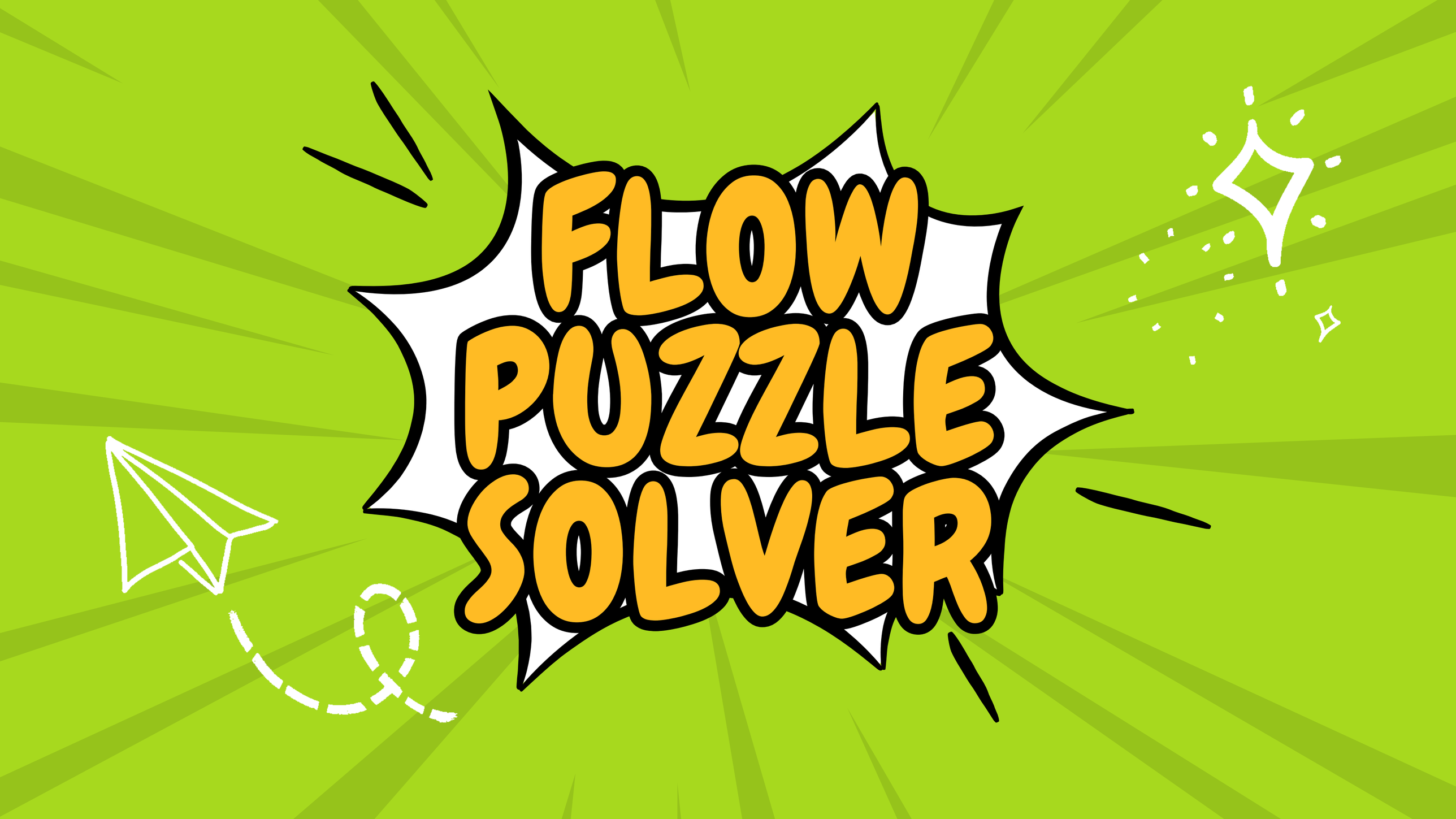

FLOW
PUZZLE
SOLVER

INSTRUCTION

- FLOW PUZZLE SOLVER IS AN EXCITING PUZZLE GAME WHERE PLAYERS CONNECT MATCHING COLORS ON A GRID.
- THE TWIST? OUR SMART SOLVER CAN FINISH THE PUZZLE FOR YOU USING AI!
- BUILT WITH PYTHON AND PYGAME, THIS GAME BRINGS TOGETHER FUN, LOGIC, AND AUTOMATION.

