SOFE 2720U
Principles of Software and Requirements Engineering

Final Project
Rummy-O Game

Requirements

Lab Week 1 Group 7

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Requirements List

1. Basic Gameplay

The basic requirements and rules of the Rummy-O game. There are four sets of tiles distinguished by four colors. Each set has tiles numbers from 1 to 13. There should also be 2 joker tiles in the deck, which means the deck should have 54 tiles.

1.1 Tile deck shuffling

Tiles in the deck should be shuffled in random order. The shuffling should occur when a game is started and after the start player selection has occurred.

1.2 Tile selection

Each player selects a random shuffled tile turn by turn starting from the first player until each player has 14 tiles in their hand.

1.3 Start Player Selection

Players are given a tile each from the shuffled tile deck and the player with the lowest tile goes first. The players will take turns in clockwise direction from the start player.

1.4 Initial meld

The starting run/set value placed by every player should add up to 25. These 25 points can be achieved by making runs and sets. A run is a sequence of numbers of the same number, and a set is a collection of the same number in different colors. The player is then supposed to keep playing tiles until they eliminate all the tiles they hold in their hand. This allows the player to start re-melding tiles starting from the next turn.

1.5.1 Re-melding tiles

Players can modify current melds by adding to them or removing tiles from a meld on the board to create a new meld by adding tiles from their own hands. Tiles on the board can be re-melded in any way as long as the end results are valid runs and sets.

1.5.2 Replacing Jokers

A joker can be replaced in a meld on the board with a tile from the player's hand. The joker then can take any value and be used to complete sets or runs. The joker has to be played during the same turn.

1.6 Win condition

The win condition occurs when all the tiles in a player's hand have been eliminated. The first player to eliminate all the tiles in their hand wins the game. This can be done by making runs and sets.

2. Multiplayer Gameplay

The multiplayer aspect of the game is that 2 to 4 remote players can play the game on a server.

2.1 Remote gameplay

Players should be able play on seperate devices. The players do not need to be on the device inorder to play in the same game.

2.2 Turn time limit

Each player has at most 1.5 minutes to play their turn. This feature will make sure if a player is away from the keyboard the game can still continue between the other players until this player returns.

3. Player Accessibility

Certain features implemented to improve user experience. These features should help the user play the game more easily by eliminating any unnecessary aspects such as the maintenance of player hand tiles.

3.1 Auto Shuffling of player hand

Rearranging the tiles in the players hand to show possible runs and sets automatically at the start of each turn. This takes away the unnecessary requirement of the player to sort their tiles to easily see the plays they can make.

3.2 Auto Shuffling of board

The board should shuffle all the tiles to appropriate locations after each turn. This will help all the players to easily see and decide their next play.

3.3 Game controls

Mouse inputs for gameplay (drag and drop tiles on the board). The mouse is more efficient and convenient to use to play this game than a keyboard as it would be more complicated and challenging for the user.

4. User personalization

Players can personalize aspects of the display of their game to make the game more visually suitable to their needs.

4.1 Board Theme

Players can customize the color scheme of the background of the game board.

4.2 Player Identity

Players can personalize their in-game avatar and their in-game name.