

CIS*3260

Assignment 1 Use Cases

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Use Case 1

A player stores a die/coin for later use

Primary Actor: player

Goal: store dice/coin for future use

Stakeholder list:

- Player needs a die/coin for a game

Initiating event: player is playing a game that requires a die

Main Success Scenario:

1. The player specifies some new dice and coins they need
2. The system creates new dice and coins that match the users' specifications
3. Player selects a specific coin/die for later use
4. The player tells the system which die they want for later
5. The system moves the chosen dice/coin into their bag

Exceptions:

1. The die/coin that the player needs to be stored does not exist
 - a. The system informs the player that no die/coin exists
 - b. The player selects another die/coin to store

Post Conditions:

- The new die/coin is tracked by the system
- The user can access the die/coin through their bag

Use Case 2

A player rolls a die that they brought in their bag

Primary Actor: player

Goal: Get a random result from

Stakeholder list:

- Player requiring a die for a board game
- Friends want to observe the rolling of the die

Initiating event: player requires a die for a game they are playing

Main Success Scenario:

1. Player needs a die from their bag
2. The player specifies the die to the system
3. The system loads the die required into the player's cup
4. The player needs a roll of the die for their game
5. System throws the players cup and results are shown
6. The result of the thrown die is used by players/friends to advance their game

Exceptions:

1. The die/coin that the player needs to be stored does not exist
 - a. The system informs the player that no die/coin exists
 - b. The player selects another die/coin to store

Post Conditions:

- Random result is either heads or tails for a coin
- Random result is between 1 and number of sides for dice

Use Case 3

Player borrows some dice/coins from a friend and places them into his cup

Primary Actor: player, friend

Goal: move dice/coins from friends' bag to player's cup

Stakeholder list:

- Player needs more dice/coins for a game they are going to play
- Friend has a few extra dice/coins in their bag

Initiating event: player requires more dice/coins for a game

Main Success Scenario:

1. The player needs more dice than what he owns for a game night
2. Player gets permission to borrow some dice/coins from a friend
3. The player gets access to their friend's bag of dice/coins
4. The player and friends have decided on the dice/coins required for their game
5. The system searches for the required dice/coins in the friend's bag

6. The system moves the dice/coins from the friend's bag to the player's
7. The required dice/coins are moved from the player's bag to their cup

Exceptions:

1. A selected die/coin required does not exist
 - a. The system informs the player
 - b. The player/friends choose new dice

Post Conditions:

- The required dice/coins exist in the player's cup

Use Case 4

For a game, the player is not allowed to use red six-sided dice, they are removed from the player's cup

Primary Actor: player

Goal: remove all red six-sided dice from play

Stakeholder list:

- Player is the host of a new game and must follow the rules

Initiating event: the player starts a new game where red six-sided dice are not allowed

Main Success Scenario:

1. The player starts a new game, red six-sided dice are not allowed
2. The player informs the system to remove any red six-sided dice
3. System searches for any red six-sided die in the player's cup
4. System relocates red six-sided die into the player's bag
5. Player informs the system of any dice/coins needed
6. The system loads required dice/coins into the player's cup
7. Player continues with new game

Post Conditions:

- No red six-sided dice exist in the players cup