**Game in Java**

**Abstract:** With a few additions, this project aims to bring back the simplicity and fun of the STAR COLLECTOR game. It will feature sophisticated, computer-controlled opponents who will attempt to outwit the human gamers. It will also include a multiplayer function that will allow multiple players to play the game at the same time over a network. This project investigates a new dimension in order to make the classic STAR COLLECTOR game more intriguing and difficult. Because of its simplicity, this game is ideal for a small project because it allows us to focus on more complex issues such as multiplayer. Every node in the STAR COLLECTOR will be represented by an object that tracks the X and Y coordinates. You'll use the same logic, but this time you'll move each node to the previous node's position before moving the head to the new position. You will not need to represent anything numerically. The player controls a long, thin creature that looks like a STAR COLLECTOR and roams around on a bordered plane, picking up food (or other items) while avoiding colliding with its own tail or the edges of the playing area. When the STAR COLLECTOR eats a star, its tail grows longer, making the game more difficult.

**Objectives:**

STAR COLLECTOR was inspired by the arcade game Blockade, which was created in 1976 by the British company Gremlin Interactive and shut down in 1984. In the two-person game Blockade, each player would control their own STAR COLLECTORs while leaving a straight line in their wake.

The purpose of this game is to alter how people see the classic STAR COLLECTOR game. While maintaining the simplicity of the classic STAR COLLECTOR game, it will provide the player the experience of commercial multilayer games. The following are the project's primary goals:

* Make a STAR COLLECTOR game with all the features of conventional STAR COLLECTOR games.
* Introduce multilayer capability into the game so that multiple players can play at once. It should be able to provide the players with the experience of a real-time multiplayer game.
* Introduce a computer-controlled clever opponent (a unique aspect of this game) to increase the difficulty and intrigue of the game. The computer will direct the movement and behaviour of these clever adversaries with the goal of consuming the food before human players do.

**Tools used:**

Software: Eclipse 2022-09 (4.25)

Language: JAVA

Operating system: Windows 7 or 10

Ram: 4GB

Rom: 512GB