Word Scramble Mid-Way Progress Report

Alexa Alcantara, Brendan Fiorani, Niels Lashbrook

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So far, our group has been able to ideate and design a basic foundation for a Java-based Word Scramble game. The idea of the game will to be putting a user up against the clock to decipher and unscramble words and phrases for points. We will utilize a database to store pre-determined phrases that will be pulled into the program and dynamically displayed to the user. We will develop algorithms for both scrambling the phrases and determine a point value for each phrase. This will keep the game both dynamic and random, but also procedural and consistent. We have also decided to implement a difficulty system for the program which will affect variables such as time, point values, and phrases to be scrambled. This way, our program can remain dynamic among users of different skill levels.

While we have made good progress so far, we still have a fair amount of work to do. Our UML class diagram is up to date with the current classes already built, but as we continue to add functionality and learn more about the structure of a JavaFX project, this aspect of our project will remain in flux. Finalizing the UML diagram and developing an understanding of project structure of this scale and custom-built complexity is our first priority as a team.

In terms of smaller, more individual assignments within this larger project, we can easily divide and conquer these. We have yet to assign specific members to each functionality, but the list of remaining task items includes, but is not limited to:

1. Algorithm development for scrambling phrases and calculating point values.
2. Finalizing user interface and experience elements.
3. Pulling phrases from a phrase database and writing user scores to a score database
4. Adding additional models, views, and controllers for GameStart, GameOver, and Leaderboard
5. Implementing custom .css styling to increase visual distinctiveness for our program
6. Add unit tests, specifically for algorithms
7. Implement necessary design patterns for security and efficiency reasons

Our goal is to continue meeting as a group so we can work while all together. So far, we have been utilizing a remote GitHub repository for managing the project, its code, and its associated files. Continuing to develop this repository will allow us to work whenever we aren’t available to peer program.