Help Documentation

The Keep Launch Hub

Overview

The Keep Launch hub is the central program of The Keep that grants access to all other programs. This program's function is to launch all of the other programs that have been created under The Keep's tool suite.

UI Elements

Title

Provides a welcome message for the user in a grey and black color scheme to mimic the aesthetic of a castle keep.

Dice Roller Button

Launches the dice rolling application which parses roll expressions such as 4d4+4

NPC Generator Button

Launches the NPC generator which allows GM's to expediently create a variety of NPC's using a trait based system

Music Manager Button

Launches the music manager which allows for GM's to add a variety of audio tracks and mix their contents, providing a soundscape for players.

Shop Inventory Generator Button

Launches the shop inventory generator which allows GMs to quickly populate a shop with items and see a price value for each item.

Battlemap Generator Button

Launches the Battle Map Generator which allows GMs to generate a quick and simple map for a variety of different terrain types.

Character Management Button

Launches the character manager which allows GMs and Players to either create characters or modify existing characters created using the character manager.

Advanced Status Tracker Button

Launches the advanced status tracker tool which allows players and GMs to keep track of conditions applied to their character and understand all of the penalties applied as a result of those conditions.

Encounter Generator Button

Launches the encounter generator which allows GMs to rapidly create logical encounters using a set of defined environments for each monster.

Overland Travel Manager Button

Launches the overland travel manager which allows GMs to overlay a hexagonal grid on top of a map and set parameters for each hex on the map, such as likelihood for an encounter and terrain type, allowing for easy travel management in play.

Dice Roller

Overview

Allows users to input a roll expression and receive a randomly determined outcome. For example, the expression 4d4+4 would create a random roll of four d4 and then it would add 4 to the overall result of the roll. The program shows the output of each individual die that was rolled by the program, the modifiers in the user's expression, and the overall result of the roll

UI Elements

Text Field

This blank text field is where the user inputs their desired roll formula. The format for a die roll is XdY where X is the number of dice to be rolled and Y is the face maximum value of each die. In addition to die rolls, modifiers can be added using the arithmetic operators of addition (+) and subtraction (+). Using this notation, complex roll formulas can be created such as 2d4 + 3d6 + 4d8 + 10.

Roll Button

When pressed, if a roll formula is present in the text field it is executed and the result is displayed in the lower area of the window.

Output Area

The lower portion of the window where output text is displayed.

NPC Generator

Overview

The NPC generator is a tool for quickly creating NPCs of various different types, such as adventurers, commoners, high tier villains, low tier villains, shopkeepers, and wealthy/influential people. This tool will generate NPCs that have a role assigned to them as well as a variety of positive and negative traits.

UI Elements

NPC Type Selector Dropdown

The uppermost button is the NPC type selector, which allows the user to toggle between the various defined NPC categories such as adventurers, commoners, high tier villains, low tier villains, shopkeepers, and wealthy/influential people. This selection causes the program to pull from a CSV list containing a variety of roles for each type of NPC. For example if the adventurer option is selected in this field, some of the possible role outputs are barbarian, wizard, warlock, or rogue.

Positive Traits Dropdown

The next dropdown in the program when read top to bottom is the positive traits numerical selector. This dropdown allows users to select how many positive traits they want an NPC to have. A positive trait is a generally favorable quality that can benefit a given NPC. For example, positive traits may be things such as possesses good business acumen, is skilled with a sword, charismatic, etc... Possible values for this dropdown range between 0 and 16.

Negative Traits Dropdown

The next dropdown in the program when read top to bottom is the negative traits numerical selector. This dropdown allows users to select how many negative traits they want an NPC to have. A negative trait is a generally favorable quality that can hinder a given NPC. For example, negative traits may be things such as greedy, bloodlust, clumsy, etc... Possible values for this dropdown range between 0 and 16.

Generate Button

The last visible UI element present in this program is the Generate button which causes an NPC to be generated based on the parameters that the user has selected. For instance, if a user selects an adventurer with 2 positive traits and 1 negative trait, the output that they get may be a paladin who is intelligent and strong, but is generous to a detriment.

Output Area

The lower portion of the window where output text is displayed.

