

## Use Case Descriptions – Decide/Announce a winner.

**Primary Actor:** Kids

### Stakeholders and Interests:

1. Parents: The game can improve their bond with their kids and keeps their kids busy.
2. Community: Players that interact with the game through online forums or social media. They contribute to the game's promotion and offer criticism to make it better.
3. Game websites: Wants to host competitions and tournaments to increase popularity and revenue.
4. Board game publishers: There will be decline in sales of physical board games.

**Preconditions:** The game has finished conclusively, A player has occupied 3 columns.

**Success Guarantee:** The winner message has been displayed and the game has been ended.

### Main Success Scenario:

1. The system keeps track of all player's progresses.
2. The system retrieves information about pieces on the board.
3. The system checks the user has fulfilled criteria for winning the game. *[Alt1: User did not fulfilled criteria]*
4. The system records the information of the user who has fulfilled criteria for winning the game.
5. The system declares a user has occupied at least 3 columns.
6. The system prevents users from taking any further turns.
7. The system provides the user with the opportunity to display the winner player or to exit the use case *[Alt2: User selects to exit game]*.
8. The user selects to display the winner player.
9. The system retrieves the information of winner player.
10. The system displays a message announcing the information of winner player.
11. The system provides user with the opportunity to start a new game *[Alt3: User selects to start a new game]* or exit the game. *[Use Case Ends]*

### Alternative Flows:

*Alt1: User did not fulfilled criteria*

1. The system confirms the user has not fulfilled criteria for winning the game.
2. The system informs the user to continue the game.

*Alt2: User selects to exit game*

1. The system saves the data in current game.
2. The system exits to start menu.

*Alt3: User selects to start a new game*

1. The system saves the data in current game.
2. Flow resumes at Set Up a Game Use Case Description.

**Exceptions:** Play must be restarted if a player wants to enter or leave the game before it has finished. If the system fails to retrieve any information or perform a task, it will display a crash message.

**Special Requirements:** The game board, dice and pieces should be coloured and scaled to assist those who are blind or visually challenged, making it easier for them to move and recognise their cubes.

**Open Issues:** What if user mis-clicked wrong column on the board and missed a win? Will he be given another chance or allowed to take back their piece and play another turn?