Play Pandemic

Use Case: Play Pandemic
Scope: Pandemic
Level: User Goal
Intention in Context: The intention of a player is to play a game of Pandemic with or against other players.
Multiplicity: Multiple Players are allowed to play the game concurrently. A player is not allowed to play several games simultaneously.
Primary Actor: Player
Secondary Actors: Players (who play the role of teammates or opponent (In the case of the Bio-Terrorist)).
Main success scenario:

1. Player logs into the system using their account.
2. System presents to Player the list of available rooms.
3. Player chooses to create new game, join existing game or load existing game.
4. System sets up the main game according to Player's choice.
5. System informs Players that the game has begun.
6. System informs Players the order of play.

Step 7 repeats according to the order of play. If a bio-teorrist is in the game, he takes a turn after each other player's turn.

7. Players take turns until the win or lose statement is reached.
8. System informs all Players whether they won or lost the game.

Extentions:
1a. Player fails to login, Use case continues at step1.
1b. Player can choose to register and logged in automatically.
3a. Player fails to join, create, or load a game, use case continues at step3.
4a. System setup new game if Player chooses to create a new game.
4b. If Player chooses to load to an existing game, System informs Players about the Current Game State.
(7-8)a. Player can save game at anytime.
(2-8)a. Player can chat with other players at anytime.
(1-8)a. Player can quit game at anytime.

Login

Use case: Login
Scope: Pandemic
Level: subfunction
Intention in Context: The intention of Player is to login to his account.
Primary Actor: Player
Secondary Actor: Server
Main success scenario:

1. Player provides System user name and password.
2. System informs Player that the name and password are correct.

system brings user to room selection screen

Extensions:
1a. Player chooses to Register. Use case continues at step 1.

2a. User name and password are invalid, System informs Player that name and password are invalid. Use case continues at step 1.

Register

Use case: Register
Scope: Pandemic
Level: subfunction
Intention in Context: The intention of client is to register a new game account.
Primary actor: Player
Secondary actor: Server
Main success scenario:

1. Player provides the Server a username and a password.
   System validates the username and password.
2. System informs Player that register succeed.
   Sytrem transfers Player to room selection screen.

Extensions:
(1-3)a. Player informs System he wants to go back to login page . System *transfers* player back to Pandemic login page.
2a. Password and confirm password are not the same.
2a.1 System informs Player to input the confirm password again.
2b. Use Case continues at step 1 if the user name does exist.

Create New Game

Use Case: CreateNewGame
Scope: Pandemic
Level: subfunction
Intention in Context: The intention of Player is start a new game from scratch.
Primary Actor: Player
Main Success Scenario:

1. Player instructs System to create a new game for x number of players (x is restricted from 2 to 5) with or without On the Brink DLC.
   System transfers player to waiting room.
2. Player informs the system that he is ready.
3. System transfers Player to main game page.

Step 3 happens only if there are enough players being ready.
Extension:
1a. Player informs System that he wishes to cancel creation.
2a.1Use case ends in failure.
1b. Player's game settings are invalid.
2b.1 System informs player that the settings are invalid. Use case continues at step 1.
1c. If the check box of DLC is checked. Player informs the System the challenge he wishes to play.
2a. Player informs System that he wishes to cancel ready status. System cancel his ready status.

Join Existing Game

Use Case: JoinExistingGame
Scope: Pandemic
Level: subfunction
Intention in Context: The intention of the Player is to join game created by other Players.
Primary Actor: Player
Main Success Scenario:
System transfers Player to waiting room.
1. Player informs System the character he wants to use.
2. Player informs System that he is ready.
Step determines that there are enough players being ready.
3. System presents game board to player.

Extension:
2a. Player informs System that he doesn't want to join this game anymore. Use case ends in failure.
2b. Player in ready status informs System that he wishes to cancel ready status. System cancels his ready status..

Load Existing Game

Use Case:LoadExistingGame
Scope: Pandemic
Level: subfunction
Intention in Context: The intention of the Player is to load a saved game.
Primary Actor: Player
Main Success Scenario:
1. Player informs System the game he wants to load a game.
2. System transfers Player to waiting room.
3. Player informs System that he is ready.

Step determines that there are enough players being ready.

