

**CS680: Experimental Game Design
Project 2 Game Design Document**

“Descent into Darkness”

Group 8

Eric Walklet, Craig Stevenson

1. Title

Descent Into Darkness

2. Logline

Survive the attacks of the cave monsters before the batteries in your flashlight run out!

3. Gameplay Synopsis

Overview

The player assumes the role of a spelunker in an unnamed cavern. At the very bottom of this cavern is mysterious treasure of an unknown origin. The spelunker's goal is to make it to the end of the cavern in order to retrieve the treasure and return home safely.

Each level of the cavern contains many environmental hazards around which the spelunker must navigate in order to progress sufficiently. While some hazards merely slow the spelunker down, others will cause the spelunker to fall to a swift and messy death. More importantly, however, is the presence of vicious cave monsters that are enticed by the strange new snack that is roaming around in their home.

The key to surviving the monsters and navigating safely is the spelunker's flashlight which unfortunately operates on limited battery supply. The flashlight illuminates obstacles in the terrain and causes the cave monsters to run in fright, but as the power in the flashlight depletes, so does its effectiveness. If a cave monster is still on the prowl when flashlight's battery life is exhausted, the spelunker will be eaten.

Gameplay Descriptions

In order to allow for score preservation and rankings lists, the player is asked to input their name upon starting the game.

The player takes control of the spelunker character after the first level loads. Being the easiest of the game's five levels, the great majority of the level is well-illuminated, showing various boulders, pitfalls, and a number of cave monsters. Almost immediately, the monsters in the level begin to move slowly towards the player's position.

The cave monsters, having lived and grown in the dark depths of the cave, are harmed by light. The spelunker can repel the monsters by shining his flashlight so that the cone of light comes into contact with the target monster. The primary objective of the level is to force the monsters to fall into one of the level's pitfalls by positioning the spelunker and the spelunker's flashlight beam in such a manner that the monsters have no choice but to hurl themselves to their doom. If all monsters within a level are eliminated, the spelunker is able to safely replace the batteries in the flashlight and move on to the next level.

The longer the player waits to dispatch a cave monster, the more difficult the task becomes. As a result of the flashlight's depleting battery life, the cone of light produced by the flashlight will become increasingly small, and the radius of visibility at the spelunker's location will begin to decrease. This means that the effective distance between cave monsters must decrease accordingly, and the player becomes less aware of impending terrain obstacles that must be avoided. If the flashlight's power is depleted completely, the cave monsters overwhelm the spelunker, and the game is over.

Despite the ever-decreasing visibility, the spelunker – in his entirety – will always be completely visible. The location of cave monsters will always be clear as their evil glowing eyes will pierce through any darkness.

Five levels will be prepared for the level, each more difficult than the last. The difficulty of each level is increased by adding additional terrain obstacles, adding additional monsters, adjusting the starting position of monsters, or decreasing the amount of the level that is initially visible as a result of advancing deeper and deeper into the cave. If the player reaches the final level, only the area illuminated by the flashlight's light beam will be visible at a time.

Controls and Interfaces

- Player Controls

The player moves around the cavern by using the arrow keys to move in the four cardinal directions. There is no "Action" button as the spelunker is unable to attack, jump, or perform similar actions.

The flashlight is controlled by moving the mouse. The "cone" of the flashlight's light beam will always be centered on the spelunker's current position and point towards the current location of the mouse pointer.

- HUD

To preserve the ominous spelunking feel, the interface is minimal, aside from an opening menu and a status update between levels. Additional information about the spelunker's current state must be collected by analyzing the appearance of the game world.

- Game World

The cavern is viewed from a top down perspective. At any point, the entirety of the current cavern level is "visible," though a significant portion of the level may be shrouded as a result of the flashlight's depleted battery life. The spelunker is capable of roaming anywhere in the cavern level that is unimpeded by an obstacle.

