Connor Teige, Connor Dole

4.)

Use Case: Move

Actors: Current Player

Trigger: Current Player wants to move to a new room

Pre-condition: It is their turn, they haven't already moved, and they haven't decided to work this turn

Post-condition: They have moved their die into a new room on the board

Basic Flow:

1.) It is that players turn

2.) Player chooses to Move instead of working

3.) Player moves their die into a new room

4.) Player can now access roles in that new room

Alternate Flow - Step 1:

1a.) It is not that persons turn

Use Case: Work

Actors: Current Player

Trigger: Player wants to work this turn

Pre-Condition: They haven't moved this turn, there's an available role, they're not currently rehearsing

Post-Condition: A shot counter has been removed and it is now the next person's turn

Termination Condition:

- (on success) The player has earned 2 credits

- (on failure) The player gets nothing

Basic Flow:

1.) Player has chosen a role that is within their rank

2.) The player has decided to Act

3.) The player then rolls

4.) The player wins and is granted two credits

Alternate Flow - Step 2:

      2.a) The player decides to rehearse instead

            .1: Player receives a +1 boost to all future rolls in this role this day

Alternate Flow - Step 4:

      4.a) The player loses the roll

            .1 Player receives nothing this turn

Use Case: Upgrade

Actors: Current Player, Bank

Trigger: Current Player wishes to upgrade their Rank

Pre-Condition: They have enough coins/credits, they aren't rank 6, they are at casting office,

aren't working a role

Post-Condition: Subtracted coins/credits and Rank is increased by One

Termination Condition:

- (on success) They player has their rank increase

- (on failure) neither coins nor rank is changed in any way

Basic Flow:

1.) They may have moved to or are currently in the casting office

2.) The player wants to upgrade their rank

3.) The bank calculates how much they need to spend and subtracts that much from their
wealth.

4.) The player has upgraded their rank by 1

Alternate Flow - Step 1:

1.a)They aren't in the casting office

2.a)They are already at max rank

Alternate Flow - Step 3:

3.a) The player doesn't have enough coins/credits

Use Case: Finish Turn

Actors: All current players

Trigger: This is the last scene of the day and we're waiting for payout

Pre-Condition: There is only one scene left

Post-Condition: Players will be paid out and returned to their trailers, new scenes will be set up

Termination Condition:

- (on success) The players are paid and the board is set up for the next day

- (on failure) The next scene is played out

Basic Flow:

1.) This is the last scene of the day and it is not played out.

2.) The highest Ranked player rolls the number of dice equal to the budget of that scene

3.) The dice are associated in descending order to each player in that scene, wrapping around after they give the nth die to the lowest ranked player

4.) Players then receive money equal to the sum of the dice they received after the roll

Use Case: Day End

Actors: All Players

Trigger: There are no scenes left

Pre-condition: There are no scenes left

Post-Condition: Everyone will be put back into their trailer

Basic Flow:

1.) The Scene cards for the day are all switched out with new ones, face down

2.) The scene counter tokens are replaced for each given scene

3.) The game continues onto the next day

Alternate Flow - Step 3:

3.a) You are on the last day (fourth)

.1) Move onto Game End

Use Case: Game End

Actors: All Players

Trigger: You are done with Day end and you are on the fourth Day

Pre-Condition: You are done with Day end and you are on the fourth Day

Post-Condition: The players have converted and counted up their score and a winner is declared

Termination condition:

- (on success) The Game has decided on a winner

- (on failure) The Game moves onto the next day

Basic Flow:

1.) Each player converts their credits, money, and rank into a score

2.) Every player compares scores, and the person with highest score wins

Alternate Flow - Step 2)

2a.) Two or more players has the same score

.1) Everyone with the highest, tied score, is the winner

Board Setup

```
Player                                          Board
  │                                               │
  │──────────── Decide Players ──────────────────▷│
  │                                               │
  │──────────── Place Board Layout ──────────────▷│
  │                                               │
```

Alt

```
Player                                          Board
  │                                               │
  │──────────── 2 or 3 players ──────────────────▷│
  │                                               │
  │◁─────────── Game is 3 days ───────────────────│
  ┆───────────────────────────────────────────────┆
  │──────────── 4 players ───────────────────────▷│
  │◁─────────── Play as normal ───────────────────│
  ┆───────────────────────────────────────────────┆
  │──────────── 5 players ───────────────────────▷│
  │◁─────────── Players begin with 2 credits ─────│
  ┆───────────────────────────────────────────────┆
  │──────────── 6 players ───────────────────────▷│
  │◁─────────── Players begin with 4 credits ─────│
  ┆───────────────────────────────────────────────┆
  │──────────── 7 or 8 players ──────────────────▷│
  │◁─────────── Players start with rank 2 ────────│
  │                                               ╳
```

Rehearsing

Player	Board

Player → Board: **Rehearse**

Board → Player: **+1 to die for this role**

Move

```
Player                                              Board

Alt
        Move to adjacent room
        ─────────────────────────────────────────▷

    Alt
                Room visited
        ◁─────────────────────────────────────────

                Room not visited
        ◁─────────────────────────────────────────

                Flip scene card
        ─────────────────────────────────────────▷

                Show scene
        ◁─────────────────────────────────────────

        Don't Move
        ◁──┐
           │

        ✕
```

Take Role

```
Player                                          Board

  |                                               |
  |------------- Request role ------------------->|
  |                                               |
  |<----------- Show available roles -------------|
  |                                               |
  +---------------------------------------------+ |
  | Alt                                         | |
  |  |---------- Take role ------------------->| |
  |  |                                         | |
  |  |<-------- Gives role ------------------- | |
  |  |                                         | |
  |- - - - - - - - - - - - - - - - - - - - - - -| |
  |  |                                         | |
  |  +--+                                      | |
  |  |  | Take role                            | |
  |  |<-+                                      | |
  +---------------------------------------------+ |
  |                                               |
  X                                               |
```

