CS 342 - Software Design - Spring 2021
Professor Mark Hallenbeck
Project 4 - Threaded AI 15 Puzzle | Collaboration PDF

Team Members :
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Since The team members were working from different time zones, we made use of GitHub and shared our code using a private repository. The work on different sections of the project was mutually agreed upon, we both worked mostly via zoom and screen sharing.The project demanded many components and thus the work was split thoughtfully to facilitate an easy flow, setting up milestones and doing everything in a chronological order so that we did not get lost or confused.

Pranav Worked On :

1. Making the swapping conditions
2. Checking the if all the buttons are in order and transitioning to a win scene if they are.
3. Rearranging the elements of the GUI to make it presentable.
4. Building the code for heuristics threading when the AI buttons are pressed.(This work was shared with Parth).
5. Created a class that implemented Callable that was used to return an ArrayList of Nodes (solution path) back to the thread, while making sure that the Application thread does not get blocked.
6. Creating Test Cases.

Parth Worked On:

1. Built the GUI for the program including the Win Scene
2. Added the MenuBar with contents and their EventHandlers
3. Adding puzzles to the Grid Pane.
4. Building the code for heuristics threading when the AI buttons are pressed.(This work was shared with Pranav). - Disabling the GridPane, when the AI algorithm is run
5. EventHandler for the see the solution button.
6. Animation of the first 10 transitions after generating a solution path via the AI algorithm,
7. Enabling and disabling the buttons for a particular event