American Karuta

Milestone Guide

Jake Ellenberg, Evan Schipellite

Written by: Evan Schipellite

Introduction:

Karuta is a Japanese card game in which two players face each other in a match that requires precision, speed, and memorization. Each player sits in front of a set of face-up cards in a series of rows. Each player has their own side and ownership of the cards before them. During play, a narrator usually reads from a separate stack of shuffled cards. These cards represent the beginning lines for a poem, while the cards before the players represent the second lines. In order to score, either player must attempt to locate and claim the corresponding card by utilizing their knowledge of the poems and memorization of the board to dictate the correct option.

However, given the nature of memorizing about one hundred different poems in order to even begin the game, this game can be a bit offsetting and challenging for newcomers. Therefore, this milestone serves to provide a simplified, or dumbed-down, version of the game, hence force called: American Karuta.

Design:

This imagining of the game serves to provide two players with the ability to play a functional variation of Karuta on two separate computers. The game will have simple lobby and search feature to create and locate games. At the end of each round, the winner will be displayed, and the game will return to the main lobby. Essentially, the first player to lose all of their cards wins the game.

At the start of the game, each player will be presented with their side of the field. This will be displayed by approximately 10-15 cards that represent their side. All cards will be randomly selected from a typical 52-card deck. At the top of their screen, they will also have access to the view of an equivalent number of cards representing their opponent's side. The left area will convey the 'narrator' deck and currently active card. The right area will convey the current score between players.

Player 2

Player 2:

Cards Left: 5
Cards Acquired: 9
Cards Taken: 4

Active Card

Cards Remaining: 6

Player 1

Player 1:

Cards Left: 5
Cards Acquired: 11
Cards Taken: 5

After a brief 10 second start phase, provided for brief memorization and examination of the respective sides, gameplay begins when the active card is revealed. A countdown timer next to the deck will convey when this card will be revealed, starting at 5.

Once a card is revealed, both players must locate and click on the corresponding card. For example, if the Seven of Spades is revealed, the players must find the card on either side of the field. During this process, one of three events may occur.

Card Acquisition:

If the owner grabs the card, it is removed from their side and they gain an acquired card.

If the opponent grabs the card from the owner's side, the card is removed from the field and the opponent gains an acquired card. Furthermore, the opponent then selects one of their cards and gives it to the original owner.

If the card is not on the field, it is called a 'dead card' and play proceeds onwards. However, the game will wait an additional amount of time before continuing gameplay. This is related to the fault rule.

Faulting:

A player can be penalized for a few basic actions. If a player 'claims' a card that is not the correct card, at the end of the round the opponent is allowed to give them an additional card. This means that if a card is presented that is not on the field, and a player still attempts to click on a card, the opponent must send a card their way. This can only occur once each round.

Winning:

Once a player reaches zero cards, they win the game and gameplay proceeds to the end screen to declare the winner. From there, players return to the lobby and can continue with another round. While notable statistics, the only win conditions involves the clearing of the field, as cards stolen and acquired are merely a means to convey active game stats.

Milestone:
- Menu System
  - Title Screen
    - Create Game
    - Join Game
  - Allows player to host / join lobbies
- Network Base
  - Setup the basic packet system
  - Host – Client (Treat host as server)
    - Host manages conflicts
    - Clients handle inputs
    - Host takes into account packet send times
      - This will assist in resolving conflicts more fairly
        - Packet times can convey which player acted faster
- Card Generator
  - Returns a shuffled group of cards
    - Users may enter the amount to return
  - Contains a maximum of 52 cards to returns
    - There will be no repeats in the returned list
- Narrator
  - Holds list of 52 cards from Card Generator
  - Can shuffle the deck
  - Contains two piles
    - Current Deck: Cards that have not been revealed
    - Discard: Cards that have been revealed
  - Compares active cards
    - Knows if either of the players has the revealed card
      - If a revealed card is presented
        - Narrator waits until players have found the card
      - If the revealed item is a dead card
        - Narrator waits a set amount of time before proceeding
  - Once a player finds a card the narrator begins a countdown
    - This countdown will likely be between 5-10 depending on testing
    - At the end of countdown, the next card is revealed
  - Displays the remaining cards in the deck for the players
- Player
  - Holds list of 15-25 cards
    - At the beginning of each game
      - Requests the set amount of cards from the Card Generator
      - Cards are placed randomly in front of the player
  - The player owns their cards
    - Game rules favor the owner of cards on ties
    - Game rules reward opponents for stealing the owner's cards
  - The player keeps track of:

- ▪ Cards left
  - • Cards visualized on their side of the field
- ▪ Cards Acquired
  - • Cards claimed from both sides
- ▪ Cards stolen
  - • Cards specifically claimed from the opponent's side
- o Player Score
  - ▪ Used to properly write and display scores on the screen
- • Resolver
  - o The Host Resolver decides round ends
    - ▪ Receives input from Host and Client
  - o On Claim:
    - ▪ On Client Claim:
      - • Rewards Client with card
    - ▪ On Host Claim:
      - • Waits a brief interval
        - o Saves Host time stamp
        - o Saves Client time stamp if available
      - • Rewards Host with card if:
        - o Client has no time stamp
        - o Client time stamp is after Host
    - ▪ On Player Fault:
      - • Notes Player fault
      - • At the end of round,
        - o Moves round to temporary fault state
        - o All players who faulted pass a card