

Requirements and preliminary UML class design

Project Name: SLUdle

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Overview

A unique twist on the classic word guessing game Wordle, infused with the spirit of Saint Louis University (SLU). While retaining the core mechanics of Wordle, SLUdle offers an additional special mode that allows players to guess SLU related words from a customized word bank. The players must guess with a certain number of attempts. The game keeps track of the player's score distribution (aka. the number of guesses per round), and the player's winning streak.

Functional Requirements

FR1: The player chooses to play in "Normal" or "SLU" mode.

- A. Normal Mode - the player has 6 guesses to guess a 5 letter word.
- B. SLU Mode - the player has to guess a SLU related word. The word will not necessarily be 5 letters. The player can see how long the word is via the grid. As a rule, if the word is x letters long, the player has $x + 1$ guesses.

FR2: The player can also choose to toggle on "Hard Mode", meaning when the player discovers a hint, they have to use it in subsequent word guesses.

FR3: The player is presented with the game grid and an onscreen keyboard.

FR4: The player can try to guess the secret word by typing with the onscreen keyboard and pressing enter.

- A. The players guess has to be the same length as the secret word
- B. The guess has to be a real word
- C. If hard mode is enabled, the player has to use any discovered letters/letter placements previously discovered

FR5: If the player's guess contains a letter in the secret word, in the same letter position as in the secret word, the letter turns SLU Blue on the grid and on the keyboard.

FR6: If the player's guess contains a letter in the secret word, but not in the correct position, the letter turns orange on the grid and on the keyboard.

FR7: Letters used by the player that are not part of the previous 2 cases turn dark gray on the grid and keyboard

FR8: If the player guesses correctly, all letters turn SLU Blue and a winning message is displayed and the player can choose to play again.

FR9: If the player fails to guess in the given number of guesses, a losing message is displayed

FR10: The player's score distribution and winning streak are displayed.