

Make a Roll

Primary actor: Player

Stakeholders and Interests:

- Player: wants to make a roll and for no further bugs and glitches to arrive, wants to view how much he/she rolled on all 4 dice, wants to know the combinations possible, wants the process to be simple and clear.
- Game Developer: wants the game to provide simple and clear options for making a roll, wants the player to be aware of the numbers rolled for each dice.

Preconditions:

- Player is identified and authenticated by system. Player has setup the game and knows the rules involved in making a roll.

Success Guarantee (Post Conditions):

- Player is made aware of the details of the roll made, including the numbers rolled by 4 dice and their combinations. Player can make a move based on a combination selected. Player's profile is updated based on the selected combinations.

Main Success Scenario:

1. The user requests to make a roll.
2. The system provides the user with the opportunity to make a roll or to exit the use case [*Use Case Ends*].
3. The user selects to make a roll. [*Alt1: User declines to make a roll*]
4. The system retrieves the details for the roll, including the number rolled by each of the 4 dice, and the 3 combinations possible and provides the details to the user. [*Exc1: System cannot retrieve correct numbers for each of the 4 dice rolled, and all possible combinations*]
5. The user requests to select a combination.
6. The system provides the user with the opportunity to select a combination of 2 pairs (pair is a sum of 2 dice).
7. The user selects a combination of 2 pairs. [*Alt2: User declines to select a combination*]
8. The system retrieves the details about the selected combination and informs the user of the selected combination. [*Exc2: System cannot retrieve the correct selected combination.*]
9. The system records that the user has selected a combination, updating the list of combinations chosen by that specific player in that game.
10. The system informs the user that they can move in the columns selected from the combination. [*Extension: User makes a move*]
11. The system provides the user with the opportunity to make further rolls [*Alt 3: User selects to make further rolls*] [*Extension: User declines to make further rolls and selects to Stop Turn*] or to exit the use case [*Use Case Ends*].

Alternative flows:

Alt1: User declines to make a roll.

1. The system informs the user that to continue the game they must make a roll.

Alt2: User declines to select a combination.

1. The system informs the user that to continue the game they must select a combination.

Alt3: User selects to make further rolls.

1. Flow resumes at Main Success Scenario Step 2.

Exceptions:

Exc1: System cannot retrieve correct numbers for each of the 4 dice rolled, and all possible combinations.

1. If at any time the system is unable to retrieve the correct numbers rolled for each dice, then the system informs the user of the problem, attempts to record the time and nature of the failure and the use case ends.

Exc2: System cannot retrieve the correct selected combination.

1. If any time system is unable to retrieve the correct combination selected, 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 combinations by a player in that game?
- Do we know if the dice roll is random?
- Do we know if the player is eligible (his/her turn) for making a roll?