Music Manager

Overview

The music management tool is designed to allow game masters to create a variety of different soundscapes to immerse their players into the session. The tool allows users to load in any audio files that they may have and set a volume amount for each file. After the user has loaded their files and configured a volume for each file, they are then allowed to play, pause, resume, or stop each track. This allows a GM to create a variety of soundscapes that are the combination of blended audio files, and grants the GM full control over what sounds play at any given time.

UI Elements

Add Track Button

When the music manager tool is initially loaded, the only button that is visible is the add track button. Upon clicking this button, a file explorer is opened which allows users to browse their local drives for audio files to be loaded into the program. After the user loads in an audio track, they are given several options for configuration and management of the track loaded as described below.

Track Name Field

Once a track is loaded, a track is added to the music manager and can be seen in the track listing, denoted by the filename selected. This allows users to keep track of what audio files are present in the music manager at any given time

Play Button

After a track is loaded, this button is used to play the audio file from either the initial state, a paused state, or a stopped state

Pause Button

After a track is loaded, this button can be used to pause a track that is currently playing. In order to see the functionality of this button, a track must first be playing. If the pause button is pressed while the track is playing, the audio for that track will stop playing at the point in the audio file where the button was pressed. If the track is resumed later, it will begin at this paused point.

Resume Button

After a track is loaded, this button is made visible in the user interface. The resume button continues playing a track at the point where it was last paused.

Stop Button

After a track is loaded, the stop button is made visible in the user interface. The stop button ceases the playing of a currently playing track and resets that track back to the beginning of the audio file.

Volume Slider

Once a track is loaded, a volume slider is made visible for that track. The volume slider can be manipulated while the track is playing to hear real time changes in volume, allowing for fine tuning of a given track at the time that it is loaded. The value representation for the volume slider exist on a scale of 0 to 1 with two decimal places.

Shop Inventory Generator

Overview

The shop inventory generator is a tool for populating the inventories of various different types of stores and shops that players are likely to encounter over the course of a campaign. Each shop is populated via tailored lists of items which contain items logical for that shop. Additionally, each item in a shop's list is assigned a rarity value that is used to determine how frequently it should appear in a shop. This is done to prevent a shop from carrying multiple items that are difficult to acquire. For instance, a spyglass is an incredibly expensive and difficult to produce item, so there should only ever be 1 spyglass in a general goods store at most.

UI Elements

Shop Type Selection Dropdown

The uppermost button present in the shop inventory generator is the shop type selection dropdown which allows the user to select a shop type in which to populate with items. The user has the ability to populate the items for a forge, apothecary, butcher, general store, component shop, jeweler, magic item shop, clothing store, stables, or a brewery. Each of these shop types encompass a shop that is likely to be encountered throughout the course of a standard fantasy campaign and is complete with a list of logical items.

Generate Button

The lowermost button present in this tool is the generate button which populates a list of items that are available at the shop selected in the shop type selection dropdown. Pressing this button populates a shop with items and provides a quantity of the item carried by that particular shop as well as a price for purchasing one of the item listed. This output can be seen in the output area for this tool.

Output Area

The bottom portion of the window for this tool initially appears blank, however, once the generate button is pressed, the area fills with the item contents for a given shop.The format for items is as follows "[itemName]: [itemQuantity] - [pricePerItem]" The name in brackets denotes a variable that is filled by the program. For example, if one line of output was Dagger: 3 - 2 GP it would mean that the shop carries three daggers, and each dagger costs 2 GP.

Battlemap Generator

Overview

The battlemap generator tool is used for creating battlemaps rapidly for a variety of different terrain types that may be encountered throughout normal play in traditional fantasy settings. The tool allows users to customize output name, terrain type, map size, and density of features on the map.

UI Elements

Map Name Text Field

The map name text field allows users to enter a desired name for the output image file created as a result of map generation.

