Draft Proposal

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Advisor Name: Dr. Sean Hayes

Expected Date of Graduation: Spring 2021

Description of Project: My project will be a system to help keep track of rules and items that are difficult to implement using paper. For instance, custom items that are created by the game master can be difficult to keep track of because they are not listed as official items in any of the Dungeons and Dragons source material. My project would provide an easy way to keep track of such items.

Proposed Implementation Language(s): My project will use Meteor, which is an online resource that integrates JavaScript, MongoDB, and Node.js to build applications. Meteor’s website at <https://www.meteor.com/> reads, “Meteor is an open source platform for web, mobile, and desktop used by over half a million developers around the globe to make shipping javascript applications simple, efficient, and scalable.”

Any Software/Equipment Needed: My project will use Meteor, a JavaScript app building resource.

Motivation and Problem Statement: There should exist a program that allows game master and players of table-top RPGs to keep track of difficult rules. Ideally, every rule of a role-playing table-top game should be used. Unfortunately, some table-top RGPs contain rules that can be difficult and time consuming and can consume a large amount of paper. Specifically, in Dungeons and Dragons, such rules as carry capacity and encumbrance are difficult to keep up with. Removing the rule entirely is a common fix, but leaves the game feeling unrealistic at times. Additionally, items can be given in secret, but verbal communication ruins the secrecy. I propose a system that uses databases and networking to allow a game master to give items to players and to allow players to easily check how much weight they are carrying. Additionally, this program would be able to keep track of all player stats and would be a tool to ease the play of table-top RPGs in as many ways as possible. Table-tops have rules that can be confusing at times, so I will make a program utilizing databases to fix the problem.

Outline of Future Research Efforts: I will complete my project by completing the personal inventory system first, then completing the networking portion to allow game masters to deliver custom items into players’ inventories. The game master can see all players’ inventories, but players can only see their own. The next step will be to create a spell book function which keeps track of players’ known spells and spell slots. Again, the game master can see all players’ spell books, while players can only see their own. Finally, I will add a system to ease character creation which can be confusing and daunting for new players. Some problems I have anticipated running into include familiarizing myself with Meteor, which can be solved with the platform’s tutorial. Another problem could be devices having multiple running games to keep track of. To remedy this, I plan on adding a game selection portion to my app so a person may participate in many games as a player or game master and the app will be able to keep track of the information for each game separately.

Schedule:

* Personal Inventory System – June 30, 2020
* Networked Inventory System – July 30, 2020
* Personal and Networked Spell Book – August 30, 2020
* Character Creation System – August 30, 2020
* Create a requirements document – September 15, 202
* Create a test plan – September 30, 2020
* Finish beta version – October 15, 2020
* Complete testing on a beta version – October 30, 2020
* Analyze results from testing and make changes (bug fixes, design changes, etc.) – November 15, 2020
* Complete project documentation – November 25, 2020
* Defend project (expected to be Dec. 4th 2020) – December 4, 2020

Revise timeline, complete meteor tutorials, meeting same time next week