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|  | **NANDHA COLLEGE OF TECHNOLOGY**  **ERODE-638 052** | | |  |
| **Department of Computer Science And Engineering** | | | | |
| N - puzzle(Game) using Best First Search | | | | |
| This  n-puzzle project is likely a game where the player is presented with a board containing a grid of numbered tiles that are initially shuffled randomly. The n-puzzle game is a classic sliding puzzle game where the objective is to rearrange a grid of numbered tiles in a particular order . The game can be implemented using HTML, CSS, and JavaScript , to solve the puzzle algorithmically, I have implemented the best-first search algorithm. This is a graph search algorithm that explores the graph by expanding the most promising node chosen according to a specified rule, such as the estimated distance to the goal state. In the case of the n-puzzle, the goal state is the desired tile arrangement . The algorithm then searches the graph, expanding nodes according to a heuristic evaluation function that estimates the distance from the current node to the goal state. This heuristic evaluation is often based on the number of misplaced tiles or the Manhattan distance between the current and goal states.  Overall, the project involves implementing an interactive game that challenges players to solve a classic puzzle, and applying a sophisticated algorithm to automatically solve the puzzle. | | | | |
|  | | **Real time application:** | PROJECT TEAM  **Student Details :**    **Kirubakaran  C -  732121104032**  **Mentor:**     Mr. Suresh Kumar V S  AP , CSE, Nandha College Of Technology | |
| 1. Educational tools  2.Game development  3.Artificial intelligence  4.Employee training  5.Cognitive therapy. |