Rules/Scoring

- Player Movement

The spelunker is confined to the physical limitations of the game map. Each cavern level is laden with various terrain objects that can either help or hinder the spelunker. Some cavern levels may feature ramps, bridges, and catwalks that can be easily traversed simply by walking over them.

Boulders and rock formations on the cavern floor will impede the spelunker's progress, forcing the player to maneuver around them. Additionally, while a player will be able to fall from a higher area onto a lower one (for example, falling off a bridge onto the terrain below), attempting to move from a lower area to a higher one without using a ramp will impede the player's progress in the same way that a boulder would.

Pitfalls are to be avoided by the player except when attempting to dispatch cave monsters. If a player walks into a pitfall area, the spelunker will die, and the level must be reattempted.

- Enemy Movement

The cave monsters that populate the cavern levels are programmed to approach the spelunker following the shortest possible path. Like the spelunker, they are impeded by the presence of boulders and rock walls, and they will perish if they come in contact with a pitfall area.

Coming into contact with the flashlight beam will cause the cave monster to reverse direction. This direction is not at all determined by the angle relating the monster and the flashlight beam but is simply the reverse of the direction in which they would be heading if no flashlight beam was present. Once they are outside of the area of the beam's effect, they will resume normal behavior.

- Win Scenario

The game will be comprised of five levels. In order to win the game, the player must complete all five of the levels successfully.

The winning condition for each level is to dispatch all of the monsters in the level by forcing them into a pitfall using your flashlight.

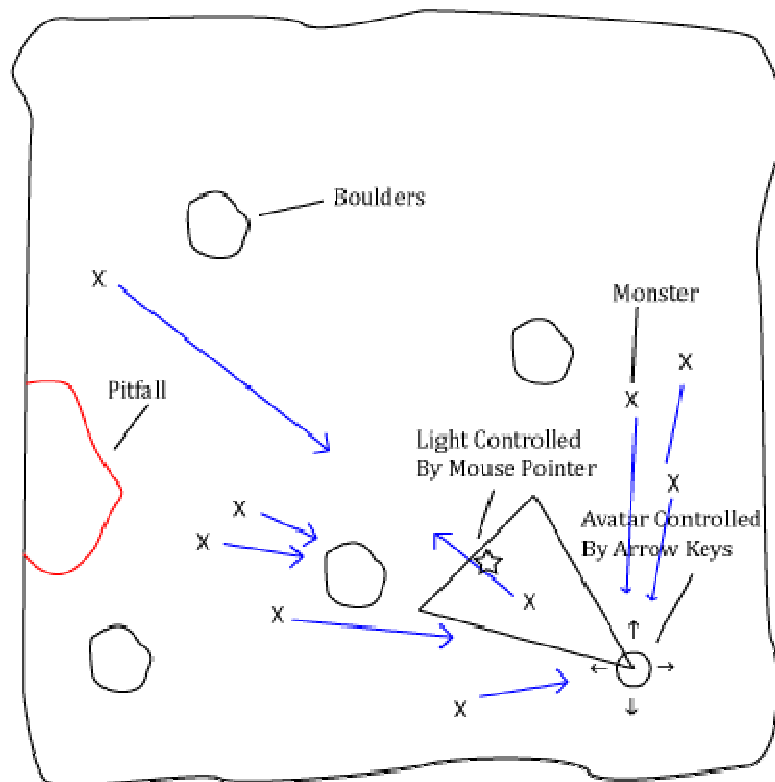
Following the completion of each level, the completion time will be displayed. The rankings for individual completion times as well as the overall completion time (calculated as the sum of all five level completion times) will be available for later viewing.

- Loss Scenario

The player loses the game by coming into contact with a cave monster. If at least one monster is still active when the battery life in the flashlight is completely exhausted, the player will immediately lose the level as there is no way to defeat a monster without using the flashlight.

Upon losing, the player will be given the option of replaying the current level or returning to the main menu in order to start from scratch.

Concept Sketch



4. Division of Labor

Main Programming – Eric Walklet

Main Animation/Art, Programming – Craig Stevenson