Fully Dressed Use Case: Take a Turn
Primary Actor: Player
Stakeholders and Interests:

- Player: wants to understand how to take their turn, wants the process to be fun and intuitive and for no bugs to arise, want to easily visually understand each part of the GUI

Preconditions:

- The game has been properly set up.
- The starting round (and possibly other rounds) has already been played out. The player picked their domino at the end of their last turn.

Success Guarantee (Postconditions):

- The turn has been played out successfully and the player is satisfied that they have done everything correctly.

Main Success Scenario:

1. The player begins their turn based on which domino they selected at the end of the previous round (Player order is based on the domino selection). They choose to play out their turn, and not exit the game *[Alt1: User clicks exit game]*
2. The player places their domino in their kingdom, adhering to the "Connection Rules". *[Alt2: The player can't place without breaking a rule]*
3. The system verifies that the player has correctly placed their domino *[Alt3: A connection rule is broken]*
4. The system indicates that the player must put their king on an available domino in the next line in the selection area.
5. The player selects an available domino.
6. The system displays a king of the player's color on the selected domino, which remains there until their next turn.
7. The player's turn ends and another player's turn begins, ending the use case *[Alt4: It's the last turn of the round and the round is over]*

Alternative Flows:

*Alt1: User clicks exit game * (The user should be able to exit at any step)*

1. The system provides the user with the option to save or discard the game
2. User selects save or selects discard. The use case ends.

Alt2: The player can't place without breaking a rule

1. The system recognizes that the player has no viable placements
2. The system tells the player that they have no allowed placements, and their domino is discarded.
3. Flow resumes at Main Success Scenario Step 4

Alt3: A connection rule is broken

1. The system tells the user that they cannot place their domino in the space, and displays the violated rule.
2. Flow resumes at Main Success Scenario Step 2 (Player can try placing domino somewhere else)

Alt4: It's the last turn of the round and the round is over

1. The player's turn ends
2. The program automatically lines up 4 dominoes in the selection area of the GUI, with numbers facing up. After a few seconds, the program flips the dominoes showing the terrain.
3. Another round begins, ending the use case.

Exceptions:

Special Requirements:

- Colours and sizes of text fonts / other GUI elements must provide or be able to provide for the visually impaired (e.g. colour blindness).

Open Issues:

- Should the player be able to exit the game at any point in the turn, or should they have to choose at the beginning of the turn?

UI Prototype: Take a Turn

Display
Their color
Ring

Round: 2/4
Turn: Player 1

Player 1, Place Your Domino!

Player 1

Player 2

Player 3

Player 4

King →

Exit Game

Game Info

Kingdom
Area

Domino
selection
Area