Project Report

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Initech

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CIS4595 Capstone Systems Project

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Executive Summary

Our project was to build a website where a group of people could continue their Dungeons and Dragons games from the comfort and safety of their computer. Party Dungeon is a way to stay in touch with friends and play DnD with almost everything you would need to enjoy the game. This report will summarize how well we fared during the time spent creating the project among other items. Our team worked together to build the best site we could and make sure that it is something that we would be proud of showing off.

Final Requirements and Comparison with Initial Requirements

Our requirements were written out in several user stories / use cases in the original project plan.

The first case was just that a user should be able to navigate to the domain of the home page by using a web browser which then they would login to the site to authenticate. This is the second use case and has been changed as logging in is now required to access the website. The third use

case was that a user could register using the site but this has been completely scrapped due to being needless since one can just log in using the authentication system.

Our fourth use case was that a character could create a character using a character sheet. This was linked with the idea of retrieving character sheets to view during the game which is use case 6. Use case 5 was that certain components could be hidden if the player chose to, which is completed in the final product.

Use case 7 was our chat system, which is fully working however is the only way to communicate from the site for now. Use case 8 is the dice system which is fully working in the final product.

There are a few items in the final product that were originally not planned for and would be new requirements and use cases. These would be the rulebook that a user can use to find information, the search function of the rulebook, the game sessions for party groups, the online function to show who is currently online, and the file upload for whatever files the player needs.

Final Timeline and Comparison with the initial timeline

Due to the insane hurricane season that we had this semester, our timeline greatly differed from the original timeline. Most weeks were either shifted around or changed completely with a couple features scrapped and one feature added. The main difference would be that every week was pushed back by a week as well as our planned two weeks of bug fixes becoming one week to fix up things at the end of the semester. Our final timeline is as follows:

Week 1: Project group set up

Week 2: Project choice

Week 3: Sketching initial design, database setup, project plan started, login component

Week 4: Character form creation, dice code, background code for libraries and etc.

Week 5: Character sheet created in Angular, Database connection finished for login

Week 6: More tool functionality

Week 7: Tool testing, documentation on each part , rulebook created

Week 8: character sheet finished, chat system fully implemented

Week 9: search function added to rulebook, game sessions started

Week 10: User files uploaded, show character sheets, finish styling

Week 11: game sessions finished, testing whole system

Week 12: Clean up code, factor as needed, finish any bugs left

Project Results Compared with Expectations

The results we got during the semester working on this project met up with our expectations pretty well. Other than the issues discussed in the work to be done session, everything we set out to do has been accomplished.

Some of the results were above what our expectations were, such as how nicely the styling came out and the few little touches we made such as the login sound effect. The rulebook is way more in depth then we envisioned as well as it now being searchable by keywords. A few bugs that we could not figure out where something we didn't expect to happen but with the shortening of our bug fix time we set at the beginning, it is something we have to accept for the time being.

Project Process Review

In the beginning of the semester, we all agreed that an agile development would be ideal for our group. We have stuck to that throughout the project process and the benefits really showed when the hurricanes happened. We were able to adapt and change our plans on the spot when the first hurricane hit and were able to continue coding throughout that week that some of us had lost power / internet. We also benefited from keeping up with a sprint board on Trello throughout the semester which helped us keep up with what to do each week as well as see where we needed to put our focus for each sprint.

Everyone kept to their roles very well, we had no complication with the members of Initech and our role assignments. The two developers of our team were able to get parts of the project coded initially which then were sent to our cyber security team who would check for issues. The cyber security team would also handle testing for us and send back reports which at that point the developers would recode anything that needed to be fixed. We had no issues with this model.

Work to be Done

Almost everything we wanted to be included in the site was implemented and with little bugs. The one big thing that we were not able to get accomplished in time though was other ways to communicate for the

players. Currently we have a chat system but originally we planned to use the Zoom sdk to utilize web cameras for the players to see each other or even just a way for players to use mics. Sadly this had to be scrapped for time.

Another issue that could use more work is the site on smaller screens, there is quite a bit to the site (lots of css) and some of the pages break when viewed on a smaller screen. Some don't break per say but don't look how we would have liked.

Lastly, there are a couple bugs / small things we did not get to. One off the top of my head is that some of the character sheet input boxes should be limited to a plus sign and number, but since they are type string letters or symbols could be added as well. If we had more time, it would have been nice to have each input box have its own regex to prevent this from happening.