Terrain Type Dropdown

The terrain type dropdown allows users to select a specific terrain type for the ground texture of their map. The options are arctic, coastal, desert, forest, grassland, hill, mountain, open water, swamp, underdark, underwater, and urban. Each option produces a different ground texture in the final output file. The arctic option produces a ground texture that is a gradient of blue and white. The coastal option produces a ground texture that has dark and light blue areas, representing water with some yellow area representing sandy shores. The desert option produces a ground texture that is a blend of orange and yellow hues, representing a sandy texture. The forest and grassland options produce a ground texture that is a blend of dark greens and light yellow, representing a forest floor, however the grassland texture favors lighter hues whereas the forest option favors darker greens. The hill option produces a ground texture that is a blend of dark and light greens with some white highlighting, simulating the perception of elevation. The mountain option's ground texture consists of black and orange hues, providing the simulation of elevation and cliff faces. The open water texture is a blend of turquoise, cobalt, and light green, simulating an top down ocean texture of water and algae blooms. The swamp option consists of separated land and water segments where water is represented by a muddled green color and land is seen in orange masses. The underdark option produces a ground texture that is a blend of muted hues, such as black, purple, and a sickly grey. The underwater option produces a variety of different colorations to simulate the diversity of flora that resides underneath the ocean. The urban option produces a ground texture that is a gradient of black and white, representing stone and cobbled streets.

Size Dropdown

The size dropdown allows users to select the relative output size of their map, whether it be small, medium, or large.

Feature Density

The feature density dropdown allows users to modify how many land features are placed on a given map. For example, if the forest terrain is selected, the land features present on that map would be trees. The feature density option, in the context of a forest map, would dictate how many trees are placed on the map. The options for feature density are none, low, normal, or high where none means no land features are placed on the map and high means that the map will have a large number of land features visible.

Generate

The generate button will take the parameters set by the user, such as map name, terrain type, size, and feature density, and will create a map in accordance with those parameters. Map generation may take a bit of time to complete depending on how much processing power there is on the computer running the application. After generation is completed, the final map will appear in the directory where The Keep is currently stored.

Retrieving Output

After the battlemap generator has been configured with user determined parameters and a map has been generated, the user will need to retrieve the file created by the battlemap generator program. The map that the program created can be found by going into the directory of where The Keep is stored and searching for a png file with a name matching the one that the user input as a parameter to the generation program. For example, if the user named their map "forest-map" and the user has The Keep stored in the directory "C:\Users\name\Documents\TheKeep" the user would need to navigate to the C:\Users\name\Documents\TheKeep\Maps directory and look for a file named forest-map.png. Once this file is retrieved, it can be imported into the user's VTT of choice, printed out for use during in person sessions, or used for any other imagined purpose.

Character Manager

Overview

The character management tool allows players to create and modify characters in a similar fashion to pencil and paper character sheets. The tool allows users to add basic character details such as name, race, class, level, ability scores, hit points, armor class, attacks, skill proficiencies, and skill scores. The combination of all of these fields allows players to keep track of the most important facets of their fifth edition characters and provides a experience that is reminiscent of a pencil and paper character sheet. Characters created using this tool can be saved to a file which can be imported back into the Keep for further modification of viewing.

UI Elements

Name Text Field

A text field intended for the name of the character that the sheet is representative of.

Race Text Field

A text field intended to represent the race of a particular character.

Class Dropdown

A dropdown menu containing all 13 of the classes offered in Dungeons and Dragons 5th edition.

Level Dropdown

A level dropdown menu containing values of 0-20, representing all levels obtainable through ordinary play.

Save Button

A button that saves the current state of the character sheet to a file which can then be accessed later or transferred between individuals to preserve a character sheet.

Load Button

A button to that allows users to load a saved character sheet. When pressed the load button opens up a file explorer that allows users to browse their drives for any character sheet files that were generated using The Keep's character management tool.

Strength Dropdown

A dropdown menu representing values 0-20 which are the ordinarily obtained minimum and maximum for each of the 6 ability scores.

Dexterity Dropdown

A dropdown menu representing values 0-20 which are the ordinarily obtained minimum and maximum for each of the 6 ability scores.

Constitution Dropdown

A dropdown menu representing values 0-20 which are the ordinarily obtained minimum and maximum for each of the 6 ability scores.

Intelligence Dropdown

A dropdown menu representing values 0-20 which are the ordinarily obtained minimum and maximum for each of the 6 ability scores.

Wisdom Dropdown

A dropdown menu representing values 0-20 which are the ordinarily obtained minimum and maximum for each of the 6 ability scores.

Charisma Dropdown

A dropdown menu representing values 0-20 which are the ordinarily obtained minimum and maximum for each of the 6 ability scores.

Hit Points Text Field

A text field representing the amount of hit points that a character currently has.

Armor Class Text Field

A text field representing the armor class value that a character currently has. This value can be modified as needed based on whether or not the character has various different types of equipment currently equipped.

