

# Process & Decision Documentation

## Project/Assignment Decisions

I created In the Dark, a game where the player controls a small toy car driving across the floor of a dark room, with shy, hidden creatures scattered throughout the space. For this side quest, I wanted to create a meditative experience that explores the relation between motion and emotion.

The key decision I made was to focus the experience entirely on the spotlight mechanic and smooth camera movement. I chose to communicate the atmosphere through limited visibility and subtle environmental motion cues (like the floor pattern and soot sprites). The spotlight around the player reveals only a portion of the dark wooden floor, creating a sense of isolation and quiet discovery.

## Role-Based Process Evidence

- Started with the Week 5 camera system lecture example and adapted it into my own world space.
- Designed and refined a wooden floor background to establish that the game takes place on the floor of a dark room.
- Implemented a circular spotlight mask to limit visibility around the player (makes the room looks dark)
- Initially struggled with the spotlight revealing a white background instead of the wooden floor.
- Used AI to debug the masking logic and rendering order of the spotlight so it reveals the world beneath it while maintaining darkness outside the circle.
- Created soot sprites to enhance the environment, starting as simple circles scattering in random spots throughout the world.
- Added floating jitter animation and avoidance behavior when the player gets close.
- Finalized soot sprites appearance with fixed size and two white eyes.
- Designed the toy car player and prompted AI to implement rotation so the car faces the direction of movement.
- Iteratively tested rendering order (world -> sprites -> player -> overlay) to maintain correct visual layering.
- Self-playtested many times to make sure smooth camera movement, correct masking behavior, and consistent visuals.

## Entry Header

Name: Kaitlyn Subcharoen

Primary responsibility for this work: Complete side quest

## *Goal of Work Session*

The goal of this side quest was to implement a smooth camera system and create a spotlight mechanic that reveals only part of a dark world. I also aimed to add subtle environmental creatures (soot sprites) to enhance the atmosphere and support the reflective, exploratory experience.

### Tools, Resources, or Inputs Used

- p5.js
- Coding example week5 (example 04)
- Lecture note on camera system and world space
- Self-playtesting
- Github CoPilot

## *GenAI Documentation*

**Date Used:** During completing side quest 5

**Tool Disclosure:** GitHub Copilot (ChatGPT 5.2)

### **Purpose of Use:**

- Debugging the spotlight mask
- Structuring class-based soot sprite behavior
- Refining animation logic
- Adjusting player rotation

### **Summary of Interaction:**

- Helped with implementing and debugging the spotlight mask so that it revealed the wooden floor background rather than a white canvas.
- Helped integrate the spotlight with the existing camera system.
- Helped generate and refine the soot sprite class, including jitter animation, fixed size, and behavior.
- Used to implement player rotation logic so the toy car faces the direction of movement.

### **Human Decision Point(s):**

I refined both my prompts and the code from Copilot multiple times when the output did not fully match my vision. For example:

- I designed the game concept and wooden floor background to establish the world as taking place on a dark room floor.
- I refined the prompt to specify that size and numbers of soot sprites must be fixed for visual consistency, but their placement can be randomized.
- After the output, I manually adjusted the sizing and visual appearance of soot sprites and that sprites render is between the world and the spotlight overlay.
- I confirmed that the player rotation logic worked correctly with repeated playtesting.

All GenAI suggestions were reviewed and modified to match my game concept and aesthetic goals.

#### **Integrity & Verification Note:**

I tested all generated code manually in p5.js to verify correct rendering order, spotlight masking, sprite behavior, and player mechanics. All AI-generated code was reviewed and tested through multiple playtestings.

#### **Scope of GenAI Use:**

The creative concept, structure, and visual refinement decisions were made by me. GenAI supported implementation and helped debugging.

#### **Limitations or Misfires:**

Copilot sometimes reset files unexpectedly or required multiple attempts to apply precise modifications. It can't account for atmospheric design unless getting a very detailed or explicit prompt.

#### **Summary of Process (Human + Tool)**

I started with the camera system and mechanic from week 5 lecture examples and adapted it into my own world space. For example, drawing a wooden floor background to reflect that the experience takes place on a dark room floor.

I integrated a spotlight mask to limit visibility around the player. I used GenAI to help debug this masking issue and correct the rendering order so the background appeared correctly within the spotlight.

After confirming the camera and masking worked together, I created soot sprites to enhance the environment. These were iterated several times: first as simple circles, then with jitter animation, then with avoidance behavior, and finally with visual refinement. Last, I designed the player as a toy car and then prompted AI to implement rotation so the car faces the direction of movement.

Throughout the process, I tested frequently, refined rendering order, and simplified visuals to maintain the meditative tone as this side quest instruction.

#### **Decision Points & Trade-offs**

I considered adding more advanced movement patterns but decided to keep the sprites minimal (floating + slight avoidance) to preserve the meditative tone and avoid overcomplicating the system.

Another decision was to make my game experience focus on lighting and motion rather than adding UI or objectives. I think this kept the project aligned with the assignment prompt of emphasizing pacing and emotion through camera movement.

## **Appendix**

Please include a full transcript of your conversation with the GenAI. GenAI transcripts are used for transparency and verification only and are not assessed for writing quality or completeness.

