a week to finish. While that would somewhat defeat the purpose of "getting together to play a game and hang out", maybe that's the only option players will have. It also allows more time for thinking and strategizing.

Data Structure and Storage

All software and hardware used to produce this project will be free. My personal computers will host the website, traffic, storage, database, and handle all computations. Cookies may be used in order to keep track of user information. The users will not need to save anything onto their computer because the games on my site will not be downloadable. The games will only be played in their browser. My code will not be open source.

Software

1. Software Languages expected to be used
    a. HTML5, CSS, PHP, Java, JavaScript, Perl
2. Browsers that will give the user a full experience
    a. Any that can run HTML5, CSS, PHP, SVG, Java, JavaScript, and Perl code successfully.
3. Software programs expected to be used in the development of the project
    a. Notepad/Notepad++
    b. Eclipse
    c. GIMP2
    d. Microsoft Word, Paint, Excel, and IIS

Hardware

1. Lenovo T510 Laptop
    a. Windows 7, Intel i5 Processor, 4GB RAM, 500GB Hard Drive
2. HP Compaq dc7100cmt Tower Unit
    a. Windows XP Professional, P4 Processor, 256MB RAM, 80GB Hard Drive