Extension:
(1-2)a. Player informs System that he wishes to cancel game loading. Use case ends in failure.
(4-5)a. Player informs System to cancel game. Use case ends in failure. System transfers Player back to game lobby.
(4-5)b. Player informs System that he wishes to cancel ready status. System cancels his ready status.

Save Game

Use Case: Save Game
Scope: Pandemic
Level: User goal
Intention In Context: The intention of Player is to save the current game.
Primary Actor: Player
Secondary Actor: Server
Main Success Scenario:
1. Player informs the System to Save.

2. System presents save game board.
3. Player inform System which slots he wants to save the game.
4. System informs Player that game is saved successfully.

Extension:

(2-3)a. Player informs System that he wishes to cancel game Saving. Use case ends in failure. System makes game board disappear.

3a. Player informs System to cancel game. Use case ends in failure. System transfers Player back to game lobby.

Quit Game

Use Case: Quit Game
Scope: Pandemic
Level: User goal
Intention In Context: The intention of Player is to quit the current game.
Primary Actor: Player
Secondary Actor: Other Players
Main Success Scenario:

1. Player informs System that he wishes to quit the current game.
2. System confirms with the Player that he want to quit.
3. Player informs the System that he wants to quit.
4. System transfers Player to Login page.
5. System informs Other Players that a player quits the game.
6. System asks Other players whether they want to save the game.
7. Other players informs System that he wants to save the game.
8. System informs Other players that the game has been saved.
9. The game continues without the Player that quit.

Extension :

3a. Player informs System that he doesn't want to quit anymore.
3b. Player informs System that he want to quit without Saving the game.
7a. Other Players inform System that they don't want to save the game.

Setup New Game

Use Case: Setup New Game
Scope: Pandemic
Level: Subfunction
Intention in Context: The system sets all initial settings for the Players to play the game.

Primary Actors： System

Secondary Actors: Players

Main Success Scenario：

System detects the number of players in the Game and the difficulty level of the Game.

1. System informs Players that the number of research stations, cure markers and disease cubes, and the infection rate are initialized.
2. System informs Players what Role and Pawn color each of them has.
3. System informs Players that their initial position is at Atlanta and that a research station is built at Atlanta.

System shuffles the player cards and deal cards to Players to form the initial hands. Give cards According to the number of players.

4. System informs Players about their initial hands.
   System evenly shuffles the Epidemic cards according to the difficulty level of the game into the player cards
5. System informs Players the number of Epidemic cards in the deck.
   System performs the following actions: the infection cards pile is shuffled and 3 of them are flipped with 3 disease cubes put on the corresponding color cities. 3 more are flipped with 2 disease cubes put on the corresponding color cities. Then 3 more are flipped with 1 disease cubes put on the corresponding color cities. The 9 flipped cards are placed facing up on the Infection Discard Pile.
6. System informs player with the new game state.
7. System informs Players with the highest City population to take turn first.

Extensions:

4a. System informs Bio-Terrorist that he does not have an initial position.
6a. For Virtual Strain Challenge, Strain Epidemic cards are used instead of Epidemic cards.
6b. For Mutation Challenge, put 3 mutation event cards in the rest player Card.
6c. For Mutation Challenge, System puts 2 mutation cards in the infection discard pile. System informs Players that 2 mutation cards are in the infection discard pile.

TakeTurn

Use Case: Take Turn
Scope: Pandemic
Level: Subfunction
Intention in Context: The intention of the Players is to play his turn
Primary Actor: Player
Secondary Actors: Players (Other players who may interact with current player or use event card)
Main Success Scenario:

1. System informs Player that it is his turn.
2. Player informs System that he wishes to do one of the following action. He repeats this step 4 times:
   - Move
   - Treat
   - Cure
   - Build
   - Share
3. Current Player informs System that he has finished actions
4. System informs all Players about the two cards drawn for Current Player
5. Current Player informs System that he wishes to continue to Infect Cities step
6. Player resolves Infection
7. System starts use case for next Player

Extensions:

1a. If current player's role is Troubleshooter, at start of her turn, then she looks at as many Infection cards as the current infection rate (by taking them from the top of the Infection Deck, looking at them, and putting them back in the same order).
(2-5)||a. Any Player with a usable Event Card in hand chooses to Play Event Card.

(2-5)||a.1 The Player who chooses to use Event Card informs System the target of Event (if any).

