

## Process & Decision Document

### 1. Short Description

For this Side Quest, I built a grid-based navigation game using p5.js. The goal was to generate a level using arrays (JSON-style data) and use loops to dynamically render tiles, obstacles, and collectible words.

The player moves one tile at a time and must collect all word tiles before reaching the goal. A second level loads automatically after the first is completed.

The main technical focus was:

- Storing level layouts in structured data
- Using nested loops to render tiles
- Adding simple collision detection
- Implementing automatic level switching

### 2. One Small Decision I Made

Originally, I considered placing word objects separately from the grid. Instead, I decided to encode special tiles (WORD and GOAL) directly inside the 2D array.

This decision:

- Simplified level readability
- Reduced redundant coordinate tracking
- Made it easier to scale additional levels

I also added a small movement throttle (one move per key press) to prevent accidental overshooting when keys are held down. This improved control precision.

### 3. GenAI Use Statement

GenAI was used to assist with:

- Structuring the JSON level format
- Debugging movement logic
- Implementing automatic level transitions
- Refining collision logic

All generated code was reviewed, tested, and modified to ensure understanding and functionality.

## Appendix: GenAI Transcript

ChatGPT 5.2

↑ Share ...

sketch.js  
JavaScript

My player movement in a p5.js grid game is too fast when I hold down the arrow keys.  
The player keeps sliding across tiles instead of moving one tile at a time.  
How can I modify my movement logic so that the player only moves once per key press instead of continuously while the key is held down?

Thought for a few seconds >

If you're checking `keyIsDown()` inside `draw()`, p5 will read the key as "down" every frame (60 times/second by default), so your player "slides." The usual fix is: **move only inside `keyPressed()`** (an event that fires once per press), not inside `draw()`.

In the `sketch.js` you uploaded, I only see the `Level1` + grid rendering (no player input code yet).

sketch

So here are the two clean patterns you can drop into your game.

+ Ask anything

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