Process & Decision Documentation

Project/Assignment Decisions

For this side quest, I decided to not only just add a level into the game but transform the simple tiles from Example 4 to an aquatic theme. I made this decision to enhance the immersion of the game play experience in a creative way. It also makes the goal feel a lot clearer to the player, with the original basic avatar/goal shapes being transformed into a fish and a food pellet.

Role-Based Process Evidence

GenAI Documentation

Date Used: February 5-6

Tool Disclosure: ChatGPT 5.2

Purpose of Use: Brainstorming, learning concepts, debugging, writing code snippets.

Summary of Interaction: I provided ChatGPT with the initial sample code files and then used it to generate game ideas, visualization ideas, and ways to improve my code. I iterated over some of the ideas, proposing new directions to see what other things the AI could suggest. I also asked for clear directions in terms of how to implement this in the code and then worked with it to debug any issues.

Human Decision Point(s):

- I modified and iterated over ChatGPT's visualizations for my aquatic theme by changing the way the ocean tiles appeared. When thinking about how to transform the tiles to look more like water, ChatGPT generated awkward looking moving tile blocks, which made the game experience a lot less polished.
- The outputted warning message was difficult to see due to the lack of a contrasting background and awkward positioning. I rejected this visualization and edited the positioning and background based on my own judgement.
- When debugging, I iterated over the solutions provided, since they oftentimes were not complete and did not fix the problem. I decided to provide additional context and flag possible areas/files to check directly.

Integrity & Verification Note: All ideas in the modified code were based off my prompts, or personal ideas. I did not use the ChatGPT game code without thorough testing for bugs, usability issues, and other errors. Through various prompt iterations and manual adjustments, I ensured that the result matched the creativity and quality requirements of this Side Quest assignment.

Scope of GenAI Use: All code was not used directly without edits and verification of functionality. ChatGPT did not contribute to the ideation of the aquatic theme, writing the text, colour/font visual design choices, and functionality such as the "success screen" or the increase in difficulty (level design) as the game went on.

Limitations or Misfires:

- Ideation for the code lacked creativity, only came up with basic suggestions (such as adding obstacles).
- Could not account for visual inaccuracies. For example, the fish character needed to flip the direction of their head as the player switches between different directions.
- Struggled to provide clear solutions to debugging errors when linked to multiple files. Solutions are also occasionally provided without clear direction of where to implement them.
- Adding new functionality using ChatGPT, such as the on-screen warning message, needed to be iterated on due to the amount of bugs it would cause.

Summary of Process (Human + Tool)

- Provided ChatGPT with context of various example files
- Brainstormed initial gameplay ideas with ChatGPT
- Developed a general idea based on some functionalities provided by ChatGPT (e.g. obstacles)
- Adjusted visual design through personal ideation and colour code searches (e.g. ocean theme, fish avatar, grid/level design)
- Used ChatGPT to enhance visual design by adding animated waves in the blocks, changing the direction of the fish's head as it swims, and adding a success screen.
- Worked on debugging the error message, iterating over the visual design, and changing the code to make the levels stop at 3.

Decision Points & Trade-offs

I considered adding a level with no change in difficulty. After testing, I realized that the gameplay was a bit stagnant anddecided to add some purpose to the increase in level by adding new rows to the grid, increasing the amount of obstacles and area to move around

before reaching the moving onto the next level. This decision enhanced the gameplay experience.

Verification & Judgement

I verified that this decision was appropriate by reviewing the Side Quest assignment document. I ensure that my final code was functional, and that it met the prompt requirements of increasing a level using JSON files and arrays.

Limitations, Dead Ends, or Open Questions

- Why does ChatGPT say that it "found the issue" while debugging, but the issue is still not resolved?

Appendix

Full ChatGPT Transcript Link: https://chatgpt.com/share/69862e09-5a0c-8009-8931-22813a15fbc7