Project Title:

Sliding puzzle, An implementation for device independent windows 10 OS.

Group Members

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Project Summary:

A sliding tile number puzzle is a combination (sequential move) puzzle that challenges a player to slide pieces along certain routes on a 2D board and establish a certain end-configuration i.e All numbers in sequential order. In this implementation, puzzle consists of 15 numbered interlocking tiles in a box. The tiles cannot be removed from the box. Since there is one tile missing, they can be slid to different positions. The pieces to be moved will be of square shapes. They may be imprinted with colors, patterns, sections of a larger picture (like a jigsaw puzzle), numbers, or letters. We have limited the requirement to implement with 1-15 numbers in a 4x4 blocks area.

Project Objectives:

1. 4x4 implementation with tiles numbered from 1-15 and one empty slot.
2. User has to login to the game via a login page.
3. User can start a new game after login.
4. User can hit a button called "New game" to scrap the current one and start another one fresh
5. Number of moves made by the user is tracked.
6. Congratulation message is displayed when the puzzled is solved.
7. If user is unable to solve the puzzle, they can click the solve button to show a possible solution to the game.
8. Users can save the current state of the game and resume later.
9. Multiple users can login and play the game. Each user current state should be saved.

Project Deliverables:

1. Agile methodology deliverables (Execution plan, etc...)
2. Project code in a versioning tool, GIT
3. A requirement specification document for the project.
4. UML Design diagram
5. A game which can be played on any windows 10 OS device(Laptop/mobile)
6. Saved state data enabling users to play in multiple devices.
7. Test plan (Acceptance test, System test and unit test) and testcases to ensure that project is delivered meets requirements
8. Next phase plans