PATHFINDER REPORT

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This report is about the development of the Pathfinder game, a graph-based game where players must get from the green node to red node before the timer runs out, while also minimising traversal cost.

Features Implemented by Mary
Task 1: Display the score, tokens, high_score and time(t).
The DrawText() function was used to display the values on the screen at the top left corner. this feature is essential as it helps the player track their progress and remaining resources throughout the game.

Task 4: Add sound effects when a node is added to the player path
To make the game more enjoyed, a click sound that plays every time the player selects a valid node. This was implemented using Raylib's audio functions. The functions LoadSounds(), PlayClickSound(), and properly unloaded the sound at the end of the game using UnloadSound(). Audio feedback improves the user experience by giving immediate confirmation that a node has been selected. This small but effective feature makes the game feel more responsive.

Task 9: Allow players to remove a node.
An undo feature was implemented, this allows the player to remove the last node by right clicking their mouse. When the player removes a node, the token cost is refunded. This allows for more control over path and strategy.

Task 13: add timer and game over
The game had been changed to add a timer where if the player takes too long the game will end, this adds a level of tension as the player doesn't have all day to make decisions and is taxing against the clock

Testing
The game was tested by:
Clicking on nodes to check if the yellow path draws correctly.
Listening for the click sound when selecting nodes.
Undoing the last node using right-click and confirming token reimbursement.
Making sure the game does not allow invalid moves between non-neighboring nodes.
Checking if tokens decrease correctly based on edge costs.
Ensuring the timer counts down accurately and stops at zero.
The testing process helped identify and fix minor bugs, ensuring the game runs smoothly and follows the requirements.

The Pathfinder Game implements various game mechanics that allows the players to navigate a graph while managing limited resources. The combination of visual feedback, audio effects, and undo functionality makes the game engaging and interactive. This project has been a great learning experience, and I am proud of what I have accomplished.