

# **System Design Document**

## **The Darkest Things Development Project**

**DEWOLF STUDIOS**  
**3821 Razorback Lane**  
**Benton, AR 72015**

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## **Introduction**

This System Design Document has been created to outline the proposed system design for the new game, *The Darkest Things* ('the Game'). The Game is intended to tell the story and deliver the intended gaming experience. By designing, testing, and deploying different versions of the Game, DEWOLF STUDIOS will improve its capabilities in iterative development processes. This document and the specifications listed herein comply with all DEWOLF STUDIOS technical standards and infrastructure. Then I will cover more specifics to the design of the Game with an executive summary, game premise, gameplay, mechanics, game elements, and assets.

## **Purpose**

The purpose of this System Design Document is to provide a description for how the game will be constructed. The Systems Design Document was created to ensure that the game design meets the requirements specified in the Darkest Things Development Project requirements documentation. The System Design Document provides a description of the system architecture, software, hardware, and security.

## **System Overview**

DEWOLF STUDIOS has faced challenges and shortcomings in managing development of the Game. The proposed Game will utilize the Player/User's computer infrastructure and hardware to provide a gaming experience which will standardize and improve the efficiency of DEWOLF STUDIOS' iterative development capabilities.

The Game is designed using the RPG Maker MV software tool which is compatible with and leverages existing DEWOLF STUDIOS hardware and infrastructure. Additionally, RPG Maker MV is compliant with all internal DEWOLF STUDIOS network security protocols and policies as well as industry regulatory policies, being a non-interactive application.

The RPG Maker MV tool will provide various user interfaces which will allow rapid and simplified development of the Game. It will also allow us to export different versions to each other for testing purposes.

One of the primary benefits of the RPG Maker MV tool over other development methodologies is its ability to consolidate all data, resources, and various other metrics. Until now DEWOLF STUDIOS has relied upon legacy software with various constraints and limited user interfaces which has resulted in poor development, management, as well as a general lack of enthusiasm among the developers.

The RPG Maker MV development tool will provide the following capabilities:

- Pre-designed asset libraries
- Integration of all maintenance data which allows for simplified management of all game resources
- Enhanced and additional developer interfaces which provide developers with much simpler creation and development capabilities
- Data export capabilities which allow developers to export data to various software tools for simplified reporting and presentation capability

## Design Constraints

The Darkest Things Development Project Team identified several constraints which will impact and limit the design of the Game. These constraints are beyond the scope of the Darkest Things Development Project but must be carefully factored into the system design. To date, the following constraints have been identified:

- The timeframe for the Capstone Project will limit how much of the Game is completed. We are currently estimating that the first in-game 'Month' will be completed and distributable.
- The Game must comply with all DEWOLF STUDIOS and industry regulatory policies and guidelines. These policies and guidelines will impact the tool by requiring certain standards of coding, user interfaces, security, and management of the Game.
- The Game must be compatible with existing user software suites. This will require the team to design and code the MMS in a manner in which data can be seamlessly imported and exported between existing software tools.

## Roles and Responsibilities

The following table defines the MMS System Design roles and responsibilities. This matrix also serves as the list of points of contact for issues and concerns relating to the MMS System Design.

Name	Role	Phone	Email
• Shane	Project Manager/Designer	See below	See below
• James (Drew)	Developer	(777) 555-1313	drew2154@gmail.com

## System Architecture

### Hardware:

The Game design is based on existing hardware architecture already deployed across the User's computer. This hardware consists of the following components:

- Mouse and keyboard interface (controller support being considered)
- **CURRENTLY UNKNOWN** storage requirements

### Software:

The Game design is based on the individual design of various components constructed within RPG Maker MV in which users will enter data. The software architecture is designed to incorporate all data entries and modifications into a save file which tracks this progress data as it's manipulated. The components which comprise the software architecture include:

- User Data Entry Module: This component provides the user interfaces for all maintenance data entry. This component consists of several sub-components to include:
  - New System Data
  - Existing System Maintenance Updates
  - System Location Updates
  - System History
- Automated Reporting Module: This component provides all of the pre-built automated reporting capabilities. These are reports that are generated regularly and repetitively at known intervals.
- Manual Reporting Module: This component provides a list of all searchable fields in which the user can create a report as the need arises

## System Security and Integrity Controls

The most current and up-to-date version of the game will be delivered via an emailed zip file upon request by James.

There are no online or social applications within the game, so no other security concerns exist at this time.

## **Executive Summary**

The concept of the game is a Final Fantasy/Persona-inspired role-playing game with decisions needing to be made by the player to determine the next course of action and how the story plays out. The genres would be Gothic Horror and Eldritch Horror. The target audience would range from their early 20s to mid-late 30s (basically us 2 and our game/story tastes from early adulthood through today). Elaborated more in the premise, the scope of the project would be to have the first in-game 'month' ready for additional beta testing.

