Use Case Descriptions – Take a Turn

Primary Actor: Kid(s)

Stakeholders and Interests:

Preconditions: Number of players has been chosen, colours/cubes have been selected, all players understand the rules of the game.

Success Guarantee: Player has scored their points and play continues. (Next players turn starts)

Main Success Scenario:

1. The system informs the user(s) who's turn it is.
2. The system provides the user with the opportunity to roll the dice.
3. The user rolls the dice.
4. The system shows the user the results of their dice roll.
5. The system retrieves information of the cubes currently on the game board.
6. The system allows the user to choose their combination of dice. *[Alt1: No valid choices]*
7. The user chooses a combination of dice.
8. The system checks that the chosen combination is allowed. *[Alt2: Incorrect choice]*
9. The system informs the user that they made a valid choice.
10. The system records the users move.
11. The system allows the user to place their cubes.
12. The user places their cubes corresponding to their chosen dice roll. *[Alt3: Wrong square]*
13. The system provides the user with the choice of rolling again or scoring.
14. The user chooses to score. *[Alt4: User chooses to roll again]*
15. The system displays an updated board to the user.
16. The system informs the user their turn is complete. *[Use Case Ends]*

Alternative Flows:

Alt1: No valid choices

1. The system informs the user that they cannot make any valid combination (bust).
2. Flow resumes at Main Success Scenario Step 16.

Alt2: Incorrect choice

1. The system informs the user their dice combination is not valid.
2. Flow resumes at Main Success Scenario Step 6.

Alt3: Wrong square

1. The system informs the user they have chosen an incorrect square.
2. Flow resumes at Main Success Scenario Step 11.

Alt4: User chooses to roll again

1. Flow resumes at Main Success Scenario Step 2.

Exceptions: If any player forgets the rules of the game, they may interrupt flow at any time to reread the instructions. If a player wishes to join or exit game play before the game has ended, play must be restarted.

Special Requirements: Pieces and game board should be coloured and sized to accommodate the visually impaired, allowing them to move and identify their cubes easily. Dices and numbers on the board should be printed clearly.

Open Issues: What happens if a user takes a long time to make a move? Will a user be able to take back their dice selection after selecting/placing cubes on the board?