(2-5)||a.2 The System informs Players of new game state. Use continues at corresponding step

2a. Current Player's role is Contingency Planner

2a.1 Current Player can perform one more action called "Retrieve Event Card"

2b. Current Player's role is Archivist

2b.1 Current Player can perform one more action called "Retrieve City Card"

2c. Current player's role is Field Operative

2c.1 Current Player can perform one more action called "Store"

2d. Current player's role is Epidemiologist

2d.1 Current Player can perform one more action called "Take"

2e. Game includes bio-terrorist challenge

if the player is not in the same city as bioterrorist, capture is shaded and cannot be performed

2e.1 Current Player can perform one more action called "Capture"

2f. Current Player's role is BIO-TERRORIST

if maximum actions are completed, use case ends in success

2f.1.Current Player can perform one Move action.

2f.2.Current Player performs two of following actions:

- Draw Card
- Infect Locally
- Infect Remotely
- Sabotage(only when there is a research station in his city)
- Escape(only when captured)

2g. Current player's role is Generalist, then he can repeat step 2 for 5 times(instead of 4).

2h. Borrowed Time Event Card has been played, then step 2 can be repeated for 6 times instead of 4.

2i. The "Special Orders" Event Card has been played. Then player may spend one action to move another player as if it were his own.

4a. The current Player has more than 7 (8 for ARCHIVIST) cards

4a.1.The current player Discard Hand. Use case continues at step 5.

4b. Draws include epidemic card(if there are two, repeated following steps once).

4b.1 System informs Players that the infection rate is increased by 1.

System draws the bottom card from the Infection Deck. Unless its disease color has been eradicated, system puts 3 disease cubes of that color on the named city.

4b.2. System informs Players of new game state.

4b.2.a The city already has cubes of this color

system does not add 3 cubes to it.Instead, System adds just enough cubes so that it has 3 cubes of this color

4b.2.a.1 System resolves outbreak and informs Players of new game state.

System discards this card to the Infection Discard Pile and place them on top of the Infection Deck.

4b.3. System informs Players of new game state. Use case continus at step 5

If an epidemic card and a mutation event card are drawn together, do 4c and then 4b

4c. The game includes mutation challenge and a mutation event card is drawn

System follows the mutation event card insturctions and discard it

4c.1.System informs Players of new game state, use case continues at step 5

4d. The game includes mutation challenge and two mutation event card are drawn

4d.1 The player inform the system the order he wants to do them.

System follows the mutation event card insturctions and discard it

4d.2.System informs Players of new game state, use case continues at step 5
4e. The game includes virulent strain challenge and a virulent strain epidemic card is drawn
4e.1. System informs Players of new game state, use case continues at step 5
5a. One quiet night Event Card has been played, use case continues at step 7.

Resolve Infection

Use Case: Resolve Infection
Scope: Pandemic
Level: Subfunction
Intention in Context: The intention of the Players is to perform infection step
Primary Actor: Player
Secondary Actors: Players (Other players who may interact with current player or use event card)
Main Success Scenario:

the following steps is repeated for n times where n is the value of infection rate

1. Current Player informs System that he wishes to continue to next infection
2. System informs Players of the infection card drawn and that one corresponding disease cube is added to corresponding city.

Extensions:
1a. Any Player with a usable Event Card in hand chooses to use Event Card.
1a.1 The Player who chooses to use Event Card informs System the target of Event (if any).
1a.2 The System informs Players of new game state. Use case continues at corresponding step
2a. There is no enough disease cube. System informs players that they loses the game. Use case ends in failure.
2b. There are already 3 disease cubes in the named city. System resolves outbreak in the city and informs Players new game state. Use case continues at next step(if any).
2b.1 Player with role Quarantine Specialist is in that city, the no outbreak occur, no disease cube placed on the city or city connected to.
2c. The game includes mutation challenge and a mutation card is drawn
2c.1 System informs Player that a new infection card is drawn from bottom of infection deck
System place a purple cube in the card's city and do not place a cube of the cards's color, both cards are discarded to the infection discard pile
2c.2 System informs Players of new game state
2c.2.a There is no enough purple cube
2c.2.a.1 System informs Players that they lose the game, use case ends in failure.
2d. The game includes mutation challenge or bio-terrorist challenge and there is at least one purple cube in the named city
2d.1 System informs players of the infection card drawn and that one corresponding disease cube and one purple cube are added to corresponding city.
2d.1.a There are 3 purple cubes in the named city
2d.1.a.1 System resolves outbreak for purple cube in the named city
2d.1.b There is no enough purple cubes
2d.1.b.1 System informs Players that they loses the game, use case ends in failure.
2e. Player with role Quarantine Specialist is in that city, then no disease cube is added to that city