**User:**

- the player has a circular light that moves with them and the the light reveals only a portion of the dark world level
- the light should be drawn as a circular transparent spotlight/mask that let you see through it

GitHub Copilot:

User: @agent Try Again

GitHub Copilot: Read

[](file:///Users/kaitlyndekker/Desktop/3B/GBDA%20302/side%20quests/Week%205/ksu\_bchar\_sidequest\_W5/sketch.js)

Using "Apply Patch"

...

...

Spotlight mask added and centered on the player.

If you want a softer edge or adjustable radius, say the word.

Made changes.

**User:** - generate random 20 small circle creatures across the world  
- each creature has x, y, size, and jitter offset for floating animation  
- add subtle floating or jitter animation  
- if player is very close, slightly move the creature away from the player  
- creatures should appear in front of world but behind the light overlay

GitHub Copilot: Read

[](file:///Users/kaitlyndekker/Desktop/3B/GBDA%20302/side%20quests/Week%205/ksu\_bchar\_sidequest\_W5/SootSprites.js)

Read

[](file:///Users/kaitlyndekker/Desktop/3B/GBDA%20302/side%20quests/Week%205/ksu  
bchar\_sidequest\_W5/WorldLevel.js)

Read

[](file:///Users/kaitlyndekker/Desktop/3B/GBDA%20302/side%20quests/Week%205/ksu  
bchar\_sidequest\_W5/Player.js)

Read

[](file:///Users/kaitlyndekker/Desktop/3B/GBDA%20302/side%20quests/Week%205/ksu  
bchar\_sidequest\_W5/index.html)

Using "Apply Patch"

...

...

Using "Apply Patch"

...

...

Read

[](file:///Users/kaitlyndekker/Desktop/3B/GBDA%20302/side%20quests/Week%205/ksu  
bchar\_sidequest\_W5/sketch.js)

Read

[](file:///Users/kaitlyndekker/Desktop/3B/GBDA%20302/side%20quests/Week%205/ksu  
bchar\_sidequest\_W5/SootSprites.js)

Added 20 floating soot creatures with jitter, push-away behavior, and rendering between the world and spotlight overlay.

- Creature class and motion/push logic in SootSprites.js.
- Creature spawn + render order in sketch.js.

Want softer float, larger avoidance radius, or different creature size range?

Made changes.

**User:** - soot sprites are small black fuzzy circles with two white eyes  
- fixed size at 12

GitHub Copilot: Read

```
[](file:///Users/kaitlyndekker/Desktop/3B/GBDA%20302/side%20quests/Week%205/ksu  
bchar_sidequest_W5/SootSprites.js)
```

Read

```
[](file:///Users/kaitlyndekker/Desktop/3B/GBDA%20302/side%20quests/Week%205/ksu  
bchar_sidequest_W5/sketch.js#35-35), lines 35 to 45
```

Read

```
[](file:///Users/kaitlyndekker/Desktop/3B/GBDA%20302/side%20quests/Week%205/ksu  
bchar_sidequest_W5/sketch.js#28-28), lines 28 to 50
```

Using "Multi-Replace String in Files"

...

...

Read

```
[](file:///Users/kaitlyndekker/Desktop/3B/GBDA%20302/side%20quests/Week%205/ksu  
bchar_sidequest_W5/sketch.js)
```

The sketch.js file appears to have been reset. Let me check the current state and make all necessary updates:

Using "Multi-Replace String in Files"

...

...

Let me check the exact formatting and make targeted replacements:

Using "Replace String in File"

Read

[](file:///Users/kaitlyndekker/Desktop/3B/GBDA%20302/side%20quests/Week%205/ksu  
bchar\_sidequest\_W5/SootSprites.js#1-1), lines 1 to 35

Read

[](file:///Users/kaitlyndekker/Desktop/3B/GBDA%20302/side%20quests/Week%205/ksu  
bchar\_sidequest\_W5/SootSprites.js#24-24), lines 24 to 43

Good! The SootSprites.js already has the eyes. Now I need to update sketch.js:

Using "Replace String in File"

Using "Replace String in File"

Read

[](file:///Users/kaitlyndekker/Desktop/3B/GBDA%20302/side%20quests/Week%205/ksu  
bchar\_sidequest\_W5/sketch.js#28-28), lines 28 to 86

Perfect! The files are already set up correctly. The SootSprites already have eyes and fixed size 12. Let me verify the complete current state:

Read

[](file:///Users/kaitlyndekker/Desktop/3B/GBDA%20302/side%20quests/Week%205/ksu  
bchar\_sidequest\_W5/SootSprites.js)

Perfect! Your soot sprites are complete:

- **Fixed size**: 12 pixels
- **Fuzzy black body**: Dark circles with transparency
- **Two white eyes**: Positioned at ±3.5px horizontally and -2px vertically from center
- **Floating animation**: Subtle jitter using sine/cosine waves
- **Push-away behavior**: Creatures move away when player gets close (50px radius)
- **Rendering order**: Behind the spotlight overlay, in front of the world

All set up and working!

Made changes.

User: make the player turns facing to the direction it is moving towards

GitHub Copilot:

User: @agent Try Again

GitHub Copilot: Read

[](file:///Users/kaitlyndekker/Desktop/3B/GBDA%20302/side%20quests/Week%205/ksu  
bchar\_sidequest\_W5/Player.js#1-1), lines 1 to 30

Using "Replace String in File"

...

...

Using "Replace String in File"

...

...

Done. Player now rotates to face the direction of movement using `atan2()` and applies the rotation to the draw method.

Made changes.