**CECS 343:   
Mythinati Game**

**System Use Cases Document**

**Group A**

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# Document Revision History

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# Name: Draw Income

**Identifier**: UC1

**Description**: Collect income for each controlled card

**Precondition**: A user’s turn has started

**Postcondition**: the player will have currency added to each of their cards’ treasuries

**Actor(s)**: System, User

**Course of Action**:

1. User’s central group’s treasury increases by its income stat(See Alternate Course A)
2. The group’s child groups increase their treasury by their income stat
3. Repeat step 2 until all groups have increased their treasury once.
4. Notify User of the changes by displaying the total treasury increase
5. If User is Gnomes of Zurich, check precondition for {Win}

**Alternate Courses**:

* **Alternate Course A**: Market Manipulation

**Precondition**: The User has the Market Manipulation card

1a. The User is prompted with text asking if they would like to use their Market Manipulation Card and two buttons, one saying ‘yes’ and another saying ‘no’

2a. If no is clicked continue to instruction 2, else continue to instruction 2 but double all gains

# Name: Attack Action

**Identifier**: UC2  
**Description**: A group uses its Power and probably money to control, neutralize, or destroy another group. Illuminati cards can attack but cannot be attacked. (exception: UFO)

**Precondition**: Groups cannot have attacked once before this action.

**Postcondition**: The player will have attempted to either control, neutralize, or destroy another group.

**Actor(s)**: Current player, player that is affected by the attack

**Course of Action:**

1. Player decides which type of attack they would like to take. Then, they would choose to go for attack to control [Alternate Course A], attack to neutralize [Alternate Course B], attack to destroy [Alternate Course C], or take no action [UC14].

**Alternate Courses**: Attack to Control, Attack to Neutralize, Attack to Destroy, Take no action [UC14]

## Alternate Course A: Player decides to attack to control

**Precondition:** The attack can be made against any other group in play except another Illuminati or group that the player already has control of. The player that will attack must have at least one outward pointing arrow free. If a group has no open outward-pointing arrow, it cannot attempt to control another group.

**Exception:** Specific group of UFO are allowed to participate in two attacks per turn.

* Player will announce which group is attacking, being attacked, and the type of attack. (Example: “The KKK, assisted by the CIA, will attempt to control the Yuppies.”
* Player will roll two dice to determine the success of the attack.
  + The success of the attack is determined by the subtraction of the defending group’s resistance from the attacking group’s power.
  + If the player rolls the number calculated by the subtraction, the attack is successful.
* [Alternate Course A1: Automatic failure]   
  [Alternate Course A2: Aiding Attacks]   
  [Alternate Course A3: Power Structure Position]   
  [Alternate Course A4: Spending money to attack]   
  [Alternate Course A5: Spending Money to Defend]  
  [Alternate Course A6: Continued Spending]  
  [Alternate Course A7: Results of the attack]
* Use case ends.

### Alternate Course A1: Automatic Failure

* A roll of 11 or 12 results in automatic failure of the attack, no matter how much Power was involved.

### Alternate Course A2: Aiding Attacks **Players:** All Illuminati, some other groups

* If a group has 2 power numbers separated by a slash on their card, the second number is its transferable power.
* Any number of groups may aid one attack by adding transferable power together.
* When an attack is announced, all transferable power to be used in the attack must be announced before any money is spent to support the attack.
  + Transferable power added in the middle of the attack is deemed invalid.
* Alignment of the Group(s) transferring power does not matter.

### Alternate Course A3: Power Structure Position:

* If a group is already controlled by an opponent, the closer it is to the Illuminati who controls it, the more of a bonus it gets to Resistance / Power (if someone tries to destroy).
  + Adjacent to the Illuminati will give the group +10 resistant points.
  + One group away from the Illuminati will give the group +5 resistance points.
  + Two groups away from the Illuminati will give the group +2 resistance points.

### Alternate Course A4: Alignments

* If the other group contains identical alignments, for each identical alignment, each attack will have +4 points.
* If the other group contains opposite alignments, for each alignment, each attack will have -4 points.

### Alternate Course A5: Special Powers

* Certain groups may have different attack points to either attack or defend against opponents.

### Alternate Course A6: Spending Money to Attack

* Each MB spent by the group (goes to the bank) will add +1 to each attack.
  + This is done if the group announces their usage of aid before any money is spent.
* Attacking money is spent from either the attacking group’s treasury or from the Illuminati treasury. Other groups within the Power Structure at this time may not spend money to aid the attack.
* Once the roll has reached 10, additional spending will not improve attacking strength.

### Alternate Course A7: Spending Money to Defend

* If the defending group is controlled by another player, the defending group counters an attack by spending some of their own money.
* For each resistance, the attack will increase by 2 points for each MB spent from the defending group’s treasury. Other groups may not participate, and all money used in this exchange goes to the bank.

### Alternate Course A8: Continued Spending

* The attacker and defending continue spending money until they are no longer able or desire to.
* When spending ceases, a dice is rolled to determine how much damage was accumulated.
  + A roll of 11 or 12 determines an “automatic failure”.

### Alternate Course A8: Results of the Attack

* A roll of 11 or 12 was rolled via the dice.
* If successful (Attack to Control), the target group is captured and added to the attacking player’s Power Structure.
* The controlled group is now a puppet to the attacking group.
  + This group is now enabled to capture their own puppets.
* [Alternate Course A8\_1]
* [Alternate Course A8\_2]

#### Alternate Course A8\_1: Captured Group had puppets

* The puppets of the Captured Group are now captured as well.
  + These puppets will maintain their puppet relationship with the group and continue its previous roles.
  + Puppets of Captured Group may rearrange if there are conflicts.
* Puppets of the Captured Group that do not fit in the new structure are dropped and become uncontrolled.
* Half of the remaining money in the Captured Groups will go to the attacker (new master) and the remaining of that go into the bank.
* Captured group can choose or aid an attack or use its special ability if they choose to do so.

#### Alternate Course A8\_2: Attacking Group’s first action was an attack (and it fails)

* The Attacking Group’s may attack again as their second action.
* No individual groups may attack twice in a turn.
* Exception: UFO’s may attack two times in one turn.

## Alternate Course B: Player decides to attack to neutralize

**Pre-Condition:**

* Target must be a Group that is already controlled by another player.
* Attacker doesn’t need an open control arrow.

**Post Condition:**

* Players attack to neutralize their opponent.
* The attacker gains an additional +6 bonus.
* Successful attack means the target group and any subordinates are considered uncontrolled. All money of the target group and any subordinates are returned to the bank.

Actions:

* Actions are the same as [UC-2]

## Alternate Course C: Player decides to attack to destroy

**Pre-Condition:**

* No group can destroy a group that is already controlled by them.
* No group may attach itself or aid an attempt to destroy itself.
* A Group with no Power cannot be destroyed except for the Special card *Whispering Campaign.*
* A group doesn’t need an open control arrow in order to attempt destruction.

**Post Condition:** A group can attack to destroy a group.

**Actions:**

* Player will announce which group is attacking, being attacked, and the type of attack. (Example: “The KKK, assisted by the CIA, will attempt to control the Yuppies.”
* Player will roll two dice to determine the success of the attack.
  + The success of the attack is determined by the subtraction of the defending group’s power from the attacking group’s power.
  + If the player rolls the number calculated by the subtraction, the attack is successful.
  + [Alternate Course: C1 Groups with Different Philosophies]
* Attack will succeed and the target Group becomes “dead”. Subordinate groups become “uncontrolled”. They can be revived through the Special Card *Media Campaign.*

### Alternate Course C1: Groups with Different Philosophies

1. Groups with different philosophies destroy each other more easily
2. For each opposite alignment, there is a +4 bonus.
3. For each identical alignment, there is a -4 bonus.