Resolve Outbreak

Use Case: Resolve Outbreak
Scope: Pandemic
Level: Subfunction
Intention in Context: The intention of the System is to resolve outbreak in corresponding city
Primary Actor: System
Main Success Scenario:

1. System informs Players that outbreak rate is increased by 1.
   System places 1 cube of the disease color on every city connected to the city
2. System informs Players of new game state

Extensions:

1a. The outbreak has reached the maximum
  1a.1 System informs Players that they loses the game, use case ends in failure.
2a. There is no enough disease cube.
2a.1 System informs Players that they loses the game, use case ends in failure.
2b. There are 3 cubes in the connected city
  2b.1 System resolve outbreak in that city
    2b.1.a The game inlcudes bio-terrorist challenge
      2b.1.a.1 System informs Players that 2 cubes are removed from the breakout city
      2b.1.a.2 System resolve outbreak in that city

Move

Use Case: move
Scope: Main game
Level: Subfunction
Intention of Context: The intention of the Player is to move a Player from one city to another city
Primary Actor: Player
Secondary Actor: Other players
Main Success Scenario:

1. Player informs System that he/she wants to move
2. System informs Player to choose one of the 4 move types
   - Drive/Ferry.
   - Direct Flight.
   - Charter Flight.
   - Shuttle Flight.
3. Player informs System which move type Player wants to choose.
4. System informs the player the city that Player can move
5. Player informs the system which city Player wants to move
6. System informs Players their new game state.

Extensions:

2a. Player role is Dispatcher, System informs the player that he need choose one person to move.
  2a.1. Dispatcher informs the system the player he wish to move
2b. Player role is Operations Expert, if player is in a city with research station, system informs player that he can move to any city.
3a. Player role is Dispatcher, player informs system which move type the other player have to move(with the permission of the other player).

3a.1 Other player refuse to move, use case move back to step 2.
3b. The “Mobile Hospital” Event Card has been played this turn and the player choose “Drive/Ferry” move type, then each city that the current player moved, the number of disease cube in that city -1.
5a. Player role is Troubleshooter, when she uses Direct Flight to travel, she does not need to discard that City Card.
5b. Player role is Operations Expert, after informing the system which city to move. System informs player that he needs to discard a city card(any card).
3d.1 Player has already done this action in one turn. System informs the player that he can not do this action again.
6a. Current player moves to a city where Bio-Terrorist is located, system informs all the players that Bio-Terrorist is located at this city.
6b. Current Player’s role is Containment Specialist, and the city he moved to has 2 or 3 disease cube of same color, system informs the player that 1 disease cube has been removed from this city.

Build

Use Case: build
Scope: Main game
Level: Subfunction
Intention of Context: The intention of the Player is to build a research station at the city he located
Primary Actor: Player
Main Success Scenario:

1. Player informs System that he wish to build a research station.
2. System informs Player that city card of current city is discarded to the Player Discard Pile.
3. System informs Player one research station is added to the current city
4. System informs Player total number of research station -1.

Extensions:
1a. Current city already has a research station, then use case fails
1b. Player does not have the city card of the city he located, then use case fails
1b.1 Player role is Operations Expert, then use case continues.
1c. Player role is Operations Expert, use case skip step 2, use case continue at step 3.
1d. Total number of research station is 0.
1d.1. System informs Player he needs to destroy a research station.
1d.2. Player informs System the research station he wishes to destroy.
1d.3. Use case continues on step 2.

Treat

Use Case: treat
Scope: Main game
Level: Subfunction
Intention of Context: The intention of the Player is to move a disease of the city he currently located.
Primary Actor: Player
Main Success Scenario:

1. Player informs System that he/she wish to threat the city
2. System informs Player that one disease cube moves away from the city
3. System informs Player that total disease cube of current color +the number of disease cube moved away from the city. .