Attack Text Field

A text field used to record the name of a specific attack or weapon. For example, if the character carries a longbow, they might record a word "Longbow" in one of these fields to represent attacks made with their longbow.

To Hit Text Field

A text field used to represent the modifiers that one has for a given attack. For example, if a character with a longbow attack has a dexterity modifier of 4 and a proficiency bonus of 3, they would likely record 7 or +7 in the To Hit text field. However, any notation of the player's choice can be used.

Damage Text Field

A text field used to represent the damage that a particular attack does. For example, if a player wishes to record the damage value for a greatsword on a character with a strength score of 3, they may write 2d6+3 in this field. However, any notation of the player's choice can be used.

Proficiency Checkbox

To the left of every skill name, there is a checkbox. The checkbox represent proficiency in the skill that it is adjacent to. For example, if a character is proficient in nature, survival, and stealth, the player would tick the checkbox next to each of those skills to notate that they are proficient in the skill.

Skill Modifier Text Field

To the right of every skill name, there is a text field with default values of 0 inserted for a new character. Each of these text fields represents the modifier that the player has for ordinary skill checks using that skill. For example, if the character has an intelligence score of 4, a proficiency bonus of 3, and is proficient in the Arcana skill, they would record a 7 in this field.

Advanced Status Tracker

Overview

The advanced status tracker is a tool used for keeping track of one's action economy, concentration status, and conditions during combat. When a user applies a condition to their character through this tool, they will see the condition present underneath the conditions header along with pertinent information pertaining to the afflicted condition, such as what mechanics a particular condition imposes. For example, if a user added the incapacitated condition, they would see an entry below the conditions header stating that an incapacitated creature can't take actions or reactions.

UI Elements

Character Name Dropdown

The left most button on the top row allows you to select a character whose statuses you are tracking for the purposes of easy visual identification. The options available are populated from Sheets folder in the directory where The Keep is stored. For example, if The Keep is stored in "C:\Users\name\Desktop\TheKeep" the character names available would pull from the directory "C:\Users\name\Desktop\TheKeep\Sheets"

Condition Dropdown

To the right of the Character Name dropdown is the Condition dropdown which contains a list of all conditions contained within the fifth edition Dungeons and Dragons SRD, which are as follows: Blinded, Charmed, Deafened, Exhaustion, Frightened, Grappled, Incapacitated, Invisible, Paralyzed, Petrified, Poisoned, Prone, Restrained, Stunned, and Unconscious.

Add Condition Button

To the right of the Condition dropdown is a button labeled Add Condition. This button applies the currently selected condition from the Condition dropdown to a character and displays the output below the ===CONDITIONS=== header for ease of viewing.

Cure Condition Button

To the right of the Add Condition button is a button labeled Cure Condition. This button removes the currently selected condition from the Condition dropdown from a character and modifies the output below the ===CONDITIONS=== header for ease of viewing. For example, if you had the Blinded and Deafened condition applied to your character, then selected the Blinded condition from the Condition dropdown, then pressed the Cure Condition button, you would then only see the Deafened condition text in the conditions output text field.

Reset Button

Located to the right of the Cure Condition button is the Reset button. When the Reset button is pressed, it reverts the Advanced Status Tracker tool to the state in which it was launched.

Long Rest Button

The left most button on the second row of buttons is the Long Rest button. When pressed, this button will reset the status of the Action, Bonus Action, and Reaction button, but will not purge conditions as some conditions may persist past the duration of a long rest.

Short Rest Button

The Short Rest button is located to the right of the Long Rest button. When pressed, this button will reset the status of the Action, Bonus Action, and Reaction button, but will not purge conditions as some conditions may persist past the duration of a short rest.

New Round Button

The New Round button is located to the right of the Short Rest button. When pressed, this button will reset the status of the Action, Bonus Action, and Reaction button, indicating that the player's turn has begun and allowing them access to these components of their action economy once again.

Action Button

The Action button is located in the center of the second row of buttons. When the Action button is pressed, its color changes to a muted red, indicating that a character has used their Action for their turn, such that they do not have to recall whether or not their action has been used as of yet during this round.