# Name: Move a Group / Reorganize Power Structure

**Identifier:** UC3

**Description:** Players may use an action to reorganize their current Power Structure to occupy an outgoing control arrow. Outgoing control arrows allow Groups to connect with other groups, especially lower-powered groups such as Puppet groups. Depending on how powerful the desired Group card is, each Group card can display zero to four control arrows pointing outwards. Players can choose to reorganize their power structure in order to allow some of their more powerful Groups to gain resistance bonuses closer to the player’s Central Card. If their chosen Group Card is connected to any puppet cards below, all the puppet cards will move with the Group Card accordingly unless an overlapping situation occurs.

**Precondition:** It must currently be the player’s turn; power structure will currently have some vacant control arrows open outwards, regardless whether they are far or close to the Central Card. For Bermuda Triangle Only - Possess an ability to reorganize at the end of their turn.

**Postcondition:** Some Groups (and their puppets) will occupy a previously-vacant control arrow. Possible for Power Structure to have all control arrows occupied after reorganization.

**Actor(s):** Users, Groups / Cards formatted in Power Structure, Screen, System

**Course of Action:**

1. Choose Reorganize Power Structure under the Regular Actions list.
2. Choose a Group / Card to reorganize
3. Check if the Group possessed puppet cards
4. Check for any vacant control arrows within Power Structure
5. Move desired Group Card (and puppets if applicable) to desired vacant control arrow
6. Preview final structure for new reorganization before Finalizing Choice
7. Finalize reorganization and show affected (puppet) stats / notifications towards player

**Alternate Courses:**

## Alternate Course A: Bermuda Triangle Precondition

1a. If Player possesses the Bermuda Triangle as their Central Card, the player can start the process of reorganizing their power structure at the end of their turn.

## Alternate Course B: Changing Decision to Move a Group

1a. If the player realizes that they do not want to move a group during their turn, they can press the back button until they return to the Actions Page / Lists during their turn.

## Alternate Course C: Moving Uncontrolled Group into Power Structure

2a. Player does not only need to choose a card within their Power Structure; player can move a card from the uncontrolled Groups towards their own Power Structure.

2b. If Player confirms their choice towards an uncontrolled Group, the Course of Action presumes at Step Four.

## Alternate Course D: Moving Received Transferred Group into Power Structure

2a. In addition to Uncontrolled Group(s), received groups from other players can be moved into their own Power Structure.

2b. If Player confirms their choice towards a transferred Group, the Course of Action presumes at Step Four.

## Alternate Course E: Filled Power Structure

4a. If Player finds all the control arrows in their power structure occupied, they can choose a different action to commit before they can decide to Drop a Group for their free action.

## Alternate Course F: Puppet Card (Kept) (Describe where they branch off)

5a. Puppet cards that are associated with Master / Desired Group Card for reorganizing

5b. With preview of final structure, puppet cards occupy other control arrows if they can still be in control under their Master Group

5c. Finalized choice leads to puppet cards also reorganized into new structure design

## Alternate Course G: Puppet Card (Lost)

5a. Puppet cards that are associated with Master / Desired Group Card for reorganizing

5b. With preview of final structure, puppet cards will have a visual display representing possible deletion / loss from the current power structure on screen

5c. Finalized choice leads to both puppet card(s) and its associated Master card (the Group card that controls the puppets) removed & lost from player’s power structure; notifies player of any other losses from removed puppet card(s)

# Name: Installation Process

**Identifier:** UC4

**Description:** A user installs Mythinati so that they can play the game

**Precondition:** The game is hosted as a .zip file on an online storefront such as Itch.io

**Postcondition:** The game is installed on the User’s computer (Satisfying preconditions for UC5)

**Actor(s):** User

**Course of Action:**

1. User downloads .zip file from online storefront
2. User extracts from .zip file to some location on their computer
3. Game is now playable from the .exe extracted from the .zip file

# Name: Run Program

**Identifier:** UC5

**Precondition:** the game has been installed on the User’s computer (see UC4)

**Postcondition:** The game window has opened and the User can now play the game

**Actor(s):** User

**Course of Action:**

1. User runs the .exe file they installed (via double-clicking, command console, or some other method)
2. The User is prompted via Unity for their desired resolution, graphics settings, and whether they’d like the game to be fullscreen.
3. If the User presses ok, the game window opens with their resolution, graphics settings and fullscreen choice (otherwise, end use case)
4. Game displays opening Unity cutscene
5. Game displays main menu

# Name: Host Lobby

**Identifier:** UC6

**Description:** A user can host a multiplayer lobby allowing other players to join before starting a game of Mythinati.

**Precondition:** the user is on the main menu

**Postcondition:** the user will be hosting a multiplayer lobby

**Actor(s):** User, System

**Course of Action**

1. User clicks Host Game button on main menu
2. User is prompted for a username
3. User is prompted for max number of players (minimum 4, maximum 6)
4. User is prompted for room name
5. System uses above information to establish a Photon Room
6. User’s screen shows a list of players in the lobby, and a button to leave the room or start the game.

# Name: Join Lobby

**Identifier:** UC7

**Description:** A user can join a lobby

**Description:** A use can enter a multiplayer lobby being hosted

**Precondition:** the user is on the main menu and one or more lobbies are being hosted

**Postcondition:** the user will be connected to a lobby

**Actor(s):** User

**Course of Action**

1. User clicks Join Game button on main menu
2. A list of all open lobbies is displayed, showing name, number of players, and max number of players
3. User selects one of the lobbies
4. User is prompted for a username to display in the lobby
5. User’s computer is connected to one of the lobbies

# Name: Start Game

**Identifier:** UC8

**Description:** a user starts a new game of Mythinati with their hosted lobby

**Precondition:** A user is hosting a lobby that has at least 4 total players connected to it

**Postcondition:** the first player’s turn beings

**Actor(s):** User, System

1. The main game board is set up on each player’s screen
2. Generate a random seed and share it between all players
3. Shuffle Central Card deck (See UC15)
4. Draw a Central Card, assign it to a player and place it face up in front of them
5. Repeat step 4 for each player in the game
6. {draw initial central cards}
7. Shuffle General Card deck (See UC15)
8. Draw a card from the general deck and place it face up on the game’s board
9. If the card is a Special card, discard it and repeat step 6
10. Repeat steps 6-7 until 4 general cards are face up on the board
11. {roll for first turn}

# Name: Shuffle Deck

**Identifier:** UC9

**Description:** Randomizes the order of cards in a deck.

**Precondition:** The game is starting, or the deck is out of cards

**Postcondition:** The cards within the deck are in a random order

**Actor(s):** System, Specific deck of cards

**Course of Action:**

1. Check if deck is empty (see Alternate A)
2. Create temporary list
3. Until deck is empty add random cards to temporary list and remove them from the deck
4. Assign the temporary list to the deck

**Alternative Courses:**

## Alternate Course A

1a. Get list of cards for this deck from the system

2a. Remove any card that is currently held in a player’s hand, controlled by a player, or revealed to the players

3a. Return to step 2

# Name: Dropping Groups

**Identifier:** UC10

**Description:** One of the three free actions, or actions that do not officially count as one regular “action,” can be done during a player’s turn. For Dropping Groups, players can remove a group from their Power Structure. As a free action, this can be done before, between, or after a player’s two regular actions.