## **Game Premise**

The premise of the Game is that of a half-social sim, half-tabletop inspired horror rpg. You play as the main character over the course of a year-long story, balancing life and the struggle against dark forces threatening the world. Different story arcs will unfold over in-game months or blocks of time, where the player will devote their time and efforts to living the characters life in order to acquire skills, resources and support as well as exploring the mysteries and conspiracies at play in the story.

## **Gameplay**

The player character, Shawn will explore the town and unravel the mysteries of the world. When combat is randomly encountered in the world, a transition to the combat screen will occur. This is where your bread & butter Japanese role-playing game combat will occur. This is directly inspired by Final Fantasy, Chrono Trigger, and the Persona series of games. Shawn will also talk to and form relationships with non-player characters and party members.

## **Mechanics**

**Time** - We can devote different combinations of switches to establishing the façade of time and its passage to the player. Switch w will indicate to the player that it is currently "Monday", switch x indicating it's "January", switch y indicating it's the 1st of the month, switch z indicating it's "morning". The switches will be tied to different events which will toggle them and cause "time" to pass -- going to class advances morning to afternoon, spending time researching at the library advances afternoon to night, going to bed advances night to the following day etc. This is all directly inspired by the Persona series of games.

**Doom** - Once a mystery becomes active, Doom will be indicated to the player via the use of variables. Doom will indicate how close an evil agenda is to being fulfilled, and once it reaches 100 the player will receive a game over. The player will generate 3 Doom every day that a mystery is unresolved, and incur additional Doom depending on events that transpire each day. Additionally, different scenarios within the mysteries will play out differently depending on how much Doom is generated during the scenario.

Current Doom will be logged when a scenario begins, and the conditional branches for the script will trigger based off of Doom progression. This is directly inspired by tabletop games like Arkham Horror and Betrayal at Hill House.

And there will be various ways to slightly diminish Doom as well, such as through randomized events or limited services/actions. Just not in a substantial enough way to where they can let an entire in-month game pass without resolving the story.

Reality - We can devote the game's RNG to reality and how the evil power of the antagonists threatens it. Combining the RNG with events, we can insert chaos into most aspects of the game. When the story begins, and the RNG's impact on events is low, the player can safely assume that returning home to rest or driving to the next town over will be a normal mundane experience. But as the story progresses, evil accrues, and the RNG holds stronger sway over the resolution of actions, the player will have to increasingly distrust their surroundings, as resting may result in waking up to a killer hovering over them, or a night drive leading to an encounter with an eldritch horror, or entering a normal room and instead ending up in an alien world.

Social Skills and Skill Tests - The player character will have exploration stats separate from combat stats.

Combat Stats: HEALTH, SANITY, STRENGTH, MAGIC, DEFENSE, MAGIC DEFENSE, AGILITY, LUCK, EVASION AND ACCURACY

Exploration Stats: ATHLETICISM, DEXTERITY, CHARISMA, KNOWLEDGE, PERCEPTION, WILLPOWER

Exploration stats will be utilized for various skill checks during gameplay to resolve events and actions. Unlike combat stats, which increase upon leveling up, the player character's exploration stats will have to be honed in various ways through the social-sim element of play. Additionally, different active party members will be able to impact skill tests as well. Attempting an athletics-based skill test while jock Toby is in party will increase your Athleticism score by 1, for example, and attempting a charisma-based skill test with the beautiful Jennifer in the party will increase your Charisma score by 1.

Exploration stats can be impaired if you receive certain injuries. Injuries will be states added to your character like status effects, but will have no impact on combat.

## **Game Elements**

Modern-day style/aesthetic designed for a 16-bit style game. Evil cult enemies seeking to destroy/corrupt the world.

Locations within the town can include the streets, alleys, school, library, restaurant, player's home, and more.

Level design and other assets provided by RPG Maker MV. Further elaborated in Assets section.

## **Characters & abilities:**

Abram - Lycanthropy - Werewolf powers focusing on inflicting massive SLASH damage

Tobias - Athletics - Berserker-like with increasing stats and damage based on damage taker

Ronnie - Throw - Chance-based skill set based on item thrown

Mercy - Marksman - ranged PIERCE damage to targets

Layla - Witchcraft - invokes an element to increase damage of spells of that element