Bonus Action Button

The Bonus Action button is located in the right of the Action button. When the Bonus Action button is pressed, its color changes to a muted red, indicating that a character has used their Bonus Action for their turn, such that they do not have to recall whether or not their Bonus Action has been used as of yet during this round.

Reaction Button

The Reaction Action button is located in the right of the Bonus Action button. When the Reaction button is pressed, its color changes to a muted red, indicating that a character has used their Reaction, such that they do not have to recall whether or not their Bonus Action has been used as of yet during this turn.

Concentration Button

The Concentration Action is the right most button on the second row. When the Concentration button is pressed, its color changes to a muted red, indicating that a character is concentrating on a spell. If the Concentration button is pressed while in this muted red state, the button will revert back to its gray color. This allows a player to easily toggle their concentration status as they cast spells and lost concentration.

Conditions Text Area

The Conditions text area takes up the vast majority of the space in the Advanced Status Tracker, being located underneath each of the buttons. The start of the Conditions text area is marked by a text banner decorated as =====CONDITIONS===== where it will keep track of each condition applied and removed using the Add Condition and Cure Condition buttons.

Encounter Generator

Overview

The encounter generator is a tool used to create logical encounters for any terrain type that one is likely to come across in a standard fifth edition setting. The encounter generator allows users to select a specified terrain type as well as the difficulty of combatants and the number of enemies faced of that difficulty. When each of these fields is filled out and the generate button is pressed, the encounter generator will create an encounter using the specified parameters as well as populate each creature in the encounter with a logical loot reward. Additionally, once an encounter is generated, users can seamlessly generate a battlemap for the selected terrain type directly from the encounter tool. For example, if one attempted to generate an arctic encounter with a single non-combatant enemy, they might see that their encounter is a Acolyte that drops a dagger.

UI Elements

Terrain Dropdown

The terrain dropdown allows users to select the terrain type that they wish their encounter to take place in. The list of available terrain types are Arctic, Coastal, Desert, Forest, Grassland, Hill, Mountain, Open Water, Swamp, Underdark, Underwater, and Urban.

Difficulty Dropdown

The difficulty dropdown allows users to select the difficulty range that they wish for their combatants to have. The list of possible difficulties are Non-Combatants, Fodder, Tough_Guys, Mid_Bosses, and Bosses. Each of these difficulties contains enemies of a defined Challenge Rating range as follows:

Difficulty	Challenge Rating Range
Non-Combatant	0-2
Fodder	2-4
Tough_Guys	4-8
Mid_Bosses	8-17
Bosses	17-30

Number of Enemies Dropdown

The number of enemies dropdown allows users to select number of combatants of the selected difficulty that they wish to appear in the encounter. Any given encounter can have between one and six enemies, each with their own loot drops based on their creature type.

Generate Button

The generate button creates an encounter using the specified parameters set by the user for Terrain, Difficulty, and Number of enemies. After an encounter is determined, the results are placed in a text output area beneath the row of buttons and dropdowns.

Generate Battlemap Button

Initially the generate battlemap button is hidden. The button becomes visible once the generate button is pressed as it is unlikely that a battlemap would be needed unless an encounter was created. The generate battlemap button creates a battlemap using the user selected option for terrain type. For example, if the user were to select Desert as their terrain type and proceeded to generate a desert encounter, they would see the generate battlemap button made visible. If the user pressed the generate battlemap button, they would see a Desert map be created called New Map in their Maps folder within The Keep's directory. For example, if the user has The Keep located at "C:\Users\name\Desktop\TheKeep" the new map would be located at "C:\Users\name\Desktop\TheKeep\Maps"

Encounter Text Area

Beneath the row of buttons and dropdowns is the encounter text area, which displays the randomly generated encounter based on the user selected parameters for terrain, difficulty, and number of enemies. Each enemy that appears in the encounter is formatted as follows: **EnemyName** CR: **CRValue** Creature Type: **Type** with bold entries being variables that are filled in based on the randomly selected creature. Below this output line is an item that the creature drops. Lastly, below that is a ASCII division line to separate creatures from one another visually. For example, a possible arctic encounter with two fodder enemies may appear as follows:

Polar Bear CR: 2 Creature Type: Beast
Drops: A day worth of rations in meat

Griffon CR: 2 Creature Type: Monstrosity
Drops: Monster's hide worth 5 GP

Overland Travel Manager

Overview

The overland travel manager is a tool designed to assist DMs with managing travel from one destination to another across a world or regional map. The tool allows users to overlay a hexagonal grid overtop an existing png or jpg image file located in The Keep's Maps directory where each hex gets a unique numeric label in order to allow for easy identification and configuration later. After a user has created a hexagonal grid overlay map or loaded in existing map data, an option will appear to format the hexes on that particular map. To do so, the user enters in a range of hexes that they wish to format and specifies the terrain type that the hexagonal tile is, the difficulty of combatants in that tile, the number of enemies in that tile, and the likelihood of encountering enemies as that tile is traversed. After this formatting has been completed for all desired hexes, the DM can then simply enter the ID of a hex whenever the party travels through it and check for encounters. The benefit of this tool is that the DM only has to invest time preparing a hexagonal map once, and, from that point on, can expediently manage overland travel for their players with regards to running into encounters.

UI Elements

Overlay Management Label

The overlay management label is designed as an organizational tool to inform the user that the map name, size, and overlay hex grid buttons are all features tied to managing the hexagonal overlay.

Map Name Dropdown

The map name dropdown allows users to select which map they wish to load in preparation for overlaying a hexagonal grid. The options available for selection from this dropdown are pulled from the Maps folder where The Keep is located. Images that one wishes to overlay a hexagonal grid onto must first be placed within this directory. For example, if the user has The Keep located at "C:\Users\name\Desktop\TheKeep" the dropdown would point at files located at "C:\Users\name\Desktop\TheKeep\Maps".

Size Slider

The size slider is what determines the size of the hexes overlayed on top of the map selected in the map name dropdown field. A smaller numeric value for this slider indicates that each hex will be smaller and therefore there will be more hexes on the map. The possible values for this slider range from 25-75 pixels per hex.

Overlay Hex Grid Button

The overlay hex grid button takes in the image selected from the map name dropdown and overlays a hexagonal grid on top of the map according to the size specification provided by the user in size slider. Once the overlay process is complete, the user will be presented with the end result of their overlay in their system's default image viewer. If the user wishes to retrieve this hex gridded map later, they must go into The Keep's maps folder and navigate to the Hex Maps directory within that folder. For example if the user has The Keep located at "C:\Users\name\Desktop\TheKeep" the hex map would be available at "C:\Users\name\Desktop\TheKeep\Maps\HexMaps".

Encounter Management Label

The encounter management label is designed as an organizational tool to inform the user that the hex ID, check for encounter, and generate encounter buttons are all features tied to managing the occurrence of encounters throughout travel.

Hex ID Text Field

The Hex ID Text Field allows users to enter the numeric value of a hex tile for a map that has both had a hexagonal overlay applied to it and has been configured using the format tiles button. The purpose of this field is to allow users to input a hex ID such that the specified hex can be checked for encounters using the check for encounter button.

Check for Encounter Button

The check for encounter button allows users to check the hex ID specified in the hex ID text field for an encounter. When pressed, The Keep will check the configured hex's percent chance for an encounter, and see if an encounter is randomly generated based on the configured chance. If an encounter is not found, text will appear beneath all of the buttons stating that there is "No encounter for this hex." However, if an encounter is populated based on the percent chance, The Keep will generate an encounter using the configurations for that hex in a new window and display the results to the user. For example, if a user configured hex 15 to have a 95% chance of a forest encounter with a single enemy of the the Bosses difficulty, and the user checked hex 15 for an encounter, more likely than not when they pressed the check for encounter button with hex 15 set as the hex ID, they would see an encounter generated with a randomly determined boss enemy that dwells in the forest, such as an Ancient Green Dragon.

Generate Encounter Button

The Generate Encounter button launches the Encounter Generator tool with no special parameters set. The purpose of including this button within the overland travel manager tool is to allow DMs to conveniently force an encounter to be generated without needing to navigate to The Keep launch hub to launch the encounter generator from there.

Data Management Label

The data management label is designed as an organizational tool to inform the user that the load map data and format tiles buttons are all features tied to managing and modifying data generated by the hex formatting tool.

Load Map Data Button

The Load Map Data button launches a file browser initially pointed at The Keep's MapData folder and allows users to load in any map data files that have been formatted using the overland travel manager's tile formatting tool. For example, if The Keep is located at "C:\Users\name\Desktop\TheKeep" then the file explorer would initially be pointed at the following location "C:\Users\name\Desktop\TheKeep\MapData" however, data can be loaded from any location.

