Process & Decision Documentation

Project/Assignment Decisions

Side Quests and A4 (Individual Work)

One key decision I made was to store all maze levels in a JSON file rather than hard-coding them in sketch.js. This made it easier to add a third level and adjust layouts without changing the main game logic. I also decided to loop the game back to the first level after completing the third to keep the project simple and focused on demonstrating level progression rather than adding extra UI or ending screens.

Role-Based Process Evidence

Name: Emily Sharpe -21074681
Role(s): Designer & Developer
Primary responsibility for this work:
Implementing a playable maze using JSON data, classes, and loops, and extending it to include automatic multi-level progression.
Goal of Work Session
The goal of this work session was to generate maze levels using JSON data, render them dynamically using loops, and implement automatic progression through multiple levels, including a third level that loops back to the start.
Tools, Resources, or Inputs Used

- Lecture slides and Week 4 code examples (Examples 3 and 4)
- p5.js library
- levels.json for level data
- Level.js and Player.js starter code
- Local browser testing and debugging
- GenAI (ChatGPT) for debugging guidance and clarification of logic

GenAI Documentation
Date Used: February 2026
Tool Disclosure: ChatGPT (GPT-5.2)
Purpose of Use:
Debugging level-switching logic, clarifying how Week4_Example04 handles player state, and validating that the implementation aligned with course expectations.

Summary of Interaction:
GenAI was used to identify logic errors causing blank screens and failed level transitions, and to help refactor the sketch.js file so that levels progressed correctly using existing class methods.

Human Decision Point(s):
I modified and simplified the GenAI-suggested solutions to ensure they matched the original Week 4 example structure and avoided introducing new methods not present in the starter code.

Integrity & Verification Note:
All GenAI suggestions were verified through testing in the browser, comparison with lecture examples, and checking against assignment requirements.

Scope of GenAI Use:
GenAI did not write the full assignment. Core implementation, level design, and debugging decisions were made manually.

Limitations or Misfires:
having to go back and make sure I was correcting the correct lines of code because they all looked very similar and one wrong move could result in the game not working

Summary of Process (Human + Tool)
I started by reviewing the Week 4 examples to understand how levels could be loaded from JSON and rendered using classes. I built multiple maze levels using 2D arrays and relied on loops in the Level class to draw tiles dynamically. After adding a third level, I worked through some issues with level switching and adjusted the logic so levels progressed automatically. GenAI was used occasionally to help debug problems, but all final changes were tested and checked against the lecture material.

Decision Points & Trade-offs
One key decision was to keep a single player instance and reset its position between levels rather than creating a new player each time. This kept the code simpler and worked better with the existing Player class. I also decided to loop back to the first level after finishing the third instead of adding an ending screen, which kept the project focused on the core mechanic.

Verification & Judgement
I checked that the implementation worked by:

- Playtesting each level to make sure movement and collisions behaved as expected
- Confirming that reaching the goal tile loaded the next level automatically
- Comparing my structure and logic with the Week 4 examples
- Reviewing the Side Quest requirements to ensure all criteria were met

Limitations, Dead Ends, or Open Questions

Some early attempts resulted in blank screens due to incorrect method calls and player initialization. These were resolved by sticking more closely to the original Week4_Example04 structure. Features like UI feedback or difficulty scaling were not added in order to keep the scope appropriate for the assignment.

Appendix

https://chatgpt.com/share/698bf122-5164-800a-872c-595c355617e1