Jennifer - Summon - summon monsters to aid in combat

Shawn - White Magic - Healing, defense abilities

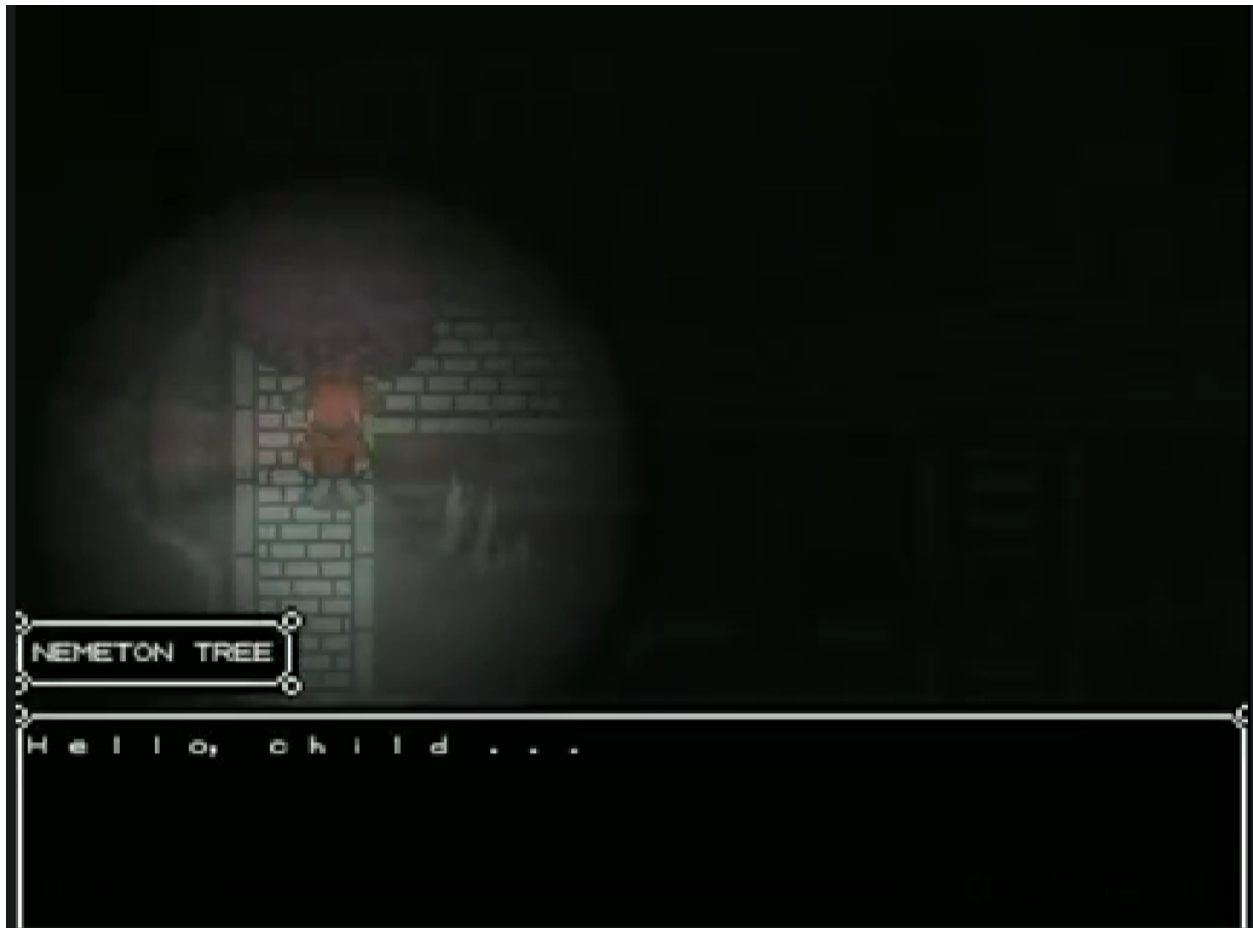
Neil - Resound - Bard-like class providing party buffs and some healing

SPELL CLASSES - FIRE, WATER, WIND, EARTH, LIGHT, DARK, NON-ELEMENTAL, HEALING, ENHANCEMENT, AILMENT, MISCELLANEOUS

A weapons showcase. Not all weapons and not all will be in the final version. All need to be tested and balanced.

ITEM	WEAPON	ARMOR	KEY
 KNIFE	x1	 HUNTING KNIFE	x1
 SILVER KNIFE	x1	 DAGGER	x1
 WITCH HUNTER	x1	 KUKRI KNIFE	x1
 FLAME DAGGER	x1	 KRIS NAGA	x1
 BOWIE KNIFE	x1	 CLEAVER	x1
 SOUL TAKER	x1	 GHOST KNIFE	x1
 HATCHET	x1	 FELLING AXE	x1
 FRANCISCA	x1	 FIRE AXE	x1
 TOMAHAWK	x1	 PULASKI AXE	x1
 BATTLE AXE	x1	 AXE OF THE GNOMES	x1
 LABRYS	x1	 CHAINSAW	x1

A gloomy foggy unnerving section early in the game where you encounter the Nemeton Tree which allows you to save your game.



## Assets

sound effects - open source sound effects from soundbible and freesounds

music - custom music made by producer on staff

Other assets provided by RPG Maker MV. This is new tech for us, so we are still iterating on how to most efficiently use it. Example: fonts, backgrounds/backdrops, etc. All subject to change/iteration to develop the best product.

## Sponsor Acceptance

Approved by the Project Sponsor:

Date:

<Project Sponsor>

<Project Sponsor Title>