**Precondition:** It must currently be the player’s turn & the player’s cards are organized in the Power Structure.

**Postcondition:** Dropped group(s) return to the uncontrolled area, or the cards collected towards the center of the players’ screen. To differentiate from the card deck itself, dropped groups / cards are revealed towards all players.

**Actor(s):** Users, Groups / Cards formatted in Power Structure, Screen, System

**Course of Action:**

1. Users choose the option to Drop Group under the Free Actions list.
2. Choose a Group / Card to drop.
3. Check if the Group possessed puppet cards.
4. Preview final structure to user before finalizing drop.
5. Finalize dropped group(s) and show affected (puppet) stats / notifications towards player

**Alternate Courses:**

## Alternate Course A: Dropping Puppet Cards

3a. The game’s system detects that there are puppet cards associated with the desired Group card to drop.

3b. With preview of final structure, puppet cards will have a visual display representing possible deletion / loss from the current power structure on screen

3c. Finalized choice leads to both Group card and its puppet card(s) removed from player’s power structure; all affected cards return towards the center of the screen with other uncontrollable Groups & notifies player of any other losses from removed puppet card(s)

## Alternate Course B: Dropping Destroyed Cards

2a. Players can also choose Groups that have been destroyed & defeated due to other player’s attacks (if their intent was to attack in order to destroy the group).

2b. Check if the destroyed Group possessed any puppet cards.

2c. With preview of final structure, puppet cards will be displayed towards the center of the players with the rest of the uncontrolled groups. Regarding the chosen Group card itself, the desired dropped card will be placed at a separate deck away from the players where all the destroyed cards are collected.

2d. Finalized choice leads to both Group card and its puppet cards removed from the player's power structure; affected cards will go according to the previous step, and the system will notify the player of any other losses removed from that decision.

## Alternate Course C: Changing Decision to Drop Group

2a. This can occur as early as step two, or as late as step four, during action. If the player realizes that they do not want to drop one of their Group cards from their power structure, they can press the back button until they return to the Actions Page / Lists during their turn.

# Name: Draw a General Card

**Identifier:** UC11

**Description:** This is the second step in every player’s turn, after collecting income and before taking two official “actions.” Simply put, the player will “draw” a card from the card deck generated by the game’s system / application.

**Precondition:** It must currently be the player’s turn & the player should have already collected their income.

**Postcondition:** Depending on the card itself, the drawn card is either placed at the “center” of the other players (with the uncontrolled groups / unclaimed cards) or placed close to the player. Afterwards, the current player can proceed to their two official “actions” during their turn.

**Actor(s):** Users, Screen, Card Deck, System

**Course of Action:**

1. After collecting their income at the beginning of their turn, players can either click on the deck of cards or a button that prompts the system to “draw” a card for the player.
2. The drawn card is revealed to the player first, displaying whether the card is a Group card or a Special card.
3. If it is a Group card, then the card will be revealed to the rest of the users and placed in the center of all the players with the other uncontrolled Groups.
4. If it is a Special card, the system prompts the player to decide between placing his Special card face-up (displaying its value to themselves & other players) or face-down (displaying its value only to themselves).
5. After the previous step for the Special card case, the special card will be placed in front of the player & all other players will be notified that the current player possesses a new special card. If the player already owns another Special card, they will be spread in front of the player for the rest of the players to see on screen.

# Name: Give Away Special Card / Money

**Identifier:** UC12

**Description:** One of the three free actions, or actions that do not officially count as one regular “action,” can be done during a player’s turn. As a free action, this can be done before, between, or after a player’s two regular actions. For this specific free action, players can either give away their special card or a certain amount of money to another player involved in the game.

**Precondition:** It must currently be the player’s turn & the play must have either some form of income, special cards, or both during the game.

**Postcondition:** Depending on what the player chooses to give away, the user will lose either a special card or a specific amount of money. On the other hand, the player who will receive these items will either earn a special card or a specific amount of money.

**Actor(s):** Users, Screen, (collection of) Special card(s), In-game Currency, System

**Course of Action:**

1. Users choose the option to Give Away under the Free Actions list.
2. Users choose which another player to give to.
3. Users choose between giving away a Special card or Money.
4. If the current user chooses the Special card option, they can choose only one special card (from their own collection) at a time to give away to another player.
5. Continuing from the Special card option, once the current user confirms the Special card, the screen will display the Special card disappearing from the current player while reappearing towards the given player.
6. If the current user chooses the Money option, they can enter a specific amount of money that does not exceed the user’s current amount.
7. Continuing from the Money option, once the current user confirms the amount given away, the money will only be transferred between the Godly Treasuries when the money is given to another player.

**Alternate Courses:**

## Alternate Course A: Changing Player to Give

2a. If the player realizes that they do not want to give their special card or money to the other chosen player, they can press the back button to return to the option prompt of choosing another player in the game.

## Alternate Course B: Changing Item to Give

3a. If the player realizes that they do not want to give money to another player (or vice versa), they can press the back button to return to the option prompt of choosing between giving away a Special card or money.

## Alternate Course C: Changing Decision to Give Away

1a. If the player realizes that they do not want to give away anything during their turn, they can press the back button until they return to the Actions Page / Lists during their turn.

# Name: Use Special Card

**Identifier:** UC13

**Description:** Special cards are cards within the game’s general deck that provides an advantage to the player who draws it during a game. The player can choose to show or place these cards face-down, but all of a player’s Special cards must be spread out so that other players can observe the current amount. Unless stated otherwise by the desired Special Card, using a Special Card is categorized as a free action.

**Precondition:** The desired Special card must currently be in the ownership of the current player. In addition, players must make sure that the desired card satisfies its restrictions accordingly, such as the timing of its usage, the status of a regular action, and more.

**Postcondition:** Depending on what advantage the Special card provides to the player as well as how the Special card has been used, affected players, group cards, and/or other elements of the game will be notified and updated to all players. In addition, after the Special card has been used, it is disregarded for the rest of the game.

**Actor(s):** Users, Special Cards, Screen, System

**Course of Action:**

1. Users are prompted to choose a Special card out of their Special card spread. Note: Each player’s collection of Special cards are all spread out for other players to see on screen.
2. Users check if all restrictions of the desired Special card have been satisfied, as well as whether the Special card is labeled as a regular action and plans to use the card accordingly. (see UC28)
3. User confirms choice of using Special card after disclaimer of satisfying restrictions and future changes to their game.
4. The Special card is used during the current player’s round.
5. Depending on the card and the timing of its usage, changes will be updated and notified to all players on screen.
6. The Special card is discarded and never used for the rest of the game.

**Alternate Courses:**

## Alternate Course A: Discarding a Special Cards to Make a Privileged Attack

1a. Instead of choosing one single card to use, Users are prompted for another option to discard the current Special card in order to improve their attack into a privileged attack.

1b. After confirming the Discard option, Users can select a single number of Special cards to be discarded.

1c. Once the user confirms the correct amount, the Course of Action will resume on Step Five.

## Alternate Course B: Discarding Two Special Cards to Abolish Another Player’s Privilege

1a. Instead of choosing one single card to use, Users are prompted for another option to discard Special cards in order to abolish their opponent’s privilege.

1b. After confirming the Discard option, Users can select two Special Cards from their spread to discard.

1c. Once the user confirms the correct amount & the correct Special cards, the Course of Action will resume on Step Five.

