

# CS9.438 Game Design Engineering

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2020102029

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## Monochrome Ascent

Digital Game - Report

### Narrative

In the enigmatic realm of Monochrome Ascent, you take on the role of a diminutive character, a little white dude, traversing a mesmerising 3D world dominated by stark contrasts of black and white. The landscape is a symphony of shadows and light, where every step is a dance between gravity and precision.

Your mission is clear: ascend to the zenith of each level, an ascent fraught with challenges and obstacles that demand not only nimble feet but also a keen understanding of the monochromatic environment. The rules are simple yet unforgiving – you can only adhere to the inky black surfaces, while the milky white expanses act as treacherous pathways that threaten to send you slipping into the void below.

As you embark on this journey, the world unfolds before you like a living puzzle. Towering walls of black and white block your way, their contours bending and twisting in impossible configurations. Your character, a small beacon of white in this sea of contrasts, is equipped with the ability to jump and run with grace. It's through this agile movement that you navigate the intricate mazes and scale the towering heights.

### Objective

The primary objective of "Monochrome Ascent" is to guide the player's character, a small white figure, through a 3D world painted by textures black and white elements. Players must navigate challenging levels by utilising precise jumps and agile movements, adhering strictly to black surfaces while avoiding slipping off on white areas. The ultimate goal is to

successfully ascend through each level, overcoming a variety of obstacles, complex mazes, and gravity-altering challenges to reach the pinnacle. As players progress, they are encouraged to master the art of movement in this monochromatic environment, pushing their skills to the limit and unravelling the mysteries concealed within the visually minimalist yet dynamically complex landscape

## Space

- Space is a dynamic three-dimensional realm where the interplay of black and white surfaces defines the gameplay.(As in you stick to blacker textures and slip of through lighter textures)
- Spatial design includes moving platforms and gravity-altering zones, creating a constantly evolving landscape
- At the end there is a portal to the next level which transports you to the start of the next increased difficulty level.
- There are 3 different levels with same landscape(twist in each level revealed later)

## Game

### Genre

It is a 3D platformer game set in a monochrome world.

### Progression

Players are introduced to the minimalist black and white world, where they control a small white character. Where different platforming challenges are introduced and players have to get past them to reach to the top.

### Platforming Challenges

1. Moving platform with obstacle
2. Cube Wall maze
3. Rotating and stationary platform
4. Rotating platform with twin-tower climbing

### Game Levels

1. Level 1:Basic use of the platforming challenges above.
2. Level 2: The controls switch sides after a certain time period.
3. Level 3: Switching colours after a certain time period.

## Win Conditions

Player wins if they reach the end of the levels..

## Mechanics

Players navigate the protagonist using the WASD keys for directional movement and the mouse for camera control. Several key actions enhance the character's abilities in this challenging world:

**WASD Keys:** Control the character's movement in the forward (W), backward (S), left (A), and right (D) directions.

**Mouse Controls:** Move the mouse to adjust the camera view, allowing players to survey the monochromatic environment and plan their route.

**Shift (Sprint):** Hold down the Shift key to activate sprint mode, allowing the character to move at an accelerated pace for quicker traversal.

**Space (Jump):** Press the Space key to make the character jump, enabling them to overcome obstacles, reach higher platforms, or execute precise manoeuvres.

**Continuous Space (Wall Jump):** When in contact with a vertical surface, players can perform wall jumps by continuously pressing the Space key. This technique allows for agile navigation along walls.

**Direction Keys (Wall Glide):** While falling near a vertical surface, players can use the directional keys to navigate and control the character's descent. This wall gliding ability provides a strategic way to navigate downward on vertical surfaces.

**Stick to Black Surfaces:** The character naturally adheres to black surfaces, allowing for standard movement mechanics. Players can explore, jump, and sprint freely in these areas.

**Slip on White Surfaces:** When on white surfaces, the character experiences minimal friction, resulting in inertial movement. The player loses direct control, requiring careful planning and precise timing to navigate these challenging areas.\

## Interface

### Screen Flow

1. Main Menu:
  - Options: Navigate to settings for controls, audio, and video adjustments.
  - Start Game: Begin the adventure in the monochromatic world.
  - Level Select: Access different levels or continue from the last checkpoint.
2. Level Start:

- HUD Display: Show essential information, including level number and character lives.
  - Start Point: Character appears at the starting point of the level.
- 3. In-Game UI:
  - Top HUD: Display level progress, time elapsed, and collected items.
  - Checkpoint Notifications: Inform players when reaching a checkpoint.
- 4. Completion Screen:
  - Level Completion Animation: Celebrate completing the level with a visually engaging animation.
- 5. Pause Menu:
  - Resume: Continue the game from the current state.
  - Restart Level: Restart the current level from the beginning.
  - Main Menu: Return to the main menu.
- 6. Game Over Screen:
  - Retry: Allow players to retry the level.
  - Main Menu: Return to the main menu to choose a different level.

## Control System

1. Keyboard - Most of the controls will be done using the keyboard - WASD, Shift, Space.
2. Mouse - To set the camera angles - pitch and yaw.

## Audio

- Audio: There are currently no voiceovers for the dialogues of player
- Music: There is no background music in the game.
- Sound Effects: There SFX for the jumping, landing, walking, running of the player.