

Dungeons and Dragons Turn Tracker



Group 7

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Link to Project

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Objectives

The objectives of this project are to focus on aiding a Dungeon Master (DM) in the specific task of turn-based combat management. We aim to provide two fully editable HTML forms that are pre-populated by PHP and SQL queries. First form population will be done by a SQL query but each end of turn will initiate a PHP page refresh that will carry over information from the previous page but update the turn order. Pages should be easy to read and follow so mimicking D&D character sheets and other released material will provide a familiar experience even for first time users. Stretch goals are to provide dynamic Javascript animations to enhance player engagement and also provide a separate view for DM's and players. DM's should have an omniscient view of the combat whereas players may not have all information revealed to them. However, the primary focus is providing a useful tool for DM's to use during a combat phase.

Summary

The goal of our website will be to provide a tool to keep track of turn order during combat of a standard D&D session. A session is when players actually gather to play the game that is run by a DM, or Dungeon Master. During the game, players may enter combat which initiates a turn-based style of play. Often times with a party of 6 players and just as many or more monsters in an encounter, tracking turn order can become quite difficult. We hope to alleviate this difficulty with our turn tracker website.

Our site has been adapted from the LAMP Stack assignment. We will use the MySQL database structure and many base pages for simple login and profile management. We will be creating an additional two PHP pages that form the majority of our website. Those pages will be the stats.php and turns.php. Stats.php will take input from a user, most likely a Dungeon Master, and will store character or monster information in the database for later retrieval. Turns.php will be the main display during gameplay. Dungeon Masters will be able to select characters and monsters from the database to include in a turn based combat display. The page will then become a live fully editable form that will allow for HP reduction from taking damage and the turn order list will cycle each time the submit button is pressed for the end of the current turn.

We expect our website to primarily run in the browser on the front-end using HTML form input and PHP prepopulation of forms. The PHP will run SQL queries to the server side database where the character data is input from stats.php. We will use a consistent CSS theme throughout our website to create a cohesive feel. The Javascript used will be

minimal but will provide minor cosmetic enhancements and dynamic animations to increase player engagement. Overall, the application will be mainly run on the local browser with minor assistance from the back-end.

Members

Tyler Fleetwood - Worked on the main stats page. PHP is new to me and learning it was interesting. Had issues with figuring out how to insert multiple instances of a PHP form into a single page. Originally was unsure with implementing multiple forms on one page with a single submit. Solution was just to make it one large form on the page. Styling the form inputs was another task to learn. In addition, learning how the PHP interacted with the MySQL database was interesting.

Tyler Gentry - I built the character and monster creation page that interfaced with the database to both insert characters and present information for players to assist in character creation. I was new to PHP and databases, so figuring out how to use PHP to insert into and pull from a MySQL database was an interesting challenge. I was also not very familiar with setting up large forms that had many inputs. Fitting and styling all the fields was another challenge for me.

Kyle Hagerman - Adapted the MySQL database from the LAMP Stack project using PHPMyAdmin and assisted with HTML form layout and PHP scripting. I'd never used PHPMyAdmin before so that was the largest piece that I had to learn. It's a really slick tool though and I was able to quickly create a usable schema for our database. I've minor experience with the HTML forms and PHP scripting combination so after some research I was able to assist with putting the pages together. My largest contribution to the forms pages was SQL query integration with the database.

Dylan Rosenbaum - I worked on finding the best color scheme that fit the feel of a DnD website. I also am working out the correct formatting of the website. One thing that I am really looking into and learning a lot about is how to correctly style a mobile website and I am learning a lot about that. I haven't worked on any PHP yet but just looking over what everyone else wrote has improved my understanding of PHP.

Conclusion

We learned a lot about PHP and the styling of forms to create a user friendly and intuitive experience. Our main obstacle was including multiple instances of players or monsters on a single page. Once we figured that out, the biggest problem was styling and

changing how that information is represented on the page to the users. Who is up? What are their stats? Etc. The way we accomplished the task wasn't too difficult, it just requires a little time and creative thinking. The way the site is set up is easy for someone to interact with without being an information overload. We would like to keep the simplicity of a one to two page layout for something like this because navigation does not need to clutter up the screen and detract from the gaming experience.

References

Meals, M., & Crawford, J. (2014). *Dungeons and Dragons: Player's Handbook* (5th ed.). Renton, WA: Wizards of the Coast LLC.

W3Schools. (n.d.). Retrieved from <https://www.w3schools.com/>.

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