King of Tokyo Use Cases

Use Case #1: Launch the game

Actor: User (Player)

Pre-Condition: KingOfTokyo.exe has been downloaded and saved on a personal computer.

Post-Condition: King of Tokyo's main menu is displayed.

Events:

1. User clicks on executable file.
    a. System opens the executable file
    b. System displays the main menu

Extensions:

None

Use Case #2: Save the game

Actor: User (Player)

Pre-Condition: The user is already engaged in a game.

Post-Condition: The current state of the game is saved in KoTSS.txt.

Events:

1. User pauses the game
    a. System opens the Pause Menu
2. User selects the Save option
    a. System saves the game state in KoTSS.txt

Extensions:

1a - 2a: User selects the Save option again

1. The previous KoTSS.txt gets overwritten with the current save state of the game

Use Case #3: Load the game

Actor: User (Player)

Pre-Condition: There exists a KoTSS.txt with data

Post-Condition: Loads a previous save state from KoTSS.txt if available

Events:

1. User is on the main menu
2. User selects the Load option
    a. System checks KoTSS.txt to see if there is any data to load

Extensions:

1a - 2a: User selects the Load option without having a KoTSS.txt

1. The system displays a message notifying the user that there is no save state to load

Use Case #4: Select main menu options

Actor: User (Player)

Pre-Condition: KingOfTokyo.exe has been opened

Post-Condition: Proceeds with a certain action depending on what option is pressed

Events:

1. User is on the main menu
2. User selects one of the main menu options
    a. System performs a certain action depending on the option chosen

Extension:

1a - 2a: User selects the Play option:
1. System initializes game systems and sets up the board

1b - 2b: User selects the Load option:
1. System checks KoTSS.txt to see if there is any data to load

1c - 2c: User selects the Exit option:
1. System closes the program

1d - 2d: User selects the Help option
1. System displays the rules for King of Tokyo

Use Case #5: Select character

Actor: User (Player)

Pre-Condition: The user has selected the Play option on the main menu

Post-Condition: User selects 1 out of the 6 playable characters.

Events:

1. User is on the character select menu
2. User selects 1 of the 6 playable characters
    a. System loads the character data for the selected character

Extension:

1a - 2a: User selects Character #1
1. System loads character data for Character #1

1b - 2b: User selects Character #2
1. System loads character data for Character #2

1c - 2c: User selects Character #3
1. System loads character data for Character #3

1d - 2d: User selects Character #4
1. System loads character data for Character #4

1e - 2e: User selects Character #5
1. System loads character data for Character #5

1f - 2f: User selects Character #6
1. System loads character data for Character #6

Use Case #6: Select number of players

Actor: User (Player)

Pre-Condition: User has already selected their character

Post-Condition: User selects to play with 1 to 5 CPUs

Events:

1. User is on the CPU select menu
2. User selects 1 to 5 CPUs to play with
    a. System loads 1 to 5 CPUs to participate in the game

Extensions:
1a - 2a: User selects 1 CPU
1. System loads CPU data for 1 CPU

1b - 2b: User selects 2 CPUs
1. System loads CPU data for 2 CPUs

1c- 2c: User selects 3 CPUs
1. System loads CPU data for 3 CPUs

1d - 2d: User selects 4 CPUs
1. System loads CPU data for 4 CPUs

1e - 2e: User selects 5 CPUs
1. System loads CPU data for 5 CPUs

Use Case #7: Select difficulty
Actor: User (Player)
Pre-Condition: User has selected how many CPUs will be participating in the game
Post-Condition: User selects the difficulty of all the CPUs.
Events:
1. User is on the CPU Difficulty menu
2. User selects Easy or Hard
    a. System loads data for difficulty for CPUs

Extensions:
1a - 2a: User selects Easy difficulty
1. System loads data for Easy difficulty for CPUs

1b - 2b: User selects Hard difficulty
1. System loads data for Hard difficulty for CPUs

Use Case #8: Set up game systems
Actor: System
Pre-Condition: The user has selected their character, number of CPUs / difficulty has been determined
Post-Condition: System loads the necessary game systems
Events:
1. System sets up the game systems
    a. Dice for all players
    b. Power Cards
    c. Victory Points
    d. Energy Cubes
    e. Green Dice
    f. Tokens
    g. Victory Point Counter
    h. Life Points

Extensions:
None

Use Case #9: Set up game board

Actor: System

Pre-Condition: The game systems have been initialized

Post-Condition: System loads the board with the necessary game systems.

