CSC466 Assignment: Sequence of Plans

Title: Heuristic Minesweeper solver

First plan - February 9, 2023

The first task provides an introduction to the project, and the last task provides a conclusion. Tasks 2-6 are infrastructure tasks. Tasks 7-11 relate to the development and testing of the heuristic player.

- Task 1: Description of the game and motivation for the project.
- Task 2: Modeling the tiles.
- Task 3: Displaying the board.
- Task 4: Manual and automatic board generation.
- Task 5: Revealing tiles and mine functionality.
- Task 6: Game playing interface.
- Task 7: Random player creation.
- Task 8: Initial heuristic player.
- Task 9: Testing random player against heuristic player.
- Task 10: Adding advanced rules to the heuristic player.
- Task 11: Testing heuristic player against previous statistics.
- Task 12: Reflections.

Second Plan – February 19, 2023

- Task 0: Description of the game and motivation for the project.
- Task 1: Modeling the tiles.
- Task 2: Modeling, generating, and displaying the game board.
- Task 3: Revealing tiles and mine functionality.
- Task 4: Game playing interface.
- Task 5: Random player creation.
- Task 6: Establish a heuristic player with basic rules and compare against the random player.
- Task 7: Long iterative task involving gradually adding more rules to the heuristic player and comparing the results with previous iterations.
- Task 8: Reflections.

Third Plan – April 10, 2023

- Task 0: Description of the game and motivation for the project.
- Task 1: Modeling the tiles.
- Task 2: Modeling, generating, and displaying the game board.
- Task 3: Revealing tiles and mine functionality.
- Task 4: Game playing interface.
- Task 5: Random player creation.
- Task 6: Establish a heuristic player with basic rules and compare against the random player.
- Task 7: Add single point evaluation rules to the heuristic player and compare to previous iterations.
- Task 8: Add a rule that solves harder patterns using a constraint satisfaction problem algorithm and compare to previous iterations.
- Task 9: Reflections.