Format Tiles Button

The purpose of the format tiles button is to launch The Keep's tile formatting program which creates and modifies existing map data. Initially this button is not visible as one should only be formatting tiles in existing map data or a newly generated instance of map data. Once a user overlays hexes onto a map, a text file will be generated in The Keep's MapData folder which is a directory where The Keep is located. For example, if The Keep is located at "C:\Users\name\Desktop\TheKeep" then the MapData folder would be located at "C:\Users\name\Desktop\TheKeep\MapData". After this text file is generated by pressing the overlay hex grid button, the format tiles button appears. Alternatively, if the user has an existing map data file that they wish to modify that was created using the hex formatting tool of the overland travel manager, they may press the load map data button, select a map data file, and see the format tiles button become visible.

Tile Formatting Tool

Overview

The tile formatting tool is used to modify the configuration of hexes for a given hex map to be used with the overland travel management tool. The tile formatter allows the terrain type, difficulty of enemies, number of enemies, and chance for an encounter expressed as a percentage to be configured for a range of hexes, allowing complete configuration of an entire hex map.

Terrain Type Dropdown

The terrain type dropdown is used to specify the environment type that a particular range of hexes is intended to represent. The possible choices for this dropdown are arctic, coastal, desert, forest, grassland, hill, mountain, open water, swamp, underdark, underwater, and urban.

Difficulty Dropdown

The difficulty dropdown allows users to select the difficulty range that they wish for their combatants to have in the specified range of hexes. The list of possible difficulties are Non-Combatants, Fodder, Tough_Guys, Mid_Bosses, and Bosses. Each of these difficulties contains enemies of a defined Challenge Rating range as follows:

Difficulty	Challenge Rating Range
Non-Combatant	0-2
Fodder	2-4
Tough_Guys	4-8
Mid_Bosses	8-17
Bosses	17-30

Number of Enemies Dropdown

The number of enemies dropdown allows users to select number of combatants of the selected difficulty that they wish to appear in the particular range of hexes. Any given hex can have between one and six enemies, each with their own loot drops based on their creature type.

% Chance Text Field

The % chance text field represents the chance of an encounter generating for the specified range of hexes, expressed as a percentage. Only positive integers should be entered as values in order to guarantee proper configuration. For example, if one were to input a value of 54, that would mean that there is a 54% chance of an encounter being generated for the specified range of hexes once the submit button is pressed.

Tile Start Text Field

The tile start text field specifies beginning of the range of hexes to be configured. When the submit button is pressed, the currently selected configuration for terrain type, difficulty, number of enemies, and % chance will be applied to all hex IDs beginning with the value of the tile start text field and ending at the hex that corresponds with the value stored in the tile end text field.

Tile End Text Field

The tile end text field specifies end of the range of hexes to be configured. When the submit button is pressed, the currently selected configuration for terrain type, difficulty, number of enemies, and % chance will be applied to all hex IDs beginning with the value of the tile start text field and ending at the hex that corresponds with the value stored in the tile end text field.

Submit Button

The submit button stores the currently selected hex formatting into the map data file that was used to launch the tile formatting tool. For example, if you selected terrain type as forest, difficulty as fodder, number of enemies as 2, % chance as 70, tile start as 5, and tile end as 12, that would result in hexes 5,6,7,8,9,10,11, and 12 being configured as having a 70% chance of generating an encounter with 2 forest enemies belonging to the fodder difficulty bracket.

Notification Area

Located to the right of the submit button is a notification area that is initially invisible which informs the user once they have successfully formatted a range of hexes. If the hex formatting is successful, the output text in this area will state "Tiles X-Y successfully formatted." where X is the value for tile start and Y is the value for tile end.

Spell Manager

Overview

The spell manager is a tool designed to assist spellcasters in the fifth edition version of Dungeons and Dragons with convenient, filter based spell lookup, spell loadout creation, and spell reference. The spell manager allows users to assemble custom spell loadouts curated from all available fifth edition SRD spells and store them in a portable format that can be reimported into any device that runs The Keep. The purpose of this system is to reduce the time needed to prepare spells each day as many spell casting players often have a select handful of common loadouts that they use depending on what they intend to do for the day, whether it be offensive focused, defensive focused, utility based, or some other form of loadout.