## Alternate Course C: Discarding Multiple Special Cards to Continue Abolish from *Secrets Man Was Not Meant to Know*

6a. This alternate course begins after the player follows Alternate Course B to abolish another player’s privilege. If the privileged player uses Secrets Man Was Not Meant to Know, the game briefly pauses and prompts the current player to decide to replace one of the lost cards to continue the abolishment or not.

6b. If the player decides not to replace the lost card to continue the abolishment, the player can choose the “no” option and continue disregarding two Special cards in total without abolishing the other player’s privilege.

6c. If the player decides to replace the lost card, the current player similarly repeats the Course of Action from Step One and continues until Step Three to choose one more Special card to discard.

6d. After confirming their choice from Step Three, the Course of Action continues onto Step Five, notifying all players about the continuation of the abolishment, as well as finishing the alternate course with Step Six where all the three chosen Special cards are finally discarded

## Alternate Course D: Changing Decision to Use Special Card

1a. If the player realizes that they do not want to use or discard their Special card(s), they can press the back button until they return to the Actions Page / Lists during their turn.

## Alternate Course E: Changing Desired Special Card

3a. If the player decides to change their desired Special card(s), they can press the back button until they return to Step One from the Course of Action, where the spread of Special cards is displayed to the current player.

# Name: Pass

**Identifier:** UC14

**Description:** During a player’s turn, the current user can choose not to take any of the regular or free actions and collect 5 mythical currencies instead.

**Precondition:** It must currently be the player’s turn.

**Postcondition:** Nothing but the player’s treasury is affected. Simply put, the player receives 5 (mythical game currency) before they can continue their turn to transfer money.

**Actor(s):** Users, Screen, In-game Currency, System

**Course of Action:**

1. Users choose the option to Pass during their turn. This option is displayed separately from the Regular and Free Actions lists.
2. System prompts a screen message towards the current player, confirming that they would like to continue through their decision to pass. In addition, the system will provide a disclaimer message that free actions cannot be done during the player’s turn once the pass has been confirmed.
3. Once the user confirms their decision after the disclaimer, the current player will transition into the next phase of their turn - transferring money.

**Alternate Courses:**

## Alternate Course A: Changing Decision to Pass

2a. If the player realizes that they do not want to pass, they can press the back button to return to the Actions Page / Lists during their turn.

# Name: Roll Dice

**Identifier:** UC15

**Description:** generates a random number simulating rolling 2 six-sided dice

**Precondition:** an action needs resolution via dice rolls (such as an attack)

**Postcondition:** the number rolled will be returned to the triggering action

**Actor(s):** System

**Course of Action:**

1. Prompt players with Assassination or Murphy’s Law cards (See Alternate A and B)
2. Generate a number between 1 and 6
3. Generate a second number between 1 and 6
4. Add the numbers together
5. Return the results

**Alternate Courses:**

## Alternate Course A: Assassination

1a. Return the result of 2

## Alternate Course B: Murphy’s Law

1b. Return the result of 12

# Name: Eliminate Player

**Identifier:** UC16

**Description:** Removes a player from the game when they no longer control any groups after their third turn

**Precondition:** It is after the third turn of the game, a player no longer controls any groups except for their central group, that player has not just completed the Destroy Groups win condition by destroying their last group

**Postcondition:** The player is removed from the game

**Actor(s):** System

**Course of Action:**

1. The player’s cards are deleted
2. Player is removed from turn order
3. Player receives a prompt informing them that they have been eliminated and providing a prompt to go back to the main menu
4. Upon clicking ‘return to main menu’ button the player is returned to the main menu
5. Player is removed from all game synchronization so that the rest of the game continues unhindered

# Name: Add Targets (End Turn & Draw Cards)

**Identifier:** UC17

**Description:** At the end of each player’s turn, all members observe the current amount of minor gods and mythical creatures in the uncontrolled area. If the current amount of cards in the uncontrolled area has fewer than two, the current player continues to draw more cards until there are two uncontrolled (or unclaimed cards of) minor gods, mythical creatures, or both. For any drawn Special cards during the end of each player’s turn, the Special card is discarded.

**Precondition:** It must currently be the player’s turn, and they must have already taken any special-power actions prior to this case. In addition, there must still be enough cards in the card deck (generated by the game’s system / application) in order to add more targets to the uncontrolled area.

**Postcondition:** There must be at least two cards displayed at the center of each person’s screen, where the uncontrolled minor gods and mythical creatures are kept. In addition, the current player’s turn officially ends, and the game progresses onto the next player counterclockwise in order to begin the next user’s upcoming turn.

**Actor(s):** Users, Screen, Card Deck, System

**Course of Action:**

1. The game’s system counts the current number of cards inside the uncontrolled area.
2. The game’s system checks if the current amount is less than two.
3. If the current amount is less than two, the current player is prompted to press a button that prompts the system to “draw” a card for the player.
4. Any group cards (cards that represent minor gods or other mythical beings) drawn will be sent to the uncontrolled area, and the system will update the current amount by one.
5. The system prompts the player to continue drawing target cards for the uncontrolled area and repeats Step Two to Four until the current amount reaches two.
6. Once the current amount reaches two, the system completes the player’s turn by displaying the current uncontrolled cards to all the players at the center of the screen.
7. The current player’s turn ends, and then the player towards the counterclockwise direction begins their turn.

**Alternate Courses:**

## Alternate Course A: Exceeding Two Uncontrolled Cards during Check

2a. If the current amount is two or more group cards inside the uncontrolled area, then the Course of Action will skip the rest of the steps and resume on Step Seven.

## Alternate Course B: Drawing a Special Card

4a. If the drawn card is a Special card, the system automatically discards the card and leaves the current number of cards in the uncontrolled area unchanged. Because the Special card is discarded, it will never be used for the rest of the game.

# Name: Gifts & Trades

**Identifier:** UC18

**Description:** While giving away a special card or a specific amount of money is categorized as a free action, gifting special cards, group cards, or money to another player does not count as any specific action. Because of this exception, gifting and trading cards or money can be done anytime during a game session unless a privileged attack is progressing in-game. When the current player specifically gifts cash, it must originate from a Major God card and transfer onto another one. Due to this condition, group cards such as Minor Gods and mythical creatures cannot give money to another player or receive money from another player.

**Precondition:** Because gifting cards or money is neither a regular or free action, the player can decide any time, except when a privileged attack is in progress, during the game session to give a Special card or a certain amount of money to another player. In addition, the giving-player must possess the Special card or specific amount of currency before proceeding further to prepare the gift. Regarding money gifts, the giving-player must be prepared to give through a Major God card.

**Postcondition:** The giving-player loses the Special card or a certain amount of money while the receiving-player earns the gift. All changes will be updated to only involved players of the transferred gift.

**Actor(s):** Users, Special card spread, Money currency, Screen, System

**Course of Action:**

1. Regardless of whether it is a player’s turn or not, all users during the game’s session will be presented with a visual button that functions as a gift-giving option on each player’s screen.
2. The user chooses the gift-giving option.
3. The user chooses between gifting a Special card or Money and confirms their decision.
4. The user chooses which player they will transfer their gift to and confirms their decision.
5. Depending on the gift item, the system will remove the gift item from their possession and will be notified about these changes once the gift has been transferred. Because of this, giving a gift to another player is treated as giving away a game item.
6. Another player during the game session will receive a notification that they have received a gift from a different user.
7. The other player will click on the gift icon to open the received game item.
8. Depending on the game item, the system will add the gift item into the other player’s possession, and they will be notified about these changes once the gift has been opened.

