

# **Use Cases**

## **Share Territories and Place Armies Initally**

Use Case Name: Share Territories and Place Armies Initally

Use Case ID: UC-1

Scope: ConKUeror-Phase 1

Level: User Goal

**Primary Actor:** System

#### Stakeholders and Interests:

Player: Wants to share equally territories and armies related to number of players.

Developer: Wants to protect equality and balance in the game by sharing armies correctly.

#### **Preconditions:**

· Game should have just started.

#### Postconditions:

- Each Player should have equal number of armies.
- All enabled Territories must be claimed by players.
- · All Armies should be placed.

## **Main Success Scenario:**

- 1. Each Player have replaced their armies on the board
- 2. The Game begins so now it is in running mode so Turn phases will start and it will be on the player who got highest number
- 3. The Player who got the highest number at the beginning get access to do an action and so the action starts.

#### **Extensions:**

- \*a. Inadequate number of available territories:
  - 1.System shows an error message stating that there are insufficient territories for the given number of players.
  - 2. Players modify the quantity of territories or players to fulfill the
- 1a. Unfinished army deployment:
  - 1. System identifies that a player has not positioned all their armies.
  - 2. System asks the player to position the outstanding armies before advancing to the subsequent turn.

2a.Incorrect territory selection:

1. Player tries to position an army on an invalid or already claimed territory.

2. System exhibits an error message and instructs the player to pick a valid territory.

## **Technology and Data Variations List:**

· Player uses mouse

### **Frequency of Occurrence:**

• In every start phase of the game. So this will be per game once.

## Pause/Resume Game

Use Case Name: Pause/Resume Game

Use Case ID: UC-2

Scope: ConKUeror-Phase 1

Level: User-goal

Primary Actor: Player

#### Stakeholders and Interests:

Player: Should be able to Pause (stop) and Resume (continue) the game anytime.

## **Preconditions:**

- Game must be open
- · Game must be already set up.

#### **Postconditions:**

· Game stops or resume

#### **Main Success Scenario:**

- 1. Game succesfully stops and the player who has the turn wait the resume response.
- 2. Game succesfully resumes and the player who had the turn continues to play.

## **Extensions:**

- \*a. The game application crashes or unexpectedly closes:
  - 1. Notify player(s) that the game state cannot be restored due to no save functionality upon relaunch.
- 1a. Player accidentally presses Pause button while the game is already paused:
  - 1. Ignore additional pause requests.
- **2a.** Player attempts to resume while another player is paused:
  - 1. Notify player they cannot resume until the player who paused the game resumes.

## **Frequency of Occurrence:**

• In every phase of the game players should be able to game and also resume it.

## **Game Setup**

Use Case Name: Game Setup

Use Case ID: UC-3

Scope: ConKUeror-Phase 1

Level: User-goal

Primary Actor: System

#### Stakeholders and Interests:

Player: Should be able determine their name and number of total players, and also chose a color.

Developer: Should associate the color with the certain player and also present available player counts.

#### **Preconditions:**

· Game should have just started.

#### **Postconditions:**

- Every player has a unique color and name attached with their army.
- · Number of player should be fixed

#### Main Success Scenario:

- 1. Game should show appropriate conditions like max and min number of players and also shows possible colors which is not already taken.
- 2. Game succesfully resume and the player who had the turn continues to play.

#### **Extensions:**

- \*a. Invalid input for player name, color, or count:
  - 1. Display an error message and prompt the user to correct the input.
  - 2. Do not allow the game to start until valid inputs are provided.
- \*b. A player attempts to choose a color that is already taken:
  - 1. Notify the player that the color is unavailable.
  - 2. Prompt the player to select a different color.
- \*c. The maximum number of players has been reached:
  - 1. Notify the player that no more players can be added.
  - 2. Disable the option to add more players.
  - 3. Also may set the count to a fix number

#### **Special Requirements:**

- Players should be able to easily navigate and understand the setup options.
- The game should store player preferences, such as names and colors, for future sessions.
- Tutorial for help button occurs which shows the detail information about the game in a label when pressed.

## **Frequency of Occurrence:**

• The game should have launched succesfully and it should per game and at the start of each game.

## Enable/Disable Mode

Use Case Name: Enable/Disable Mode

Use Case ID: UC-4

Scope: ConKUeror-Phase 1

Level: User-goal

Primary Actor: System

## Stakeholders and Interests:

Player: Should be able to disable and enable some territories/continents according to their preferences.

Developer: Should determine the limitations and implement the feature to disable and enable territories.

#### **Preconditions:**

· Game should be in building mode.

## **Postconditions:**

- The disabled territories will no longer be available for play.
- The disabled territories will not be distributed by the game.

#### **Main Success Scenario:**

- 1. Player requests to enable or disable certain territories.
- 2. System checks for any limitations or restrictions.
- 3. System enables or disables the requested territories accordingly.
- 4. Players continue to play with the updated territory settings.

#### **Extensions:**

1-2a. Player requests to disable too many territories or violate any predefined limitations:

- 1. System displays an error message notifying the player about the limitation.
- 2. System does not apply the changes.