Extensions:

1a. Current city has no cube on it, then use case fails.
2a. Current Player is Medic, then System informs Player that All disease cubes moves away from the city
2b. The city with the particular color already has the cure discovered. Player with any role removes all the cubes from the city.

Share

Use Case: Share
Scope: Pandemic
Level: Subfunction
Intention in Context: The intention of the Player is to give or take one City card to or from another Player when they are both in the city that is same with City Card shared.
Primary Actor: Player
Secondary Actor: Other Player (with whom knowledge is shared)
Main Success Scenario:

1. Player informs System that he wants to share.
2. System informs Player to choose one of the Share type
    - Give
    - Take
3. Player informs System which share type he/she want to do.
4. Player informs System what card he wants to share
5. System asks the target Player to give consent
6. Target Players informs System that he permits the share
7. System informs Player and other Players the new game state

Extensions:

1a. Players are in same city but do not hold the City Card of that city, then use case fails.
    1a.1. one of the player is the Researcher, then use case continues.
1b. Player is in the city alone, use case fails.
7a.The Player or target Player has exceeded his hand limit
7a.1 The player or target player Discard Hand, use case ends in success

Cure

Use Case: Cure
Scope: Pandemic
Level: Subfunction
Intention in Context: The intention of the Player is to cure a disease of particular color when he or she has 5 City cards of such color and meanwhile he is at a Research Station.
Primary Actor: Player
Secondary Actor: Disease (which is to be cured)
Main Success Scenario:

1. Player informs System he whish to cure.

2. System informs Player that 5 cards of same color of Player is discarded to the Player Discard Pile.
3. System informs Players that the cure is enabled.
4. System asks the player who has the “Rapid Vaccine Deployment” Event Card, if he wants to use that Event Card.
5. Player informs System that he wants to use that Event Card.
6. System asks the player to choose a city with the color of the cure and has a disease cube on it.
7. Player informs System the city he choose.
8. System informs Player that one disease cube moves away from the city
9. System informs Player that total disease cube of current color +the number of disease cube moved away from the city.

the following step repeats 4 times.

10. System asks Player to choose a city between the current city and the city connect to it, that city must have at least one disease cube on it.
11. Player informs System the city he choose.
12. System informs Player that one disease cube moves away from the city
13. System informs Player that total disease cube of current color +the number of disease cube moved away from the city.

Extensions:

1a. If current city is not a Research Station, use case fails.
1b. If current Player does not hold 5 City Cards of same color, use case fails.
    1b.1 Current Player is Scientist, she only needs 4 City Cards of same color.
    1b.2 Current Player is Field Operative, he may replace exactly 2 of the needed City cards by returning 3 cubes of the cure color from his Role card to the supply.
3c. Currently all 4 cures are enabled, then winning statement occurs
4a. No player has the “Rapid Vaccine Deployment” Event Card, use case terminates.
5a. The player informs System that he does not want to use that Event Card, use case terminates.
10a. There are no city that satisfy the condition, use case terminates.

Capture

Use Case: capture
Scope: Pandemic
Level: Subfunction
Intention in Context: The intention of the Players is to capture bio-terrorist
Primary Actor: Player
Secondary Actor: Player(bio-terrorist)
Main Success Scenario:

1. Current Player informs System that he wants to capture bio-terrorist
2. System inofrms bio-terrorist that all his cards are discarded
3. System informs Players of new game state

Extension:

2a. Bio-terrorist has no card in his hand
    2a.1 Use case continues at step3

Retrieve City Card

Use Case: Retrieve City Card

Scope: Pandemic
Level: Subfunction
Intention in Context: The intention of the Players is to retrieve city card from Player Discard Pile
Primary Actor: Player(Archivist)
Main Success Scenario:

1. Player informs System that he wants to retrieve city card
2. System informs Player of the available option
3. Player informs System which card he wants to retrieve
   system adds the card to player's hand
4. System informs Players of new game state

Extension:
1a. There is no city card in Player Discard Pile
    1a.1 System informs player that there is no available option, use case ends in failure
1b. Player has already done this use case once in current turn, use case fails.
4a. The current Player has more than 7 cards in his hand
    4a.1The current Player discard cards or Play event cards until the current player has 7 cards in his hand. Use case continues at step 4