**Alternate Courses:**

## Alternate Course A: Changing Decision to Gift

2a. If the player realizes that they do not want to prepare a Special card or Money as a gift for another player, they can press the x-icon on the top right corner of the gift window until they return to the game session’s default screen.

## Alternate Course B: Privileged Attack in Progress

2a. If a Privileged Attack is in progress, the gift-giving option will be greyed out and unavailable to the player.

2b. In addition, if the user’s mouse hovers over the greyed-out option, the System will display a message on screen that due to a Privileged Attack in progress, giving gifts will be unavailable now.

## Alternate Course C: Choosing to Gift a Special Card

3a. If the user chooses the Special card option, the user’s screen will transition towards their Special card spread where they can choose a Special card to prepare as a gift.

3b. The system prompts the user to confirm their decision regarding which Special card they would like to prepare as a gift. If the user changes their mind, they can press the back button to return to the Special card spread screen and choose a different card.

3c. After confirming the desired Special card, the Course of Action resumes on Step 4.

## Alternate Course D: Choosing to Gift Money

3a. If the user chooses the Money option, the user’s screen will display the current amount of currency in the game session.

3b. First, the system checks if there is a Major God card that can be used to transfer Money as a gift onto another player. If the system does not detect a Major God card that can be used for this purpose, then the system displays a disclaimer message to the player’s screen regarding how they cannot give Money to another player due to this restriction.

3c. Otherwise, if the system detects a possible Major God card(s) that can be used during the gift-process, then the system prompts the user to enter an amount of Money to prepare as a gift. It is important to remember that the entered amount cannot exceed the current amount that the player possessed.

3c. The system prompts the user to confirm their decision regarding the amount of money they will give away in order to prepare a gift. If the user changes their mind regarding the current amount, they can press the back button to return to their currency window and enter a different amount.

3d. After confirming the amount of money, they will give away for preparing a gift, the Course of Action resumes on Step 4.

## Alternate Course E: Changing Decision regarding Gift Item

3a. If the player realizes that they wanted to prepare a different game item for their gift, such as switching from a Special card gift to a Money gift, they can press the back button to return to the gift-giving window in order to select the desired game item to gift.

## Alternate Course F: Gifts for Trading

5a. If the gift is a Special card & the gift is involved in a trade between two players, instead of receiving nothing from giving a gift, the original user will be notified of a Special card gift that was sent from the involved trading player.

5b. In other words, both players will experience Steps Five through Seven from the Course of Action simultaneously if they trade a Special card to each other.

## Alternate Course G: Gifts for Selling

5a. If the gift is a Special card & the gift is being traded for money, instead of receiving nothing from giving a gift, the original user will be notified of a Money gift that was sent from the involved trading player.

5b. In other words, both players will experience Steps Five through Seven from the Course of Action simultaneously if one of them sold a Special card for money.

# Name: Starting a Game (Session)

**Identifier:** UC19

**Description:** The user begins their participation in the program, Mythinati.

**Precondition:** The user must have Mythinati installed on their computer [UC4] and have a working computer, monitor, keyboard, and mouse. Ther user must also run the game [UC5].

**Postcondition:** The user begins playing the game.

**Actor(s):** The players who want to play Mythinati.

**Course of Action:**

1. Fulfill [UC4 & UC5].
2. The user will click on “Join Game Session” and a generated ID will show up for the user to join other players who are waiting for a game to start.

## Alternate Course: User Decides to Quit the Game

* + **1.** Should the user decide that they would rather not play, they can click on “Exit Game” to close the program.

# Name: Transfer Money

**Identifier:** UC20

**Description:** The player can transfer money to either its master or its puppet. The player can make up to two money transfers during their turn, however they can also make a transfer as a regular action. If the transfer is successful, money may be able to move two or more groups in one turn.

**Precondition:** Prior actions of a “sequence of play” must be considered or completed before approaching this step. Such prior actions include collecting income [UC1], drawing a card [UC11] and using it or using a special card [UC13].

**Postcondition:** The user will have transferred money to either a master or puppet and may or may not have transferred through multiple groups in one turn.

**Actor(s):** The current player, the player’s master / puppets, system

**Course of Action:**

1. Player decides where they would like to transfer its money to - either their master or their puppet.
2. Player makes up to two money transfers.
3. If a player chooses, they can repeat steps 1 and 2 for two more groups until they decide not to.

# Name: Transfer Groups

**Identifier:** UC21

**Description:** Transferring Group cards, such as a Minor God or Mythical creature card, covers a range of free and regular actions after the current player draws a card during their turn. For example, giving away a Group card is considered a group transfer, as well as selling or trading group cards away to other players. Despite how it covers a range of actions in the game, transferring Group cards out of / into the current player’s power structure is treated as a regular action, and transferring Group cards to another player will only be possible if the receiving player gives their consent.

Regarding the receiving player, the use case for Moving a Group Card will apply as the other player transfers their new Group card(s) into their power structure.

**Precondition:** For the user to transfer Group cards, it must currently be their turn during the game session, and they must have already drawn a card during their turn. In addition, they must already have the Group cards (and their puppet cards) within their Power Structure, and the receiving player must have already given their consent to receive and transfer the user’s cards onto their own Power Structure.

**Postcondition:** The user will lose the Group card(s), as well as their puppet cards, from their Power Structure, while the receiving player gains new Group and puppet cards onto their own structure. Depending on how the receiving player manages to move the new cards into their structure, the receiving player either keeps all of their new and current Group cards, loses some of their previous Group cards, or loses some of their newly received Group cards into the uncontrolled area. In addition, depending on how much the current player transfers cards, each transfer is treated as a regular action and the system will update accordingly throughout the turn.

**Actor(s):** Users, Groups / Cards formatted in Power Structure, Screen, System

**Course of Action:**

1. Depending on what the current player does regarding any transfer of Group cards, such as trading for another Group card or giving a Group card away, the system will first display a disclaimer message on the user’s screen. This message will ask if the user will commit to the transfer, as well as explain how transferring a Group card will be treated as a regular action.
2. Once the player confirms the disclaimer message, any Group card(s) that are involved in the transfer will be removed from the Power Structure by the game’s system first. Then the system will count the transfer as a regular action, and then finally update the player regarding their recent transfer action.
3. Depending on what free or regular action the user has done with their Group cards, the Course of Action will resume towards latter steps for those Use Cases.

**Alternate Courses:**

## Alternate Course A: Changing Decision to Transfer

1a. If the player realizes that they do not want to transfer their Group cards, they can press the cancel button to return to the Actions Page / Lists during their turn.

1b. It is important to note how the cancellation stops any free or regular action that involves transferring groups such as trades or giving Group cards away to other players. Because of this, the recent actions will not be completed or counted according to their type, and the player is prompted to choose again from the Actions Page / Lists.

## Alternate Course B: Receiving Player Declines Transfer

1a. Regardless of the free or regular action that involves transferring Group cards, if the receiving player does not give their permission to receive the Group cards, first the system will display a message to the current user regarding how the current action cannot be continued due to the receiving player’s decline.

1b. After exiting from the message by pressing on the circular X-Icon on the top right of the message’s window, the current player will return back to the Actions Page / Lists.

# Name: Winning the Game

**Identifier:** UC22

**Description:** In order to win a game session, a player must have met one of their goals by the end of a turn. For the Base Game Version of Mythinati, players need only meet their Basic Goal in order to win. The Basic Goal of the game is the same for all players in a game session: Players need to control a certain number of Groups in order to win. The amount of Groups to control depends on the amount of users playing in a single session, and regardless of another player leaving or becoming eliminated from the game, the amount of Groups that needs to be controlled remains the same throughout the game.