Events:

1. System sets up the board
    a. Graphic of the map
    b. Graphic for each player

Extensions:

1a: The game has 5 or 6 players

1. Tokyo Bay is added to the game board with the same functionalities as Tokyo City

Use Case #10: First roll to determine turn order

Actor: User (Player) / CPU, System

Pre-Condition: The game board has been set up

Post-Condition: User / CPU roll the 6 black dice. Highest roll goes first, descending to the lowest roll.

Events:

1. User rolls the 6 black dice
    a. System records the total number of Smash symbols face up
2. 1 to 5 CPUs roll the 6 black dice
    a. System records the total number of Smash symbols face up for each CPU
3. System applies turn order starting at the highest roll, descending to the lowest roll

Extensions:

1a: Two or more players have rolled the same total amount of Smash die faces.

1. System identifies the players for rerolling
2. System directs selected players to roll again
3. System orders each selected player in descending order
4. System adds each player to the original descending order list if their rolls are unique
5. Repeat steps 1a.-1d until all players have rolled unique values
6. Rejoin Step 3

Use Case #11: Player/CPU roll dice

Actor: User (Player) / CPU

Pre-Condition: The roll order has been determined

Post-Condition: User / CPU roll the dice to determine action.

Events:

1. User / CPU roll the 6 Black Dice
    a. System records current values of the dice
2. User / CPU finish rolling

Extensions:

1a: User / CPU on 1st roll

    1. User / CPU can also roll the 1 or 2 Green Dice if certain Power Card is in their deck
    2. If User / CPU satisfied with dice values, rejoin Step 2

1b: User / CPU on 2nd roll

1. User / CPU can keep favorable dice values from previous roll and reroll the remaining
2. If User / CPU satisfied with new dice values, rejoin Step 2

1c: User / CPU on 3rd roll

1. User / CPU can keep favorable dice values from previous roll and reroll the remaining
2. Favorable dice values kept in the the 2nd roll can be rerolled if desired
3. Rejoin Step 2

Use Case #12: Player/CPU resolve dice

Actor: User (Player) / CPU, System

Pre-Condition: User / CPU has finished rolling phase

Post-Condition: User / CPU resolves dice in any order

Events:

1. System determines actions for User / CPU based on dice values

Extensions:

1a: Dice value is a Victory Point symbol

1. If roll is a three-of-a-kind of 1, 2, or 3, gain as many Victory Points as the number
2. Each additional die rolled with the same value gains 1 additional Victory Point
3. User / CPU gains the respective amount of Victory Points

1b: Dice value is an Energy symbol

1. User / CPU gains respective amount of Energy Cubes based on how many Energy symbols are face up

1c: Dice value is a Smash symbol

1. User / CPU damages players for 1 Life Point for every Smash symbol that is face up

1d: Dice value is a Heal symbol

1. User / CPU gains 1 Life Point for every Heal symbol that is face up

Use Case #13: Player/CPU enters Tokyo City

Actor: User (Player) / CPU

Pre-Condition: No one is in Tokyo City

Post-Condition: User / CPU enters Tokyo City

Events:

1. Tokyo City is unoccupied
    a. On User / CPU turn, they must enter Tokyo City
    b. System updates the game board to show who is in Tokyo City

Extensions:

1a: After determining roll order, the first player must enter Tokyo City

1. The first User / CPU rolls the 6 black dice
2. User / CPU enters Tokyo City

1b: User / CPU in Tokyo City rolls a Smash symbol

1. Since neither User or CPU starts in Tokyo City, rolling a Smash has no effect

1c: If there are 5 or 6 players and Tokyo City is already occupied, Tokyo Bay is used as another location to take control of

1. One User / CPU is already occupying Tokyo City
2. Another User / CPU rolls the 6 black dice
3. User / CPU enters Tokyo Bay

Use Case #14: Player/CPU buys power cards

Actor: User (Player) / CPU

Pre-Condition: User / CPU chooses to purchase a Power Card

Post-Condition: User / CPU buys a Power Card

Events:

1. User / CPU browses the Power Cards on the board
2. User / CPU selects a card to purchase
    a. System reduces the User / CPU Energy Cubes by the card’s Energy cost.
3. User / CPU obtains the card and keeps it for personal use.
    a. System replaces the card removed from the board with another card from the top of the deck.
4. User / CPU finishes browsing the Power Cards

Extensions:

1a: User / CPU chooses to sweep current Power Cards on the board

1. System checks if User / CPU has 2 Energy Cubes to sweep
    a. If the User / CPU does not have 2 Energy Cubes, rejoin Step 1
2. System reduces User / CPU Energy Cubes by 2
3. All current cards on the board are discarded
4. 3 Power Cards replace the discarded cards and are displayed face up on the board
    a. Rejoin Step 1

2b: User / CPU does not have enough Energy Cubes to purchase a Power Card

1. If the User / CPU does not have enough Energy Cubes to purchase Power Card, rejoin Step 1

Use Case #15: Player/CPU end of turn

Actor: User (Player) / CPU

Pre-Condition: User / CPU has resolved their dice

Post-Condition: User / CPU ends their turn

Events:

1. User / CPU passive Power Cards activate after end of turn.
2. If the User / CPU is in Tokyo City, system awards them with 2 Victory Points.

Extensions:

2a: User / CPU is in Tokyo Bay

1. User / CPU passive Power Cards activate after end of turn regardless of whether they are in Tokyo City, Tokyo Bay, or on the board
2. System awards User / CPU with 2 Victory Points

Use Case #16: Player/CPU performs smash attack

Actor: User (Player) / CPU

Pre-Condition: User / CPU rolls Smash face values

Post-Condition: User / CPU performs smash, resulting loss of Life Points for other players

Events:

1. User / CPU rolls Smash face values
    a. System calculates the total number of Smash symbols that were rolled
2. User / CPU performs a Smash attack
    a. System removes Life Points from other players accordingly

Extensions:

2a: User / CPU is in control of Tokyo City

1. User / CPUs outside of Tokyo City lose 1 Life Point

2b: User / CPU is in control of Tokyo Bay

1. User / CPUs outside of Tokyo Bay lose 1 Life Point

2c: User / CPU is on the board

1. User / CPUs in Tokyo City and Tokyo Bay lose 1 Life Point

2d: Other players are in the same location as the User / CPU performing the Smash

1. System does not remove Life Points from players in the same location as the User / CPU performing the Smash

Use Case #17: Player/CPU activates power card

Actor: User (Player) / CPU

Pre-Condition: User / CPU is in possession of a Power Card

Post-Condition: User / CPU activates Power Card

Events:

1. User / CPU browses through their Power Cards, if they have any
2. User / CPU selects a Power Card to use
    a. System processes Power Card’s functions
    b. System executes the Power Card’s functions

Extensions:

1a - 2a: “End of Turn” Power Cards

1. User / CPU with “End of Turn” activate after the buying phase
2. If User / CPU has multiple “End of Turn” Power Cards, the order of activation based off buy order

1b - 2b: “Discard” Power Cards

1. User / CPU with “Discard” Power Cards are activated once bought
2. System removes the card from the deck

1c - 2c: “Keep” Power Cards

1. User / CPU with “Keep” Power Cards remain in User / CPU deck
2. Effect of “Keep” Power Card is applied for the remainder of the game

1d - 2d: Mimics

1. User / CPU can now mimic one Power Card
    a. Power Card must be able to be mimicked

    b. System unlocks new effect of the mimicked Power Card

Use Case #18: Player/CPU wins by victory points
Actor: User (Player) / CPU
Pre-Condition: User / CPU has accumulated Victory Points
Post-Condition: User / CPU wins the game by scoring 20 Victory Points
Events:

1. User / CPU obtains a certain amount of Victory Points.
    a. System checks User / CPU’s Victory Point amount
2. User / CPU has 20 or more Victory Points
    a. System announces who won the game
    b. System end the game

Extensions:
None

Use Case #19: Player/CPU wins by last one standing
Actor: User (Player) / CPU
Pre-Condition: User / CPU is the only one with 1 or more Life Points
Post-Condition: User / CPU wins the game if they are the only one left with Life Points
Events:

1. User / CPU is the last player remaining
2. User / CPU has 1 or more Life Points
    a. System announces the last player standing as the winner

