Use Case : Take A Turn

Primary Actor: Player

Stakeholders and Interests:

- *Player:* Wants to add the domino selected in the previous round/setup to their kingdom and select a new domino for the next round

Preconditions:

- The playing order for the round has been decided by selecting a domino in the previous round or in the initial setup.

Success Guarantee (Postconditions):

- Each player has added the domino selected in the previous round to their kingdom, has selected a new domino for the next round and the playing order for the next round has been decided.

Main Success Scenario:

1. The system checks if there are dominoes left in the deck before commencing the round. [Alternate 1: No dominoes left in the deck].
2. The systems check for the number of players in the current game.
3. The system records the number of players currently in the game.
4. The system decides on number of dominoes to be included in the new set according to the number of players.
5. The system randomly selects a new set of dominoes from the deck.
6. The system removes the dominoes from the deck.
7. The system orders the dominoes in ascending order.
8. The system displays the dominoes with the terrain side facing down.
9. The system flips the dominoes and displays the terrain side.
10. The system checks the rank order of players from the previous round.
11. The system determines the highest ranked player who has not taken their turn yet.
12. The system verifies if a suitable spot is available for the domino claimed by the player in the previous round. [Alternate 2: There is no suitable spot available for the domino].
13. The system asks the player to add the domino to their kingdom.
14. The player selects a spot for the domino in their kingdom from the available spots.
15. The system verifies the spot chosen is suitable as per the terrain rules.[Alternate 3: The chosen spot is not suitable]
16. The system places the domino in the player's kingdom.
17. The system asks the player to claim a domino for the next round by selecting from the set of dominoes selected by the system in Step 4. [Alternate 4: It is the last round]

18. The player claims a domino for the next round.
19. The system verifies whether the domino has been claimed by any other player. [Alternate 5: Domino has already been claimed.]
20. The system records the domino selected by the player.
21. The system records the rank order of the player for the next round based on the domino claimed.
22. The system records that the player has taken their turn.
23. The system repeats steps 10 to 22 for rest of the players turn by turn according to the rank order.
24. The system moves to the next round or to the end of the game. [Use Case Ends]

Alternative Flows:

Alternative 1: No dominoes left in the deck.

1. The system informs the players that this is the last round of the game.
2. Flow resumes at main success step 10.

Alternative 2: There is no suitable spot available for the domino.

1. The system informs the player that there is no suitable spot for the domino claimed by the player in the previous round.
2. The system discards the domino.
3. Flow resumes at main success step 17.

Alternative 3: The chosen spot is not suitable.

1. The system informs the user that the selected spot is not suitable.
2. Flow resumes at main success step 13.

Alternative 4: It is the last round

1. Flow resumes at main success scenario step 23.

Alternative 5: The domino has already been selected.

1. The system informs the user that they need to select a different domino.
2. Flow resumes at main success scenario step 17.

Exceptions:

- None

Special Requirements:

- No specific special requirements for this use case.

Open Issues:

- Will all the kingdoms be visible at all times during the round or only the kingdom of the player who is currently taking their turn?