

## **Process & Decision Documentation**

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**Side Quest 4**

### **Project/Assignment Decisions(2-4 Sentences)**

For Side Quest 4, I decided to extend the static grid system by adding a player entity that exists in grid coordinates rather than pixel space. This decision allowed me to demonstrate how a 2D array can function as a rule-based environment where movement is constrained by data values (walkable vs. blocked tiles). I intentionally kept the interaction simple—grid-based movement with wall collision—to prioritize clarity and system logic over visual complexity.

### **GenAI Documentation (Used)**

**Date Used: January 27,2026**

**Tool Disclosure: ChatGPT (GPT-5.2)**

Purpose of Use: ChatGPT was used as a conceptual support tool to help plan how a player could be represented within a tile-based grid system and how movement logic could be constrained by the grid data structure.

Prompts Used:

- “How can I add a player to a 2D grid in p5.js using row and column coordinates?”
- “How do I prevent a player from moving into wall tiles in a grid-based maze?”
- “What is the simplest way to map grid coordinates to screen coordinates?”

Summary of Interactions: ChatGPT helped outline a high-level approach for representing a player using grid coordinates, checking walkability through conditional logic, and mapping grid positions to pixel space. It also suggested keeping the solution minimal to align with the learning goals of the Side Quest.

Human Decision Points:I decided where to place the player's starting position, how movement would be triggered (keyboard input), and how collision rules would be enforced based on the grid values. I also chose the final implementation structure and visual representation of the player, ensuring the solution aligned with course examples and my own understanding.

Integrity & Verification Note: All code was reviewed, modified, and tested by me to ensure it functioned correctly and reflected my understanding of grid-based systems. ChatGPT was used for planning and clarification only; final design and implementation decisions were made independently.

### **Appendix:**

**ChatGPT Conversation Link:**

<https://chatgpt.com/share/69890038-52a0-8013-bb3c-f443324bdae4>