Retrieve Event Card

Use Case: Retrieve Event Card
Scope: Pandemic
Level: Subfunction
Intention in Context: The intention of the Players is to retrieve event card from Event Discard Pile
Primary Actor: Player(Contingency Planner)
Main Success Scenario:

1. Player informs System that he wants to retrieve event card
2. System informs Player of the available option
3. Player informs System which card he wants to retrieve
   system adds the card to player's hand
4. System informs Players of new game state

Extension:
1a. There is no city card in Event Discard Pile
    1a.1 System informs player that there is no available option, use case ends in failure
4a. The current player has more than 8 card in his hand
    4a.1 The current player discard cards or play event cards until the current player has 8 cards in his hand. Use case continues at step 4

Store

Use Case: Store
Scope: Pandemic
Level: Subfunction
Intention in Context: The intention of the Players is to store a cube
Primary Actor: Player(Field Operative)
Main Success Scenario:

1. Player informs System that he wants to store a cube
2. System informs Players of new game state

Extension:

2a. There is no cube in current city
    2a.1 System informs Player that there is no cube in current city. Use case ends in failure
2b. The disease of the cube has been cured
    2b.1 System informs Player that the cube has been cured. Use case ends in failure
2c. The player has stored 3 cubes of this color
    2c.1 System informs Player that he has stored 3 cubes of this color. Use case ends in failure.

Take

Use Case: Take
Scope: Pandemic
Level: Subfunction
Intention in Context: The intention of the Players is to take a City Card from other players who are in same city.
Primary Actor: Player(Epidemiologist)
Secondary Actor: Other player
Main Success Scenario:

1. Player informs System that she wants to take a City Card from other Players
2. System informs Player of the available options, which are other players in same city
3. Player informs System which card she wants to take
4. System informs other Player that Epidemiologist want to take one of his card, other player agree
   system adds the City Card to player's hand
5. System informs Players of new game state

Extension:

1a. There is no other player in current city
    1a.1 System informs Player that there is no available option, use case ends in failure
4a. Other Player disagree, use case ends in failure.

Move(Bio-terrorist only)

Use Case: move
Scope: Main game
Level: Subfunction
Intention of Context: The intention of the Player(Bio-terrorist) is to move himself from one city to another city.
Primary Actor: Player who's role is Bio-Terrorist
Secondary Actor: Other players
Main Success Scenario:

1. Player informs System he want to move.
2. Current player chooses one of the 3 move types
    1. Drive/Ferry.
    2. Direct Flight.
    3. Charter Flight.

3. Player informs System which move type he wants to go
4. System informs the current Player only the new game state

Extensions:

3a. Current Player moves to the city where other players located. Current player's pawn will appear on the map. Other players can see it

3b. Player does not have the infection card needed, use case go back to step 2.

Draw Card

Use Case: Draw Card
Scope: Player Action
Level: Subfunction
Intention in Context: The intention of the player is to draw a Card
Primary Actor: Player(bio-terrorist)
Main Success Scenario:

1. Current player informs System that he wants to draw a Card
2. System informs current Player that one infection card is added to Player's hand(Other players don't know)

Extensions:

2a. Player has more than 7 cards after drawing.

2a.1 Player Discard Hand

Infect Locally

Use Case: infect locally
Scope: Pandemic
Level: Subfunction
Intention in Context: The intention of the Player is to infect a local city
Primary Actor: Player(bio-terrorist)
Secondary Actor: Player(Other players)
Main Success Scenario:

1. Current Player informs System that he wants to infect local city
2. System inofrms Players that one purple cube is added to local city
3. System informs Players of new game state

Extension:

1a. Current Player is captured

1a.1 System informs Current Player that he is captured. Use case ends in failure

2a. There are already 3 purple cubes in the city

2a.1 System resolves outbreak for purple cubes in local city, use case continues at step 3

Infect Remotely

Use Case: infect remotely
Scope: Pandemic
Level: Subfunction
Intention in Context: The intention of the Players is to infect a remote city

Primary Actor: Player(bio-terrorist)
Secondary Actor: Player(Other players)
Main Success Scenario:

1. Current Player informs System that which remote city he wants to infect
2. System informs Current Player that a corresonding infection card is discarded
3. System inofrms Players that one purple cube is added to the city
4. System informs Players of new game state

Extension:

1a. Current Player is captured
    1a.1 System informs Current Player that he is captured. Use case ends in failure
2a. Theres is no corresponding infection card in Current Player's hand
    2a.1. System informs Current playr that he does not have corresponding infection card, use case ends in failure
3a. There are already 3 purple cubes in that city
    3a.1 System resolves outbreak for purple cubes in tht city, use case continues at step 4

Escape

Use Case: escape
Scope: Pandemic
Level: Subfunction
Intention in Context: The intention of the Players is to escape
Primary Actor: Player(bio-terrorist)
Secondary Actor: Player(Other players)
Main Success Scenario:

1. Current Player informs System which infection card he will discard
2. System informs Current Player that a corresonding infection card is discarded
3. System inofrms Players that Current Player escaped
4. System informs Players of airport sighting in corrresponding city
5. System informs Players of new game state

Extension:

1a. Current Player does not have infection card
    1a.1 System informs Current Player that he has no infection card, use case ends in failure

Sabotage

Use Case: sabotage
Scope: Pandemic
Level: Subfunction
Intention in Context: The intention of the Players is to remove a research station in his city
Primary Actor: Player(bio-terrorist)
Secondary Actor: Player(Other players)
Main Success Scenario:

1. Current Player informs System which infection card he will discard to remove the research station in his city
2. System informs Current Player that a corresonding infection card is discarded
3. System inofrms Players of which research station is removed
4. System informs Players of new game state

Extension:

1a. The current Player does not have an infection card that matches the city's color
    1a.1 System informs Current Player that the color does not match, use case ends in failure

Pass

Use Case: Pass
Scope: Player Action
Level: Subfunction
Intention in Context: The intention of the Player is to skip all actions remaining in this turn.
Primary Actor: Player
Main Success Scenario:

1. Player presses Pass button to inform System that he wants to pass.
2. System aks player that he really want to pass
3. This turn terminates.

Extension:
2a. Player informs system "NO!", then use case fails

Chat

Use Case: Chat
Scope: Pandemic
Level: User Goal
Intention in Context: The intention of the Player is to communicate to with other Players via chat box.
Multiplicity: Players are allowed to use the chat box simultaneously.
Primary Actor: Player
Secondary Actor: Players (the others).
Facilitator Actor: Server
Main Success Scenario:

1. Player informs system that he want to chat.
2. Player choose one the following chatting mode:
    - message to friends.
    - message to the global chatting environment.
    - message to other Players of the current game.

3. Player sends messages to System.
4. System informs other Players(those who are chatting with the Primary Actor) that new messages has arrived by displaying the message in the chat box.
5. System saves the messages into Server.

Discard Hand

Use Case: Discard Hand
Scope: Subfunction
Level: Subfunction
Intention in Context: The intention of the Player is to discard card in his hand

Primary Actor: Player
Main Success Scenario:
Step 1 can be repeated many times until maximum hand limit is reached
1. Players informs System the card he wants to discard.
2. System informs Player that the cards has been discarded to discard pile

Extensions:
1a. Players Play Event Card, use case continus at step 1

Play Event Card

Use Case: Play Event Card
Scope: Main Game
Level: Subfunction
Intention of Conext: The intentio of the Player is to use an Event Card and process the Event.
Primary Actor: Player who use the Event Card
Secondary Actor: Other players
Main Success Scenario:
1. Player informs System of the event card he wants to use and the target(if any)
2. System informs all players of the new game state

Play “Airlift” Event Card

Use Case: Play “Airlift” Event Card
Scope: Main Game
Level: Sub-Subfunction
Intention of Context: The intention of the Player is to use Airlift Event Card
Primary Actor: Player who use the Event Card
Secondary Actor: Player to Move
Main Success Scenario:
1. Player informs System that he wants to use an Airlift Event Card.
2. System provides a list of players to the current Player.
3. Player informs System the player he wishes to move.
4. System asks player which city to move.
5. Player informs System the city to move.
6. System asks the Player to Move if he wishes to move to that city.
7. Player to Move informs System that he wishes to move.
8. System informs other players that the Player to Move moves to that city.

Extensions:
8a. Player to Move informs System that he does not want to move to that city. Use case fails.

