Use Case 2.1: Customize Game

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Characteristic Information

Goal in Context: The host should be able to select a new wordlist, set different letter distributions and scores to customize his gameplay experience.

Scope: Game

Level: Subfunction

Primary Actor: User

Stakeholders & Interests:

- ❖ User: Wants to adjust the game settings to play the game the way he wants.

Preconditions: User has started the application and created a game lobby

Success Guarantee (Postconditions): Game user has his wanted dictionary, letter distribution, and scoring for the upcoming game., can see his information, and switch between profiles, and finally delete a profile.

Trigger: User navigates through the GUI and clicks on 'Create Game Lobby"

Main Success Scenario

1. User clicks on the button to change the wordlist.
2. User selects a wordlist.txt file, which they like to import.
3. The words in the file are loaded in
4. User sets distribution of each letter
5. User sets score of each letter

Extensions

*a.   At any time, System fails:
  1. System reopens system, logs in, and requests recovery of prior state.
  2. System reconstructs prior state.
     2a. System detects anomalies preventing recovery: System signals error and records the error. System starts new tutorial.
  3. Warning sign that the game crashed appears.
1a. Alternative Path
     1.   User uses the default the wordlist, which is already set up
2a. The wordlist is not a .txt file:
     1.   System warns that the file type is not suitable.
     2.   System asks for a file again.
2b. The words in the list itself are not ordered:
     1. System warns that the file is not suitable.
     2. System asks for a file again.
2c. The first word in each line is not the word to use:
     1. System warns that the file is not suitable.
     2. System asks for a file again.

Technology & Data Variation List:

For the dictionary we simply use a .txt file in which the first word of every line (separated by whitespaces) is the word to use.
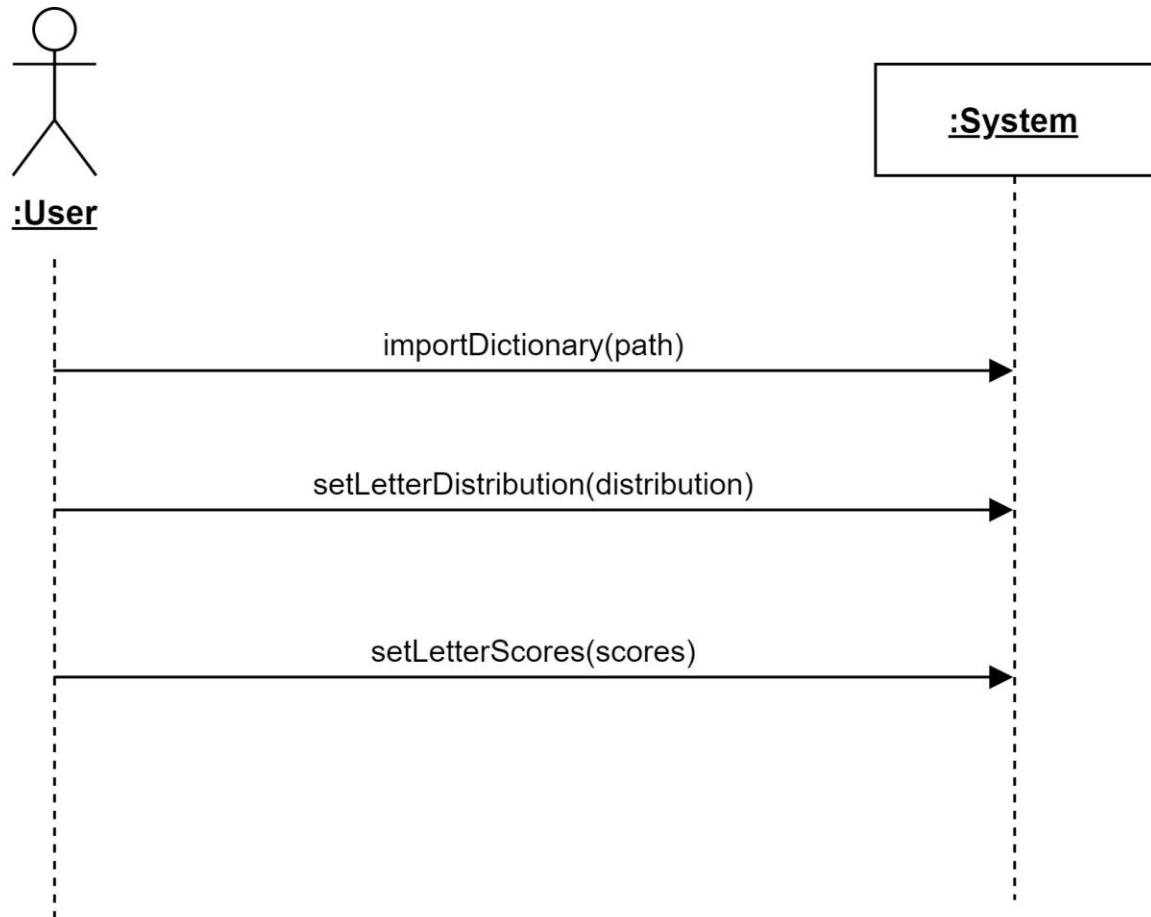
Optionally meaning, connections and variations of the word can be added to the word in the same line from the second word onwards

Due Date

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System Sequence Diagram

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Operation Contracts

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Contract 2.1: importDictionary

Operation: importDictionary (path : String) : void

Cross References: UC 2.1: Customize Game

Preconditions:

- User had created a game lobby
- User was requested to select the path of the dictionary file they want to load in
- Given path exists and file at given path is formatted correctly

Postconditions:

- Dictionary instance dict was created
- Words in the file at given path were associated with dict

Contract 2.2: setLetterDistribution

Operation: setLetterDistribution (distribution : int[]) : void

Cross References: UC 2.1: Customize Game

Preconditions:

- User set distribution number for each letter in the GUI
- User clicked 'Apply'

Postconditions:

- game.letterDistributions was disassociated from game
- *Distribution* was associated with game

Contract 2.2: setLetterDistribution

Operation: setLetterDistribution (scores : int[]) : void

Cross References: UC 2.1: Customize Game

Preconditions:

- User set score for each letter in the GUI
- User clicked 'Apply'

Postconditions:

- game.letterScores was disassociated from game
- *scores* was associated with game