**Precondition:** Assuming that this Use Case will be in effect near the end of a game session, the number of Groups that needs to be controlled is already calculated by the System at the beginning of the session. Similarly mentioned in the description, this required amount depends on the number of users present at the beginning of the session. Near the end of a game session, at least one player must control a close amount of Group cards needed to satisfy the Basic Goal. In addition, at least one player must complete the Basic Goal by the end of a turn in order to be recognized as a winner.

**Postcondition:** An announcement window will display the current winner(s) of the game session. For the winner(s), an alternate window displays a congratulating message for winning the game. Regardless of which announcement window it is, all players will have two button options: one button to play another session immediately, and another button to return to the Main Menu.

**Actor(s):** Users, Group Cards in Power Structure, Screen, System

**Course of Action:**

1. Similarly mentioned in the Precondition and Description Sections, the necessary number of Groups cards for the Basic Goal is calculated at the beginning of the game session. This calculated amount depends on the amount of players present at the beginning of the game, and the calculated amount remains the same despite future dropouts or eliminations of players.
2. Throughout the game session, the game’s system calculates the total amount of Groups cards in each player’s possession / control at the end of each turn.
3. Depending on the updated changes that each player commits / experiences during a session, the system continues to count the amount of Group cards each player controls until, at least, one player meets the total amount of Group cards needed for the Basic Goal.
4. Once a player meets the Basic Goal, the system updates their status from players to winners.
5. Once a turn is finished, the system generates an announcement window to all the players in the session. This announcement window shares the winner(s) of the game, in addition to two options for the players at the end of the game.

**Alternate Courses:**

## Alternate Course A: Multiple Winners

3a. For the Base Game Version of Mythinati, the game’s system is able to accommodate a session that results in multiple winners.

4a. In other words, if two or more players meet the total amount of Group cards needed for the Basic Goal, the system updates their status from players to winners.

4b. The system continues to follow the Course of Action from Step Five, where it displays & congratulates the multiple players who won.

## Alternate Course B: Winning by Satisfying Special Goal

1a. For future updates and versions of Mythinati, the game’s system will be capable of determining winners based on the completion of their Special Goal. Each Central God card possesses a unique goal that differs from other Central cards. These goals relate to certain details of the game, such as controlling at least one Group card of each Mythology or destroying eight Minor God / Mythical Creature cards within the game’s session.

1b. In the beginning of the game session, the system will reveal the Special Goal to each player according to their Central God card.

1c. Once each player understands their Special Goal, players will begin determining the player order together, and the system will resume on Step Two of the Course of Action.

## Alternate Course C: Winning by Satisfying Hidden Goal

1a. For future updates and versions of Mythinati, the game’s system will also be capable of determining a winner based on the completion of a player’s Hidden Goal. While each Central God card possesses a unique goal, one of the Central God cards allows them to choose a goal from the list of Hidden Goals.

1b. In other words, this Central God card allows its owner to choose a Hidden Goal that will benefit them in the game session, called a Hidden Goal. This selection will occur at the beginning of the game session.

1c. Once the player confirms their selection and understands their Hidden Goal, all players will begin determining the player order together, and the system will resume on Step Two of the Course of Action.

# Name: Starting a Turn (Collect Income)

**Identifier:** UC23

**Description:** Starting a turn covers a collection of actions that transfers the player order from the previous player onto the upcoming player. After taking Special-power actions and adding targets onto the uncontrolled area from the previous player’s turn, the Use Case of Assigning Player Order will be implemented as the system transitions from the previous user onto the upcoming user. Finally, the system prompts the upcoming user to collect their income in order to officially start their turn.

**Precondition:** The previous player must already have finished the last stages of their turn, which includes taking Special-powered actions as well as adding targets. In addition, the Use Case of Assigning Player Order must be established in the game’s system.

**Postcondition:** The turn transitions into the upcoming player, and the upcoming player begins their turn by collecting the income from their Group cards.

**Actor(s):** Users, UC25 (Assigning Player Order), Group Cards, System, Screen

**Course of Action:**

1. Once the last stages of the previous player’s turn have been completed, Use Case 25 is implemented to determine the upcoming turn for the next player.
2. The system transfers the status of the current player from the previous user onto the next determined user based on the Player Order.
3. Once the transferred status has been established onto the new user, the system automatically calculates the total amount of income from any Group cards that receive income.
4. After calculations, the system takes the necessary amount of currency from the system’s bank and then transfers the necessary amount onto the new user’s Group treasury. Group treasuries refer to any Group cards that earn income, and any income received will be visually displayed on top of the Group card on screen. This is also to ensure that Money is placed on the Group cards when the new user begins their turn.
5. After collecting income, the system prompts users the options of stacking or spreading their Money towards the rest of the players.
6. After confirming their selection, the Money will be displayed in the desired matter on each player’s screen and the player is then prompted to follow Use Case 11 to draw a card.

**Alternate Courses:**

## Alternate Course A: Non-Existent Group Treasuries

3a. If there are no Group cards that receive income, the Course of Action resumes onto Step Six from the Course of Action and the new user continues their turn.

## Alternate Course B: The Investigative Oracle (Senate Investigating Committee)

3a. The Investigative Oracle Special card is a card that can be used by a player to force the next player to skip their turn. Because this is a special card, this card can be used by any player during any time of the game.

3b. However, for the Investigative Oracle card to work, the Special card needs to be played any time before Step Four in the Course of Action. 3c. If the Investigative Oracle card works, first the system announces to all the players on screen that the card has been played for the new user. Then, the system abruptly stops the current Use Case and implements Use Case 25 once more in order to force the new user to skip their turn.

# Name: Selecting a Hidden Goal

**Identifier:** UC24

**Description:** Out of the many Central God cards provided in Mythinati, there will be only one Central card that allows a player to choose a Hidden Goal. A Hidden Goal is essentially any goal chosen from the Special Goals list, however the rest of the players (who do not possess this Central card) do not know which Special Goal is the Hidden Goal during their game session.

**Precondition:** After drawing the Central cards during the beginning of the game’s session, at least one player must possess this Central card. During this time, other players will be presented their Special Goal while the system calculates the amount for the Basic Goal.

**Postcondition:** After choosing a Hidden Goal (if the player understands the Special goal, they chose for themselves), the system prompts the user to confirm if they are ready. Once all players are ready, the system begins shuffling the cards in the deck in order to establish the first four uncontrolled Groups at the beginning of the game session.

**Actor(s):** Users, One of the Central Cards, System, Screen

**Course of Action:**

1. After revealing the chosen Central card to the player, if this Central card grants the player to establish a Hidden Goal, first the system displays the list of Special Goals onto the player’s screen.
2. From the Special Goals list, the system prompts the user to choose a Special Goal as their Hidden Goal.
3. After selecting a Special Goal from the list, the system prompts the user to confirm their decision.
4. After the user confirms their decision, the system waits for the rest of the players to confirm their understanding of their own Special Goal before it begins shuffling the card deck.

**Alternate Courses:**

## Alternate Course A: Changing Decision of Hidden Goal

3a. If the player realizes that they do not want to confirm their current hidden goal, they can press the back button to return to the list of Special Goals in order to select a different Hidden Goal.

# Name: Assigning Player Order

**Identifier:** UC25

**Description:** In order to determine which player’s turn is next during a game session, the game’s system determines and assigns the player order at the beginning of the game. To determine player order, the system prompts each player to roll two dice. Then, the player with the highest amount from the roll plays their turn first. After completing the first player’s turn, the system continues the player order in a counterclockwise direction until a winner emerges.

