Section A

1. Description of the Scenario
    a. The client and the advisor is my classmate Henry Westfall. He is an appropriate advisor because he is also the client: he can accurately guide me and explain what the success criteria are. He also has coding experience, so he can potentially help me if I need help debugging a specific section of the project that is not working. This product (an endless runner video game) is being developed because my classmate wants an easy-to-play game to enjoy during his off-periods. He likes playing the Chrome Dinosaur Game, but he doesn't want to be forced to use the Google Chrome search engine. We consulted numerous times to determine what the product would be and what he wanted it to include (See Appendix A for all of the client consultations).
2. Rationale for the Proposed Product
    a. An endless dinosaur game, similar to Google Chrome's dino game, is an effective solution for my client because it is a simple game without a large learning curve that can be played an infinite amount of times. To create this product, I will use the game engine Godot (which is used with the programming language GDScript) because it offers features that can be easily integrated into my game, such as audio and physics. Without Godot, I would have to write those manually, which would take a significant amount of time. With Godot, I can use prewritten C++ libraries,

which will offer good performance and ease of use, as well as pre written methods to calculate force exerted by gravity and to output audio. In addition, they have a built-in game loop in the background, which means I only have to create the objects I will use within the game (ex: the player, the cacti, the text labels), reducing my workload significantly. Artwork and audio, both of which can be easily integrated into the game with Godot, can be found from free online sources. In addition, I can export the game as an executable for Windows 10, Windows 11, Linux, and Mac machines. I can also export it as HTML5 and deploy it to my own website hosted by Github Pages, so it can be played by any PC with a modern web browser.

3. Success Criteria
    a. It must be able to have a scoring system
    b. It must have audio
    c. There must be a game condition, that if achieved by the player, results in a loss
    d. It must be available online
    e. It must be able to store high scores persistently
    f. It must be an “endless runner game” (able to be played forever without losing if a player doesn’t make a mistake)

Word Count: 439