## **Frequency of Occurrence:**

• Occurs when players want to customize the territories during the building mode.

## **Use Territory Card**

Use Case Name: Use Territory Card

Use Case ID: UC-5

Scope: ConKUeror-Phase 1

Level: User-goal

**Primary Actor: Player** 

#### Stakeholders and Interests:

Player: Wants to use the territory card to gain bonus armies or special abilities during the game.

Developer: Wants to ensure that the territory card functions as intended and does not cause any issues in the game.

#### **Preconditions:**

- Player must have a territory card in their possession.
- Player must be in the reinforcement phase of their turn.

#### Postconditions:

- Player gains bonus armies or special abilities as specified by the territory card.
- The used territory card is removed from the player's possession.

#### Main Success Scenario:

- 1. Player selects the "Use Territory Card" option.
- 2. System displays a list of available territory cards.
- 3. Player selects the desired territory card to use.
- 4. System applies the bonus armies or special abilities as specified by the territory card.
- 5. The used territory card is removed from the player's possession.

#### **Extensions:**

- **3a**. The selected territory card is not valid or has already been used:
  - 1. System displays an error message notifying the player that the card cannot be used.
- 3b. The player does not have any territory cards:
  - 1. System displays an error message notifying the player that there are no available cards.
- 4a. The reinforcement phase has ended:
  - 1. System displays an error message notifying the player that the card can only be used during the reinforcement phase.

#### **Frequency of Occurrence:**

- Occurs when a player has a territory card and wants to use it during the reinforcement phase of their turn.
- The frequency depends on how often players obtain territory cards during the game.

## **Exchange Armies**

Use Case Name: Exchange Armies

Use Case ID: UC-6

Scope: ConKUeror-Phase 1

Level: User-Goal

**Primary Actor:** Player

## Stakeholders and Interests:

Player: Should be able to change their armies' quantities and qualities for given strategic situation.

#### **Preconditions:**

- · Game must be on.
- User must have enough armies to do the exchange.

#### Postconditions:

• User successfully exchanges the armies soldier distribution.

### Main Success Scenario:

- 1. Player decides to change their existing troops.
- 2. Player either increases its army size sacrificing a superior army troop or player sacrifices army size and changes less significant peace to superior piece.

#### **Extensions:**

- \*a. Player cancels the exchange before confirmation.
  - 1. The system cancels the exchange, and the troops remain the same.
- 2a. Player does not have enough troops to exchange.
  - 1. Request is ignored, and troops do not change.

## **Frequency of Occurrence:**

• Every time the user who has to turn wants to exchange the troops in order to distribute its armies or launch an offense.

## **Decide Player Order**

Use Case Name: Decide Player Order

Use Case ID: UC-7

Scope: ConKUeror-Phase 1

Level: User-goal

**Primary Actor: Player** 

#### Stakeholders and Interests:

Player: All players roll a die the user who gets the highest number starts the round. Once the first player is decided loop continues until player order is determined.

Developer: Wants to ensure that the die roll functions as intended and does not cause any issues in the game.

#### **Preconditions:**

- · Game must be initialized.
- Number of players must be valid and determined.

## **Postconditions:**

· Player order is initialized.

#### **Main Success Scenario:**

- 1. Each player rolls a die.
- 2. The player with the highest roll goes first, followed by the second highest, and so on.
- 3. If more than one player gets the same highest value, they roll the die again until one player gets a greater value.
- 4. The order of play is established and communicated to all players.

### Extensions:

- \*a. Player disputes the result of the die roll:
  - 1. The players discuss the issue and decide to either reroll the dice or come to a mutual agreement.

- \*b. Technical issue occurs during the die roll:
  - 1. The system prompts the players to roll the die again.
- **4a**. Player leaves the game after determining the order:
  - 1. The system adjusts the order of play accordingly.

## **Frequency of Occurrence:**

- · At the beginning of every game
- After game setup is completed.

## **Launch Offensive**

Use Case Name: Launch Offensive

Use Case ID: UC-8

Scope: ConKUeror-Phase 1

Level: User-goal

**Primary Actor: Player** 

#### Stakeholders and Interests:

Player: Wants to gain additional land to win the game and crush their foes.

Developer: Wants to ensure that the offence functions as intended and does not cause any issues in the game.

#### **Preconditions:**

- · Game must be started.
- Offensive and defensive player should be neighbors in the map.
- · Offensive player must have armies.
- Armies should be in the border territory between offensive and defensive player.
- Total number of armies on that border territory must be greater in the offensive side at least by one.

### Postconditions:

- Offensive player gains the territory if the attack is successful.
- Defensive player loses the territory if the attack is successful.
- The number of armies in the attacking and defending territories is updated based on the outcome of the attack.

## Main Success Scenario:

- 1. Attacking player chooses the territory from which to launch the assault.
- 2. Attacking player picks the adjacent territory to target.
- 3. The system verifies if the attacking territory has a minimum of 2 armies and if the territories are directly connected.
- 4. The attacking player specifies the number of armies involved in the assault (maximum of 3 or the available armies 1).