UI Elements

Spell Name Text Field

The spell name text field is used as one method for searching spells. If a user happens to know the exact name of a spell that they want to search, they can input the spell's case sensitive name into this text field and press search to find the spell in the Select Spell dropdown. If a user

want to search all spells available and use filters to narrow down their spells instead, they should input the text "All Spells" into the spell name text field prior to searching.

Level Dropdown

The level dropdown allows users to filter spells by level. The dropdown contains options for spell levels 0-9 with spell level 0 being representative of cantrips. If a user wants to stop filtering by name the level dropdown should be set to the "All Levels" option.

School Dropdown

The school dropdown allows users to filter spells by each of the schools available in the fifth edition SRD ruleset. The complete list of options available are as follows: Conjuration, Illusion, Evocation, Divination, Abjuration, Enchantment, Transmutation, Necromancy, and All Schools. If a user wants to stop filtering by spell school, the school dropdown should be set to the "All Schools" option.

Save Loadout Button

The save loadout button allows users to save their currently created list out to a text file that can later be reimported into the keep. When the save loadout button is pressed, a file explorer will launch that is initially pointed at the SpellLoadouts folder in the Sheets directory present where The Keep is located. For example, if The Keep is located at "C:\Users\name\Desktop\TheKeep" then the save loadout button will initially open in the "C:\Users\name\Desktop\TheKeep\Sheets\SpellLoadout" directory. Once this file dialog is open, users will have the ability to name their spell loadout to a custom name of their choosing.

Load Loadout Button

The load loadout button will allow users to load in a previously saved spell loadout into the spell manager for easy reference. When the Load loadout button is pressed, a file explorer will launch that is initially pointed at the SpellLoadouts folder in the Sheets directory present where The Keep is located. For example, if The Keep is located at "C:\Users\name\Desktop\TheKeep" then the load loadout button will initially open in the "C:\Users\name\Desktop\TheKeep\Sheets\SpellLoadout" directory. Once this file dialog is open, users can path to wherever their desired loadout is located and load the file from that location.

Search Button

The search button allows users to view all spells that match the criteria of their selected filters such as spell name, level, and school. When the search button is pressed, the select spell dropdown will be populated with all spells that fit the currently applied filters. For example, if a user set the spell name field to All Spells, set the level dropdown to 9, and set the school to evocation, they would be presented with the spells Mass Heal and Meteor swarm.

Select Spell Dropdown

The select spell dropdown is located between the search button and the preview spell button. This dropdown will contain a list of all spells that fit the filters selected by the user once the search button is pressed. After the filters have been tinkered with to the user's liking and the search button has been pressed, the user can then click on the select spell dropdown to view all spells that match their criteria.

Preview Spell Button

The preview spell button is used to view the specific details of a given spell. In order to view preview the contents of a spell, one must first select a spell from the select spell dropdown and then hit the preview spell button. Once this is done, The Keep will create a new window containing the details of that spell such as the name of the spell, the level and school of the spell, the casting time, the duration, the range, and the description of the spell. These windows can be used to quickly reference several different spells simultaneously as a spellcaster considers their options for a given scenario.

Add Spell Button

The add spell button is the key to building out custom spell loadouts. When pressed, the add spell button will add the currently selected spell from the select spell dropdown into the caster's spell list. When this button is pressed for the first time, it will cause the spell loadout text area to appear, which displays all spells currently present in the caster's loadout. For example, an offensive loadout for a first level Wizard may look something like this once they have added all of their desired spells:

Cantrips: Fire Bolt, Ray of Frost, Light
1st Level: Burning Hands, Magic Missile, Thunderwave, Mage Armor, Shield
2nd Level:
3rd Level:
4th Level:
5th Level:
6th Level:
7th Level:
8th Level:
9th Level:

Spell Loadout Text Area

Beneath each of the buttons in the spell manager tool is the output area for one's spell loadout. Initially, when the spell manager program is launched, this output area is hidden as users may only want to lookup spells quickly without creating a loadout. However, once a spell is added to a loadout through the use of the Add Spell button, text begins to populate below all of the buttons containing a list of all possible spell levels as well as the recently added spells. The user can use this output to look at the spells added to their loadout in a logical fashion.