**Precondition:** It must be the beginning of the game’s session. Specifically, each player must already have their Central God card as well as both their Basic and Special (or Hidden) Goal, as well as the system must have generated the first four Group cards in the uncontrolled area.

**Postcondition:** The system determines the first player of the game. Afterwards, based on the first player’s position, the system continues the player order in a counterclockwise direction.

**Actor(s):** Users, Dice, Screen, System

**Course of Action:**

1. First the system presents each player with two dice. This can be represented as two dice visuals on each player’s screen.
2. The system prompts each player to roll both dices. This can be accomplished with a button that generates the numbers (within the dice amount) for the roll.
3. The system displays the total amount of value in their roll by adding the values from the two dice together. For each player, these total roll amounts are not displayed to the rest of the players.
4. The system compares each players’ total roll values in order to find the highest roll.
5. Once the system finds the highest roll, the system displays an announcement to all players that one of the players (the one with the highest roll) will go first.
6. Regarding the first player’s turn, reference the Use Cases for Starting a Turn as well as other relevant Use Cases for each turn.
7. After the first player adds targets to the uncontrolled area (if needed), the system goes in a counterclockwise direction to begin the next player’s turn. This can be accomplished in a FILO order when the system reads the player from right to left in an array.

# Name: Slush Fund/Swiss Bank Account

**Identifier:** UC26

**Description:** The player uses the Slush Fund or Swiss Bank Account special card and has either 15 or 25 currency respectively added to their central card’s treasury.

**Precondition:** The player has Slush Fund or Swiss Bank Account in their hand

**Postcondition:** The player’s central card’s treasury increases and Slush Fund or Swiss bank Account is discarded

**Actor(s):** User

**Course of Action:**

1. Player clicks Slush Fund button on their screen at any time(see UC28)
2. 15 currency is added to central card’s treasury(if Swiss bank account see Alternate Course A)
3. Discard the special card

**Alternate Courses:**

## Alternate Course A: Swiss Bank Account

**1a.** Add 25 currency to central card’s treasury

# Name: Media Campaign

**Identifier:** UC27

**Description:** A player uses the Media Campaign special card to revive a destroyed general card so that it is once again available and uncontrolled.

**Precondition:** A player has the Media Campaign special card in their hand

**Postcondition:** Their chosen group is brought out of the dead pile and added to the list of uncontrolled groups.

**Actor(s): User**

**Course of Action:**

1. User clicks the Media Campaign button on their screen (see UC28)
2. A prompt appears displaying a list of groups that have been destroyed
3. User clicks on the group they would like to revive
4. The group is removed from the list of dead groups
5. The group is added to the list of uncontrolled groups both virtually and graphically.

# Name: Secrets Man Was Not Meant to Know

**Identifier:** UC28

**Description:** A player plays Secrets Man was Not Mean to Know cancelling the effect of another special card

**Precondition:** A player has played a special card

**Postcondition:** The special card does not take effect

**Actor(s):** User

**Course of Action:**

1. User is prompted to play Secrets Man was Not Meant to Know
2. If they choose to use the card, discards Secrets Man was not Meant to Know and the target card
3. Do not continue with the execution of the other card’s effect

# Name: Interference

**Identifier:** UC29

**Description:** A player may interfere with an attack, either by helping the attacker or by opposing them. The money from the Illuminati treasury will go towards this move and it will affect the die roll by +1 or -1.

**Precondition:** Theplayer must already be participating in the game. It must also be the player’s turn.

**Postcondition:** The player will have attacked, either by helping the attacker or by opposing them.

**Actor(s):** Player, interfered player, system

**Course of Action:**

1. Player will announce via button who they will use the interference move on.
   1. Other players cannot interfere either for or against a Privileged Attack at this time.
2. The special card *Interference* will be used at this time.
3. [Alternate Course A, Alternate Course B, Alternate Course C]
4. Case ends

**Alternate Courses:**

## Alternate Course A: Attacker wants to prevent Interference

* + 1a. Attackers can prevent interference between them and another group.
  + 1a. The player must click on the “Privilege” button to declare that they will prevent the attack from happening as well as discard any special card that they have.

## Alternate Course B: Attacker is part of the Bavarian Illuminati

* + 2a. The Special Ability to declare one attack per turn Privileged is allowed with this group. However, the cost of 5 MB must be used to do this action.

## Alternate Course C: Special Card *Deep Agent* is Used

* + 2a. The privilege of [Alternate Course B] may be abolished by use of the special card *Deep Agent* or by discarding two special cards.
    - If the privilege has been abolished, it cannot be reinstated on that attack.

# Name:Player Drop-Out

**Identifier:** UC30

**Description:** This refers to the instance whenever a) a player decides to voluntarily leave a game session (without being eliminated) or b) a player is eliminated from the game and decides to leave the session. Once the player confirms dropping out of the game session, the system will automatically make the necessary changes in order to accommodate the game for the rest of the present players

**Precondition:** All the current players are still inside the game session. In addition, there exists an established number of players participating in the game session.

**Postcondition:** All the current players who want to continue participating in the game are still inside the game session. However, the number of players participating decreases. In addition, the system closes the missing gap between players when it comes to the session’s play order. In other words, the player order remains the same for the rest of the current players.

**Actor(s):** Users, Screen, System

**Course of Action:**

1. During any time in the game session, each player will be offered to leave or drop out of the game session through a visual default button on the screen.
2. A user selects the leave button on screen.
3. The system prompts the user to confirm their decision to leave.
4. Once the user confirms, the system transfers the user out of the game session and returns them onto the main menu.
5. After transferring the user out of the session, the system collects all of the previous player’s cards and discards them.
6. After adjusting the cards, the system collects all the previous player’s money and sends them back into the bank.
7. After adjusting the money, the system finally calculates an updated version of the player order. This player order will remain the same, however it will only skip over the player who left the session instead.

**Alternate Courses:**

## Alternate Course A: Changing Decision to Drop Out

3a. If the user decides not to leave the game session, they can press a back button in order to return to their default screen of their current game.

# Name: Main Game Play Loop

**Identifier:** UC31

**Description:** This is what the user will see and do when they are in the game session. The users will be able to see the different game sequence of play that they will need to fulfill during their turn.

**Precondition:** It must be the player’s turn in order for their actions to be valid and moves can be made.

**Postcondition:** The player will have observed someone’s turn or have played their own turn.

**Actor(s):** Players, system

**Course of Action:**

1. The order of game sequence is:
   1. Collect income [UC1]
   2. Draw a card [UC11]
   3. Take two actions
      1. Regular actions include: Attacking a group [UC2], transfer money [UC20], move [UC-3]/ give a group away [UC18]
      2. Free actions include: Drop a group [UC10], give away money [UC20],
      3. Passing actions: Player abstains from choosing an action and instead receives 5 MB for that turn.
   4. Take any free actions. These do not count for the two allowed actions in the turn. They may be taken before, between, or after the two regular actions (listed in part c.)
      * 1. Drop group [UC10]
        2. Give away money or special cards [UC18]
        3. Use a special card [UC13]
   5. Take special-power actions (if applicable) [UC13]
   6. Transfer money [UC20]
   7. Add targets
      1. At the end of each turn, if the uncontrolled area has fewer than two groups, the player will draw cards until there are only two uncontrolled groups. All special cards drawn during this time will be discarded.