- 5. The defending player designates the number of armies for defense (maximum of 2 or the available armies).
- 6. The system rolls dice for both attacking and defending players, then compares the results.
- 7. The system calculates the battle outcome, modifies the number of armies in both territories, and alters the territory control if necessary.

#### **Extensions:**

- 1a. Attacking player selects an inappropriate territory for attack or defense:
  - 1. System shows an error message and requests the player to choose suitable territories.
- 2a. Attacking player lacks adequate armies for initiating an assault:
  - 1. System shows an error message and asks the player to choose a territory with enough armies.

## **Frequency of Occurence:**

• Every time the player who has the turn that satisfies the conditions decides to launch an offence.

## **Conquer Territory**

Use Case Name: Conquer Territory

Use Case ID: UC-9

Scope: ConKueror-Phase 1

Level: User Goal

**Primary Actor: Player** 

#### Stakeholders and Interests:

Player: Wants to add the territory to its countries lands.

Developer: Wants to meet that goal without any crashes occur.

### Preconditions:

- · Game must be on.
- · User must have made an attack and be victorious.
- · There shouldn't be any enemy armies left on the territory

#### **Postconditions:**

- The conquered territory gets added to the user.
- The former owner of the territory lost the territory

## **Main Success Scenario:**

- 1. After a succesful attack user's troops enter the territory.
- 2. User obtains the territories card for the conquered territory.
- 3. The player who loses the territory loses armies on that specific territory.
- 4. Conqueror user choses how many troops to station on the conquered territory
- 5. Territories color changes to conqueror's color
- 6. User obtains the conquered territory card.

#### **Extensions:**

- 3a. Defense player has existing armies in the territory.
  - 1. Territory cannot be captured.
- **5a.** Territory does not change colors after conquering occurs.
  - 1. Game crashes and must be restarted.

#### **Frequency of Occurrence:**

 Each time users makes a consecutive successful attack and demolishes enemy troops completely from a territory.

## **Use Army Card**

Use Case Name: Use Army Card

Use Case ID: UC-10

Scope: ConKUeror-Phase 1

Level: User-goal

**Primary Actor: Player** 

#### Stakeholders and Interests:

Player: Wants to use the army card to gain advantage during the game.

Developer: Wants to ensure that the army card functions as intended and does not cause any issues in the game.

## **Preconditions:**

- Player must have an army card in their possession.
- Player must be in a phase of their turn where the card can be used.

#### Postconditions:

- Player gains advantage or benefit as specified by the army card.
- The used army card is removed from the player's possession.

## Main Success Scenario:

- 1. Player selects the "Use Army Card" option.
- 2. System displays a list of available army cards.
- 3. Player selects the desired army card to use.
- 4. System applies the advantage or benefit as specified by the army card.
- 5. The used army card is removed from the player's possession.

#### **Extensions:**

- **3a.** The selected army card is not valid or has already been used:
  - 1. System displays an error message notifying the player that the card cannot be used.
- 3b. The player does not have any army cards:
  - 1. System displays an error message notifying the player that there are no available cards.

- 4a. The phase of the player's turn does not allow for the use of army cards:
  - 1. System displays an error message notifying the player that the card cannot be used in the current phase.

## **Frequency of Occurrence:**

- Occurs when a player has an army card and wants to use it to gain advantage or benefit during their turn
- The frequency depends on how often players obtain army cards during the game.

## Pick & Use Chance Card

Use Case Name: Pick & Use Chance Card

Use Case ID: UC-11

Scope: ConKUeror-Phase 1

Level: User-goal

**Primary Actor: Player** 

#### Stakeholders and Interests:

Player: Must pick and use a chance card at the beginning of their turn to gain advantage during the game.

Developer: Wants to ensure that the chance card functions as intended and does not cause any issues in the game.

#### **Preconditions:**

- There must be chance cards available in the game.
- Player must be in the first phase of their turn where chance cards can be used.
- Player must draw a chance card before being able to use it.

#### **Postconditions:**

- Player gains advantage or benefit as specified by the chance card.
- The used chance card is removed from the player's possession.

## Main Success Scenario:

- 1. Player draws a chance card at the beginning of their turn.
- 2. System displays the drawn chance card.
- 3. Player selects the "Use Chance Card" option.
- 4. System applies the advantage or benefit as specified by the chance card.
- 5. The used chance card is removed from the player's possession.

#### **Extensions:**

- ${}^{\star}a$ . The phase of the player's turn does not allow for the use of chance cards:
  - System displays an error message notifying the player that the card cannot be used in the current phase.
- **3a**. The drawn chance card is not valid or has already been used:

- 1. System displays an error message notifying the player that the card cannot be used.
- 3b. There are no chance cards available:
  - 1. System displays an error message notifying the player that there are no available cards.

## **Frequency of Occurrence:**

- Occurs at the beginning of each player's turn when they draw a chance card and must use it to gain advantage or benefit during the game.
- The frequency depends on how many players there are in the game and how many chance cards are available.