PROBLEM FORMULATION

INITIAL STATE:

A grid with unconnected pairs of colored dots and empty cells.

ACTIONS:

Move in grid to draw a path from one dot to its matching pair.

TRANSITION MODEL:

Drawing a path updates the grid by filling cells along the path.

PROBLEM FORMULATION

GOAL TEST:

All pairs of colored dots are correctly connected without overlapping paths, and the entire grid is filled.

PATH COST:

Each move has a cost of 1; the objective is to minimize the total Number of moves or time taken.

PEAS

PEAS

Performance : solve the Puzzle by connecting matched dots , without overlapping, with fewest moves and least time.

Enviroment : N*N Grid ,Colored Dots.

Actuators : Select and move on grid, draw and delete paths.

sensors : Detect current state , read positions, validate rules.


ODESDA

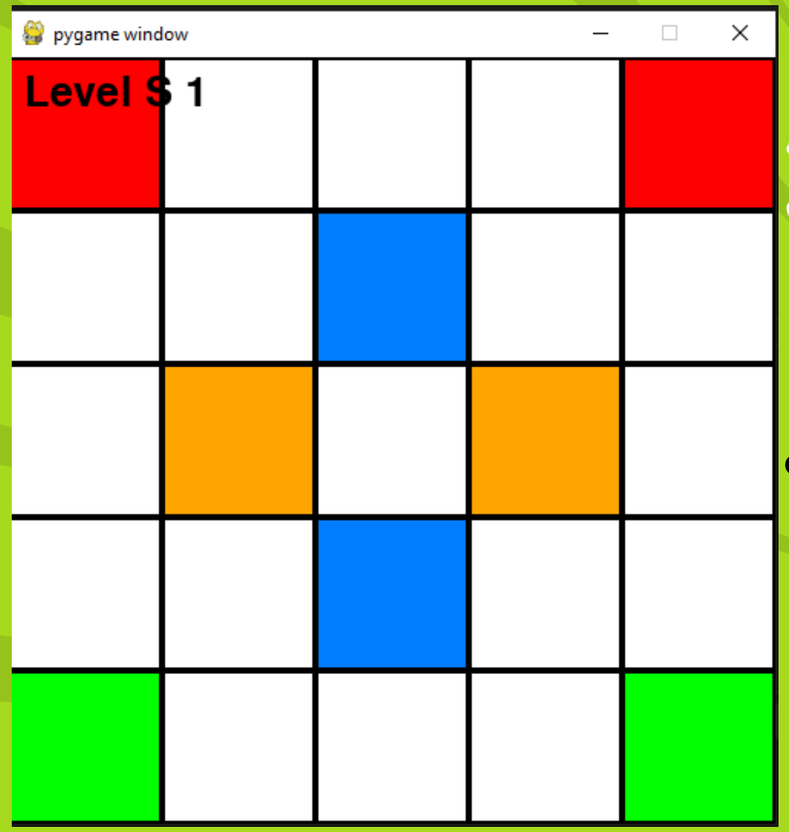
ODESDA

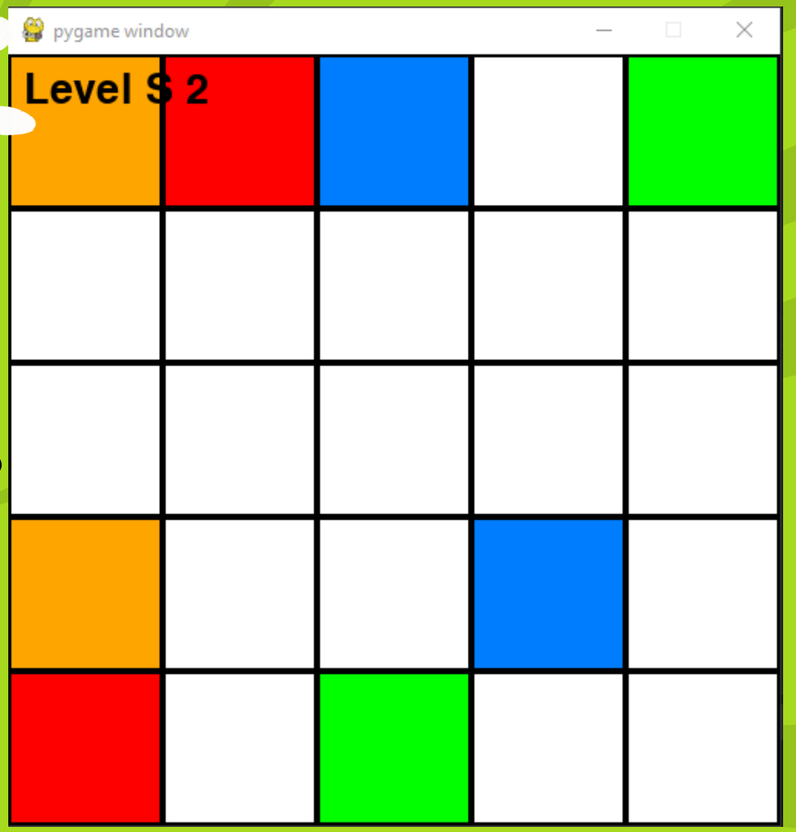
Observable:	Fully observable
Deterministic:	Deterministic
Episodic:	Episodic
Static:	Static
Discrete:	Discrete
Agent:	Single Agent and cooperation

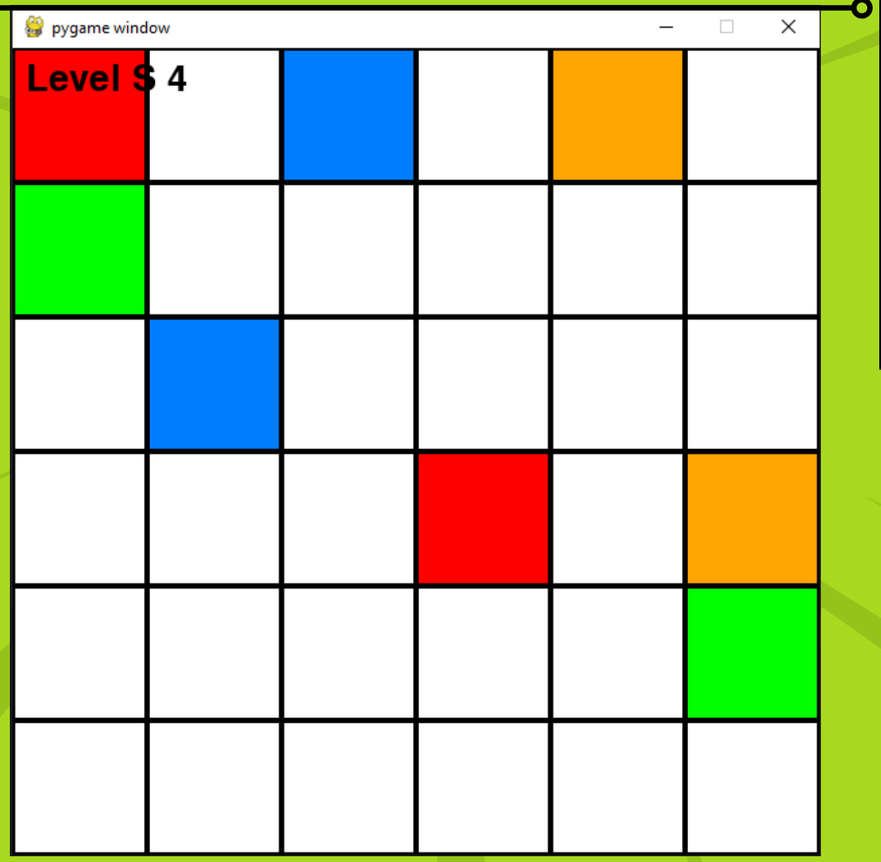
AGENT TYPE

Goal-based Agent: because it makes decisions to achieve a specific goal (solving the puzzle), using search algorithms.

GAME UI


pygame window
Level S 1


pygame window
Level S 2


pygame window
Level S 4

THANKS

UNTIL NEXT TIME