

PROCESS WORK

- **Workflow of The Ball movement and Level progression of the game**

Initialization:

The Main method initializes the game window and sets the target frames per second.

It enters a game loop until the window should close.

Update Method:

The Update method handles the logic for updating the game state, including ball movement and level completion.

It checks for keyboard input to determine the direction of the ball's movement.

Based on the direction of movement, it updates the ball's position.

It checks for collisions between the ball and the level's endpoint, indicating level completion.

If the level is completed, it sets the isLevelCompleted flag to true, increments the currentLevel, and resets the ball's position.

Draw Method:

The Draw method handles rendering the game visuals.

It begins drawing and clears the background.

It switches based on the currentLevel to determine which maze to draw.

For each level, it calls a corresponding draw method (DrawLevelOne, DrawLevelTwo, DrawLevelThree) to render the maze.

It then draws the ball at its current position.

If all levels are completed, it displays a congratulatory message.

Level Progression:

The game progresses through levels based on the currentLevel variable.

Each level has its own maze layout.

When the ball collides with the endpoint of a level, the `isLevelCompleted` flag is set to true, and the `currentLevel` is incremented.

The game loop then moves to the next level's maze layout.

Ball Movement:

Ball movement is controlled by keyboard input.

When the player presses the arrow keys (up, down, left, right), the ball moves in the corresponding direction.

The ball's movement speed is constant (`ballSpeed`) and is multiplied by the frame time to ensure smooth movement regardless of the frame rate.

End of Game:

Once all levels are completed (`currentLevel` exceeds the number of levels), the game loop stops.

- **Instructions to play the game**

To incorporate the instruction process into the game, I adjusted the main loop to handle the transition from displaying instructions to starting the game.