Act

Player | Board

Roll Dice

Alt
- Roll successful
- Progress scene
  - Alt
    - Is last shot
    - Roll for payout
    - Payout for rank and role
  - Is not last shot
- Roll unsuccessful

Increase Rank

Player → Board: Request rank

Board → Player: Available ranks

Alt

Player → Board: Select new rank

Board → Player: Gives higher role access

Board → Player: No available rank

End Day

Player ← → **Board**

Board → Player: One scene left

Board → Player: Day ends

Alt

Board → Player: Not last day

Player → Board: Resets board

Board → Player: Last day

Player → Board: Tallies score
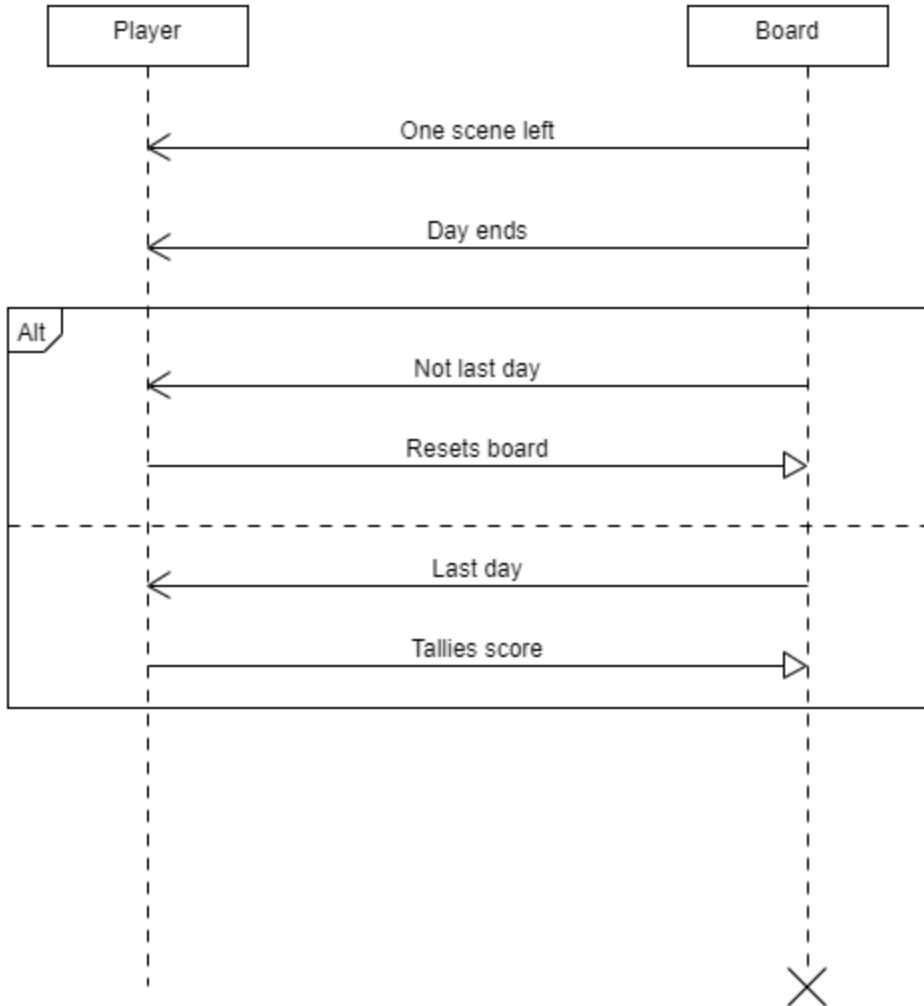
Increase Rank	
Rank up	Move
Allows player higher roles	Player

Player	
Keeps track of rank	End Day
Keeps track of score	Increase Rank
Completes scenes	Move
Keeps track of role	Act

End day	
Resets board for next day	Player
Ends game	

Move	
Select adjacent room	Take Role
Move to adjacent room	Increase Rank
Notify if room has been visited	

Take Role	
Select Role	Act
Gives ability to Act	

Act	
Progress scene	End Day
Payout to player	Player

EndDay

-playerCount : int
-dayLimit : int

-setDayLimit(playerCount) : dayLimit
-endGame(getDay) : int[]
-calculateScore(endgame) : int[]
+generateScene() : ArrayList<>

Board

-playerPosition : int[][]
-boardPosition : int[][]
-role : ArrayList[]
-scene : ArrayList<>
-day : int

+getDay() : day
+getScene(x,y) : scene
+getPlayerPosition(x,y): playerPosition
+getBoardPosition() : boardPosition
-changePlayerPosition(x,y) : (x,y)
+setScene(generateScene) : boardPos
+setPlayerPosition(Move) : (x,y)

Move

-adjacent : List<>

+calculateMove(x,y) : (x,y)[]
+verifyMove(x,y) : boolean

Player

-rank : int
-credit : int
-money : int
-role : string
#playerID: string

+getRank() : rank
+getCredit() : credit
+getMoney() : money
+getRole() : role
+getPlayerID : playerID
+move(x,y) : (x,y)
+setRank(int) : rank
+setMoney(payout) : money

Increase Rank

-canRank(playerID) : boolean
-changeRank(playerID) : getRank()

Act

-practiceChips : int

-roll() : int
+payout(roll) : int

Take Role

-verifyRole(getScene, String) : boolean
-setRole(boolean, playerID) : getRole()