Play “Forecast” Event Card

Use Case: Play “Forecast” Event Card
Scope: Main Game

Level: Sub-Subfunction
Intention of Context: The intention of the Player is to use Forecast Event Card
Primary Actor: Player who use the Event Card
Secondary Actor: Other players
Main Success Scenario:

1. Player informs System that he wants to use an Forecas Event Card.
2. System informs All Players the top 6 cards of the Infection Deck.
3. Player informs System the order of the 6 cards.
4. System informs All Players the new order of the 6 cards.
5. System informs All Players that 6 cards has been put back in the Infection Deck with the new order

Extensions:
2a. There are less 6 cards in the Infection Deck, then System informs All player all the cards exist in the Infection Deck.

Play “Government Grant” Event Card

Use Case: Play “Government” Event Card
Scope: Main Game
Level: Sub-Subfunction
Intention of Context: The intention of the Player is to use Government Event Card
Primary Actor: Player who use the Event Card
Secondary Actor: Other players
Main Success Scenario:

1. Player informs System that he wants to use an Government Event Card.
2. System asks player which city he wants to add a research Station.
3. Player informs System the city.
4. System informs All players that a research station has been added to the correspond city
5. System informs Player total number of research station -1.

Extensions:
3a. Current city already has a research station, then use case fails
3b. Total number of research station is 0.
3b.1. System informs Player he needs to destroy a research station.
3b.2. Player informs System the research station he wishes to destroy.
3b.3. Use case continues on step 4.

Play “Resilient Population” Event Card

Use Case: Play “Resilient Population” Event Card
Scope: Main Game
Level: Sub-Subfunction
Intention of Context: The intention of the Player is to use Resilient Population Event Card
Primary Actor: Player who use the Event Card
Secondary Actor: Other players
Main Success Scenario:

1. Player informs System that he wants to use an Resilient Population Event Card.
2. System asks the Player to choose an Infection Card from the Infection Discard Pile.
3. Player informs System the Infection Card he wants to discard.
4. System informs All players that the Infection Card has been moved from the game.

Extensions:
2a. Infection Discard Pile is empty, them use case fails.

Play "New Assignment" Event Card

Use Case: Play "New Assignment" Event Card
Scope: Main Game
Level: Sub-Subfunction
Intention of Context: The intention of the Player is to use New Assignment Event Card
Primary Actor: Player who use the Event Card
Secondary Actor: Player to change
Main Success Scenario:
1. Player informs System that he wants to use an New Assignment Event Card.
2. System asks the Player to choose another player.
3. Player informs System the "Player to change".
4. System asks the "Player to change" whether he wants to change the role.
5. "Player to change" informs the System that he want to change.
6. System informs the Player a list of unused role.
7. "Player to change" informs the System the role he wants to change.
8. System informs All players that the current player role has been changed.

Extensions:
5a. "Player to change" informs the System that he does not want to change the role, then use case fails.

Play "Re-examined Research" Event Card

Use Case: Play "Re-examined Research" Event Card
Scope: Main Game
Level: Sub-Subfunction
Intention of Context: The intention of the Player is to use Re-examined Research Event Card
Primary Actor: Player who use the Event Card
Secondary Actor: Target Player
Main Success Scenario:
1. Player informs System that he wants to use an Re-examined Research Event Card.
2. System asks the Player to choose another player.
3. Player informs System the target Player.
4. System asks the target Player whether he wants to draw a card from Player Discard Pile.
5. Target Player informs the System that he wants to draw.
6. System informs the target Player a list of Player card from Player Discard Pile.
7. Target Player informs the System the card he wants to draw.
8. System informs All players that the card moved into the target Player's hand.

Extensions:

1a. There are no card in the Player Discard Pile, then use case fails.
5a. “Player to draw” informs the System that he does not want to change the role, then use case fails.

Play “Remote Treatment” Event Card

Use Case: Play “Remote Treatment” Event Card
Scope: Main Game
Level: Sub-Subfunction
Intention of Context: The intention of the Player is to use Remote Treatment Event Card
Primary Actor: Player who use the Event Card
Main Success Scenario:

1. Player informs System that he wants to use an Remote Treatment Event Card.

The following steps repeats 2 times.

2. System asks the Player to choose a city that has at least one disease cube.
3. Player informs System the city.
4. System informs all players that one disease cube has been removed from that city.
5. System informs all players the total disease cube of that color +1.

Extensions:
2a. There are no city which has at least one cube, then use case fails.