# Name: System Checks Victory Conditions

**Identifier:** UC32

**Description:** The system will check if any specific groups have won.

**Precondition:** The user will continue playing until they have reached their general goal or special goal (if they are a special group).

1. Basic goals (number of groups that need to be controlled) [UC-22]
   1. 2 or 3 players, 13 groups need to be controlled
   2. 4 players, 12 groups need to be controlled
   3. 5 players, 10 groups need to be controlled
   4. 6 players, 9 groups need to be controlled
   5. 7 or 8 players, 8 groups need to be controlled
2. Special goals (depending on the specific group, will have special goals) [UC-22]
   1. Barvarian Illuminati must control groups with a total power of 35 or more (including their initial power of 10)
   2. The Bermuda Triangle must control at least one group of each group.
   3. Discordian Society must control five Weird Groups.
   4. Gnomes of Zurich must collect 150 megabucks in the whole Power Structure’s treasuries.
   5. The Network must control groups with a total transferable power of 25 (including their initial 7).
   6. Servants of Cthulhu must destroy eight groups.
   7. Society of Assassins must control six Violent groups.
   8. UFOs must fulfill whatever special goal they decided to copy from any other Illuminati group. This is unknown to other groups until it is achieved at the time of winning.

**Postcondition:** The user wins the game

**Actor(s):** User, system

**Course of Action:**

1. The general goal to win the game is for a session of different sized players, different amounts of groups must be controlled.
2. If the player is playing with specific cards, they will have special goals as another option to win if they achieve the given goal.

# Name: System Disconnects from Photon Lobby

**Identifier:** UC33

**Description:** A user exits a Photon lobby and thus does not participate in that photon game, freeing up a player slot

**Precondition:** A user is in a Mythinati Photon lobby

**Postcondition:** That user is no longer inside that lobby

**Actor(s): User, System**

**Course of Action:**

1. User clicks exit lobby
2. Prompt appears asking for them to confirm their choice
3. User clicks ‘confirm exit’ button (see Alternate A)
4. User is brought back to the main menu
5. System removes the user from appearing in the lobby
6. System finished disconnecting

**Alternate Courses:**

## Alternate Course A: No Confirm

**1a.** The player does not confirm their exit

2a. The player remains in the lobby, end of use case

# Name: Multiplayer Synchronization

**Identifier:** UC34

**Description:** The system ensures that all players are experiencing the same game by replicating the same actions across each session

**Precondition:** Any other action is taken within a lobby/game

**Postcondition:** The same action occurs with the same result in every player’s local game.

**Actor(s): System**

**Course of Action:**

1. System detects user or system action within the game
2. System performs the detected action for every other user
3. System checks the game state of each player to ensure they match the host’s game state
4. Any non-matching game states are updated to match the host’s game state

# Name: User Interface Interactions / Menu

**Identifier:** UC35

**Description:** This is what the user will interact with when they want to start or end the game.

**Precondition:** Players must have installed the game [UC4] and ran the game [UC5].

**Postcondition:** Users may start and end their session.

**Actor(s):** User, system

**Course of Action:**

1. Users click on an icon to interact with the menu.
   1. Users can exit [Alternate Course A] or start the program [Alternate Course B].
   2. Users can click on an icon to close the menu back up. [Alternate Course C]

**Alternate Courses:**

## Alternate Course A: Users exit the Program

* + 1a. User clicks on “exit program” to close the session and closes the program.

## Alternate Course B: Users start the program.

* + 1a. User clicks on “start program” to start a game [UC8]

## Alternate Course C: User Minimizes the Menu

* + 1b. User clicks on “\_” to minimize the menu and keep out of sight.

# Name: Messaging Other Players

**Identifier:** UC37

**Description:** Mythinati is not only a strategic game to rule the world, but a game that invites the power-thirsty gods and goddesses inside each player to converse amongst each other. With a chat box set aside to the display that ranges from each player’s game possessions to unclaimed mythical creature cards, players can publicly or privately message each other in order to strike deals that may contribute to their victory.

**Precondition:** The messaging chat box, or a box on the screen that displays text messages from other players, is set aside on each player’s screen when a game session begins. Specifically, on the message box, there is an empty space towards the bottom of the section that will allow users to type and share their messages to other players. In addition, there will be additional option buttons to select whether those text messages are shared with everyone or only with one other player, as well as another drop-down option for users to select specific players. Finally, towards the top half of the section is an empty display box that presents the text messages to each player.

**Postcondition:** The messaging chat box will eventually be filled with text messages either sent publicly or privately from other players. Public and private messages will be labeled accordingly, and each player will have a different color set to their username whenever they message in the chat box. Users will be able to scroll towards past messages by moving the scroll in the display box of the messaging section.

**Actor(s):** Users, Screen, System

**Course of Action:**

1. Users type out their message in the bottom half of the chat section. This section is represented as a decently empty space.
2. Users can choose to display their message publicly to everyone or privately to one person in the game session through a drop-down option button.
3. The user is prompted to confirm their message, their message’s status, and the message’s recipients.
4. Once users confirm their message’s status, users can press the Enter button in order to send their text message into the message box.
5. Regardless of the public or private status, a text message will first start out with the sender’s username in a specific & readable color that is not white. Following the username with a colon, the text message is displayed on the messaging section of the screen in white text.

**Alternate Courses:**

## Alternate Course A: Changing Decision of Message Status

3a. If the player decides to change their message status from private to public (or vice versa), then the user can simply select the other status from the status drop-down option.

## Alternate Course B: Changing Decision of Message Recipient

3a. If the player decides to change the recipient of their private message, then the user can simply select the other player from the player drop-down option.

## Alternate Course C: Changing Text Message

3a. If the player decides to change their text message, they can simply type and edit their message through the same mechanics as typing and editing a text message on a keyboard. This is done towards the bottom-half of the message section of the screen.

# Name: The Stars are Aligned (Computer Espionage)

**Identifier:** UC38

**Description:** This Special card is a unique card that can be played among members participating in a session of Mythinati. For this card, if a player decides to use The Stars are Aligned, the player will be able to either a) count the money on any one Group card from another player or b) reveal and examine all of the other player’s Special cards to themselves.

**Precondition:** At most, one player must already have this Special card in their possession. In addition, this card can be used at any time during the game once the session starts as well.

**Postcondition:** The player who uses the card gains knowledge and awareness regarding a) the amount of money another player’s Group card receives or b) all the Special cards another player possesses. The Stars are Aligned card will finally be discarded from the game.

**Actor(s):** Users, Group Cards, Money, Special Cards, Screen, System

**Course of Action:**

1. User follows Use Case 13 in order to begin using The Stars are Aligned card.
2. After completing UC13, the user chooses between the options offered in the specific Special card.
3. After choosing an option, the user chooses another player to use the card onto.
4. Then, the system prompts the user to confirm their selection regarding the offer and the player.
5. After the confirmation, the system will display an announcement on every player’s screen regarding the usage of The Stars are Aligned.
6. After the display, the system will update accordingly to the player who used the card based on their offer selection.
7. After the system updates the player, the system finally discards the Special card and resumes where the game session left off before the usage.

**Alternate Courses:**

## Alternate Course A: Changing Decision of Offer

4a. If the player decides to change their selection regarding the Special card’s options, the player can press on the display for the Special card selection in order to return to Step 2 from the Course of Action.

## Alternate Course B: Changing Decision of Player

4a. If the player decides to change their selection regarding the player they will use the card on, the player can press on the display for the Player selection in order to return to Step 3 from the Course of Action.