Report on Puzzle Progression Game

1. **List of parts of the Puzzle Progression Game that need to be tested.**

    ➢ **UI/UX:-**
      Layout, design, and Responsive should be the same in different screen sizes
    and devices. Smooth navigation between screens (like starting the game and moving
    between levels and multiplayer option.). Clarity of instructions
    and information for players.

    ➢ **Gameplay Process:-**
      All players should play the game and move the puzzle without restriction.
    Gradually progression and increased difficulty level for the players. All team Players
    should know the Score, levels, and any action taken by other players. The winning result
    is displayed after a player of the team completes the levels.

    ➢ **Multiplayer Functions:-**
      The game flow of all levels and functions is managed by the Game Master. In case of
    certain situations, the game master can give access to others to manage the game. All
    players can communicate with team members. All players get to know the real-time
    updates of the game. Players can restart or retry the level and the game starts from the
    initial stage.

    ➢ **Data Collection:-**
      The player's data is collected in storage where all data like; (Each move of the players,
    time taken to solve the Puzzle, actions of each player, and the Game levels of each
    player).

    ➢ **Performance:-**
      Smooth Performance during multiple teams play simultaneously and performance during
    complex puzzles.

    ➢ **Game Report Generation:-**
      Display Correct and Consistency reports of all teams Including individual data of players
    and the team finish the levels in minimum time based on this report declared the winners.

 2. **Test Case for the Game Play Part of the Puzzle.**

    ➢ **TC1:- Verify Player Movement**
        ● **Description:-** To Verify that all team players can play the puzzle freely.
        ● **Excepted Result:-** All team players should be able to play the puzzle without any
          restriction.

- ➢ **TC2:- Verify Puzzle difficulty levels increase gradually**
  - ● **Description:-** To verify that the difficulty level increases as players progress through the levels.
  - ● **Excepted Result:-** The Next level should have more difficulty than the previous level for the player.

- ➢ **TC3:- Verify Player Action Reflected to other team members.**
  - ● **Description:-** To Check that if one player takes any action it is reflected in the team player's screen.
  - ● **Excepted Result:-** All Team players see the same game status in real-time.

- ➢ **TC4:- Verify the Data Collection of each player.**
  - ● **Description:-** Ensure that each player's time to finish each level is recorded.
  - ● **Excepted result:-** All data of each player and team should be accurately recorded.

- ➢ **TC5:- Verify that the game master can monitor the flow.**
  - ● **Description:-** Check that the game master can able to manage the flow of the game and guide the team.
  - ● **Excepted Result:-** The game master should be able to monitor the progress without any errors.

- ➢ **TC6:- Verify the game Restart and Retry functionality.**
  - ● **Description:-** To check that players can restart/ retry the levels and start the game from the initial stage if needed.
  - ● **Excepted Result:-** The player should able to restart the game and play the level from initial stage without any issue.

3. Assumptions
- ➢ This game should designed for mobile devices and it is optimized for both Android and IOS devices.
- ➢ The game master monitors and guides the players.
- ➢ After finishing the game report is generated accurately.
- ➢ This game smoothly performs while multiple teams play the game.

4. List of tests that will be needed for successful release.
- ➢ **UI/UX:-** All interfaces should be Integrated, responsive, and work with all screen sizes of Android and IOS devices.
- ➢ **Gameplay:-** Players should be able to play all levels without bugs. Team action should be displayed on the screen of each player.
- ➢ **Data Collection:-** All player's moves, time, and actions should be recorded correctly.
- ➢ **Game Master functionality:-** The game master should be able to monitor and guide the teams without any error.
- ➢ **Performance test:-** The game should run smoothly without any error.

➢ **Report Generation:** The report generated when players or teams finish the game should be accurate.

These are the details that I assume and cover based on my experience with testing required for the Puzzle Progression Game.

Prepared by:- Pradeep Kumar Sahoo
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