

## PROJECT FUNCTIONALITIES - Hello Wordl

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Our project, called Hello Wordl, is a word guessing game. At a high level, it enables users to guess a word in 6 tries and the program gives the user hints based on their guess. Specifically, this project has numerous functionalities from the beginning to end. To start the game, the user presses the start button on the title page, which brings them to the login page. Here, the user can either add a new account or log in, both with their username and password, which is stored in a text file. If the user logs in with the current information, they reach the main menu, which has 6 different functional buttons - ones that take them to the easy mode, the hard mode, instructions, settings, statistics, and the start screens.

If the user goes to the instructions screen, they will see an image of the instructions (we will resize this for the next version). If they go to the settings page, they see 4 different buttons - one to change the theme of the game between dark mode and light mode, one to look at the credits (bringing them to a screen with the APA citations), and the other two to go back to the main menu and start page. They can also go back to the start screen through the main menu. On the other hand, the user can go to the statistics page to view account information regarding the games they've played. This information includes how many games they've played and won for easy mode and hard mode, along with the probability of them winning a hard mode and easy mode game (with that data).

Speaking of easy mode and hard mode, in the easy mode, the user has to try to guess a valid five-letter word on their keyboard and they press enter to guess (currently you need to press "[" on the keyboard, but we will fix that later). After each guess, the color of the tiles will change to show how close your guess was to the word. If the letter in the user's word is in the answer word BUT isn't in the right spot, then the letter turns yellow. On the other hand, if the letter in the user's word is in the answer word AND is in the right spot, then the letter

turns green. Otherwise, it remains gray. There is also a 'harder level mode' for guessing 7-letter words instead.

If the user gets it in 6 tries, then they go to the congratulations screen and if they don't they go to the loser screen, which displays the word/answer. In both cases, the statistics log updates. Furthermore, both these screens show the same buttons, where they can exit the program, go back to the main menu and pick a game mode again, or view their statistics.

Note: version 1 has the title page and main menu with all options along with the basic classes and the client class Main. It also has the main functionality, but we need to make the algorithm for the easy mode more efficient because there are a few bugs. However, Shirdel and I are confident that we will be able to iterate on these for the next version.