Extensions:
None

Use Case #20: Player/CPU restores life points
Actor: User (Player) / CPU
Pre-Condition: User / CPU rolls Heal on dice roll or uses a Power Card to heal
Post-Condition: User / CPU recover Life Points
Events:

1. User / CPU rolls Heal on dice roll. Refer to Extension 1.
    a. System checks if User / CPU is Tokyo City or Tokyo Bay.
    b. System restores the User / CPU Life Points by a given amount based on how many Heal symbols are present
2. User / CPU regains specified amount of Life Points

Extensions:
1a - 2a: User / CPU chooses to heal with a Power Card.

1. User / CPU browses deck and selects Power Card that restores Life Points
2. System restores specified Life Points

1b - 2b: User / CPU rolls Heal symbol(s) while in control of Tokyo City or Tokyo Bay

1. User / CPU can not restore Life Points from Heal symbol rolls while in control of Tokyo City or Tokyo Bay

Use Case #21: User loses all life points

Actor: User (Player)
Pre-Condition: User is attacked by another player via Smash or Power Card
Post-Condition: User loses all Life Points and is removed from the game
Events:

1. User has low Life Points
2. User is attacked by Smash die rolls or Power Cards
    a. System removes appropriate Life Points from User
3. User loses the remainder of their Life Points
    a. System removes User from the game
    b. System ends the game

Extension:
None

Use Case #22: CPU loses all life points

Actor: CPU
Pre-Condition: CPU is attacked by another Player / CPU via Smash or Power Card
Post-Condition: CPU loses all Life Points and is removed from the game
Events:

1. CPU has low Life Points
2. CPU is attacked by Smash die rolls or Power Cards
    a. System removes appropriate Life Points from CPU
3. CPU loses the remainder of their Life Points
    a. System removes CPU from the game
    b. System reevaluates number of players in the game

Extension:
1a - 3a: Player count falls to 4 or below

1. Total players in the game is 4 or below
    a. System removes User / CPUs currently in Tokyo Bay
2. Tokyo Bay is no longer accessible to User / CPUs

Use Case #23: Player/CPU leaves Tokyo City

Actor: User (Player) / CPU
Pre-Condition: User / CPU in Tokyo City gets damaged by a Smash and choses to yield
Post-Condition: User / CPU leaves Tokyo City
Events:

1. User / CPU is damaged by a Smash
2. User / CPU choses to yield Tokyo City
    a. System removes User / CPU from Tokyo City

Extension:
1a - 2a: User / CPU is in Tokyo Bay

1. User / CPU choses to yield control of Tokyo Bay
    a. System removes User / CPU from Tokyo Bay

Use Case #24: Player/CPU stays in Tokyo City

Actor: User (Player) / CPU
Pre-Condition: User / CPU is already in Tokyo City
Post-Condition: User / CPU stays in Tokyo City
Events:

1. User / CPU is in current control of Tokyo City
2. User / CPU chooses to stay in Tokyo City
    a. System leaves User / CPU in Tokyo City

Extension:
1a - 2a: User / CPU is already in Tokyo Bay

1. User / CPU chooses to stay in Tokyo Bay
    a. System leaves User / CPU in Tokyo Bay

Use Case #25: Player selects option to display player's power cards

Actor: User (Player)
Pre-Condition: User selects option to display current Power Cards
Post-Condition: System displays User's current Power Cards
Events:

1. User presses the Deck button
    a. System displays the User's current Power Cards

Extension:
None

Use Case #26: Player selects option to display game status

Actor: User (Player)
Pre-Condition: User selects option to display current game status
Post-Condition: System displays current game status
Events:

1. User presses the Status button
    a. System displays the current game status

Extension:
None

Use Case #27: Player selects option to pause the game

Actor: User (Player)
Pre-Condition: User selects option to pause the game
Post-Condition: System pauses the program
Events:

1. User presses the Pause button
    a. System pauses the program

Extension:
None

Use Case #28: Player selects option to exit game

Actor: User (Player)

Pre-Condition: User selects option to exit the game

Post-Condition: System closes the program

Events:

1. User presses the Pause button
    a. System displays Pause Menu
2. User selects the Exit option from the Pause Menu
    a. System closes the program

Extension:

None