Wordle++

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Introduction

The goal of this project is to revamp the viral game Wordle, by adding different customizable options to the game, such as, word obscurity, word length, and number of guesses to create a more engaging and more exciting version of the game. We will also add aesthetic elements to the page when different events happen, such as the screen shaking when you guess the word wrong and confetti when the word is guessed right. Ultimately, we would like to make the game feature a live competition aspect, where multiple users compete on a puzzle. Our key success criteria would be the customers favorability of these extra features since this is what we are adding to the already existing game world.

Roles

- Development Lead (Ricky)
- Buildmeister (Tyler)
- Architect (Mateusz)
- Developers (Jeff, Tyler, Mateusz, Ricky)
- Test Lead (Ricky)
- Testers (Jeff, Tyler, Mateusz, Ricky)
- Documentation (Jeff, Tyler, Mateusz, Ricky)
- Documentation Editor (Jeff)
- Designer (Jeff)
- User advocate (Mateusz)
- Risk Management (Mateusz)
- System Administrator (Tyler)
- Modification Request Board (Jeff, Tyler, Mateusz)
- Requirements Resource (Ricky)
- Customer Representative (Jeff, Tyler, Mateusz)
- Customer responsible for acceptance testing (Mateusz)

Method

- Software
    - Browser (Google Chrome, Safari) - used to test and debug the code
    - Visual Studio Code - used to write the code

    - Languages: HTML, JavaScript ES6, Typescript 4.6.3, CSS
    - OS - Cross-platform
    - Github - to share and collaborate
    - Software/libraries used:
        - Parcel JS - v2.4.0 - bundler, minifier, polyfills, typescript compiler
        - Firebase - v9.6.10 - library wrapper over Firebase API
    - Code conventions
- Hardware
    - Development: Desktop, Windows and Mac
    - Target: All browsers on mobile and desktop
- Back Up Plan
    - Game is already functional, all code is backed up on Github
- Review Process
    - Code Reviews:
        - Done before major/minor changes are committed to main
        - Informal, one person from team read over and discuss
        - Development lead will resolve any outstanding issues
    - Meetup weekly to discuss:
        - What has been added
        - Any bugs that have been discovered
        - New ideas to add to our game
        - To split up what needs to be done
- Build plan
    - Git used for revision control system
    - Github used as the repository
    - Code is worked on consistently, main branch is always presentable
    - Main branch is automatically deployed to Netlify for hosting
    - Final Deadline: Apr 18, 2022

Virtual and Real workspace

- Github, Zoom meetings, SMS group chat

Communication Plan

- Meet weekly on Tuesdays where we discuss the project, tasks, features to add
- Meet on Wednesdays before our demo date to work on our presentation
    - Meeting includes discussing slides, version to demo
- Status and issue meeting happen on Tuesday
- Issues meetings and emergencies are communicated via SMS messaging, group chat

Timeline and Milestones

- Implemented:
    - Base html and css code developed for the game board - 2/11/2022
    - Game board will generate on command - 2/18/2022
    - Victory and defeat board added on win or loss - 2/19/2022
    - Word Length, word difficulty and number of guesses features added - 2/23/2022
    - Keyboard under gameboard was created and functioning - 3/10/2022
    - Timer was added - 3/17/2022
    - Stats page was added - 3/24/2022
    - Scoreboard added - 3/28/2022

    - Optimized for mobile use - 4/01/22
    - Background option added - 4/13/22
    - Analytics added, back button and about page - 4/16/22

Testing Policy

- Actively tested by multiple members with their local files to ensure the game is not breaking
- Tested on multiple web browser including Chrome and Safari

Risks

- No user data besides inputted name for scoreboard/multiplayer is collected
- All data is kept in Google Firebase, possible authentication will be Firebase as well

Assumptions

- Browser will properly run/execute the game (browser updated last two years)
- Players will know English, game dictionary is only in English
- Game will be presentable and placed into maintenance by project deadline

Distribution List

- Mateusz Marciniak
- Tyler Reinhart
- Jeffery Fitzimmons
- Richard Kirk
- Professor Oyeleke
- Teacher Assistants

Documentation Plan

- Key parts of code will be written in Typescript, self documenting
- Comments will be left over code, but code should not need to be commented heavily
- Github README will contain development environment setup instructions