Place Player Cubes

Primary actor: Player

Stakeholders and Interests:

• Player: wants to place white cubes, colored cubes, and for no further bugs and glitches to arrive, wants to move white cubes based on the roll, wants to know the valid columns for moving, wants the process to be simple and clear.

• Game Developer: wants the game to provide simple and clear options for making a move, placing initial white cubes, replacing white cubes with colored cubes, wants the player to be aware of valid moves in a specific column.

Preconditions:

• Player is identified and authenticated by system. Player has set up the game and made a roll.

Success Guarantee (Post Conditions):

• Player is made aware of the valid columns to move. The player's profile is updated based on the moves made.

Main Success Scenario:

1. The user requests to place white cubes at initial squares.

2. The system provides the user with the opportunity to place white cubes or to exit the use case [*Use Case Ends*].

3. The user selects to place white cubes in specific columns' initial squares obtained from selecting a combination. [*Alt1: User declines to place initial white cubes*]

4. The system retrieves the details for the move made, including the column number in which the move was made, the square in the column and provides the details to the user. [*Exc1: System cannot retrieve correct column number and moved square.*]

5. The user requests to advance white cubes based on roll.

6. The system provides the user with the opportunity to advance white cubes.

7. The user selects to advance white cubes based on roll. [*Alt2: User decides to stop turn and declines to advance white cubes*]

8. The system retrieves the details for the move made, including the column number in which the move was made, the square in the column and provides the details to the user. [*Exc1: System cannot retrieve the correct column number and moved square.*]

9. The system records that the user has selected a specific move, updating the list of moves made by that specific player in that game.

10. The system informs the user that the move made is confirmed.

11. The system provides the user with the opportunity to make further advances on white cubes [*Alt 3: User selects to make further moves*] or to exit the use case [*Use Case Ends*].

Alternative flows:

Alt1: User declines to place initial white cubes.

1. The system informs the user that to continue the game they must place white cubes in all legal columns as roll allows.
2. Flow resumes at Main Success Scenario 4.

Alt2: User decides to stop turn and declines to advance white cubes.

1. The system informs the user that they have successfully stopped their turn.
2. The system gives the opportunity to the user to replace the white cubes with their colored cubes.
3. The user selects to replace the white cubes with their colored cubes.
4. The system informs the user that the replacement of white cubes with colored cubes was confirmed and successful. [Use case ends]

Alt3: User selects to make further moves.

1. Flow resumes at Main Success Scenario Step 6.

Exceptions:

Exc1: System cannot retrieve correct column number and moved square.

1. If at any time the system is unable to retrieve the correct column number and moved square, then the system informs the user of the problem, attempts to record the time and nature of the failure and the use case ends.

Special Requirements:

• Colors and sizes of text fonts used must provide - or be able to provide - for the visually impaired (e.g., color blindness).

Open Issues:

- Do we keep a record of the selected moves by a player in that game?
- Do we keep a record of valid moves that can be made by a player?
- Do we know if the player is making an illegal move in unrolled column?