



AI PUZZLE SOLVER PROJECT

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- Program with GUI for the User
- Choice of 4 different puzzles (2 N-Puzzles, 2 Queens puzzles)
- Solver Agent with multiple algorithms (uninformed/informed search, local search)
- GUI and Agent on 2 different threads to avoid GUI freeze
- GUI must show the different visited states for solving the puzzle
- GUI must show metrics for the algorithms
- Solving in reasonable time and resources
- Survive

OBJECTIVES

- Board object
- Solver Factory
- Metric class
- Threading with QThread

ARCHITECTURE

- N-Puzzle:
 - Uninformed searches:
 - Breadth-first search
 - Depth-first search
 - Informed search:
 - A* (Best-First Algorithm): from Dijkstra pathfinding algorithm
- Queen Puzzle:
 - Local Search:
 - Hill Climbing
 - Backtracking

ALGORITHMS

Demo Application

GUI

- Many algorithms do not solve the puzzles in reasonable time and memory resources
- Given time was a bit short
- Project's scope inappropriate with the time given and the holidays

PROBLEMS