

Hearts Of Diamond - PM Angela Zhang (Inky), Jonathan Wu (Loki), Jesse Xie (Polly)  
SoftDev

P02 -- Design Document for 'Wordle Mania!™'

2022-03-07

Time Spent: 3.5 hours

### Project Description:

Our project, Wordle Mania!™, is a unique take on the hit game Wordle, in which players try to guess as many of the randomly generated 5 letter words correctly as possible. In our version, players will have two versions that they can select - a default mode, zen mode, rude mode, and a hard mode. In all versions, players will try to complete as many words as possible in the time allotted. Depending on the mode, players may gain or lose time based on how they play. Players will compete for highscores for their own enjoyment or for a leaderboard where players may input a desired name after a session.

### Wordle Mania!™

#### Features of all modes

- Ability to change the color ways of the wordle screen from default pictures
- Leaderboard feature for 'finishing' your session
  - Upon completion, the user can input a username of their choice to represent themselves on the leaderboard.
  - No login or sign up !!
- The timer begins when you enter your first guess.
  - The words will always be five letters, and do NOT include plural words.
    - Ex: words, picks, bikes
- Much like the original Wordle, green tiles indicate that the letter is in the correct spot. Yellow tiles indicate that the letter is in the word but in the wrong spot. Gray tiles indicated that the letter is just not in the word.

- 500 points for completing a word
- 200 bonus points for 3 or less tries (  $\leq 3$ )
- 100 points per green letter when time runs out
- Endless. The words keep coming and there isn't a 'daily wordle' for the user to complete.
- If you navigate to a different part of the website while the game is running, the session is not saved and your current score/game will be wiped.
- Default Mode
  - Chill background
  - Time based (3 minutes)
  - Gain time for completing fast (1 minute)
- Hard Mode
  - Intense background
  - Time based (1.5 minutes)
  - Gain less time for completing fast (30 seconds)
  - Penalties for making bad guesses
    - Guessing the same word again or with letters that you already know do not exist in the word removes 10 seconds per error.
- Rude Mode (recommended by Big Birds)
  - Yells at you if you mess up (maybe a desk slam sound?)
- Zen Mode (recommended by Big Birds)
  - No timer, peaceful ?

#### "Default" Page : The Default Mode Game of Wordle Mania!™

- Will act as the "landing page" for this website
- The player can begin playing upon first guess
- The player can navigate to the other parts of the website.

#### Hard Mode Page

- Like the default page, the user can begin playing upon first guess

- Can also navigate to the other parts of the website

#### Rude Mode Page

- Like the default page, the user can begin playing upon first guess
- Can also navigate to the other parts of the website
- Every wrong guess plays a sound effect
- If the player manages to fail guessing the word by the end of six tries, a special sound effect plays.

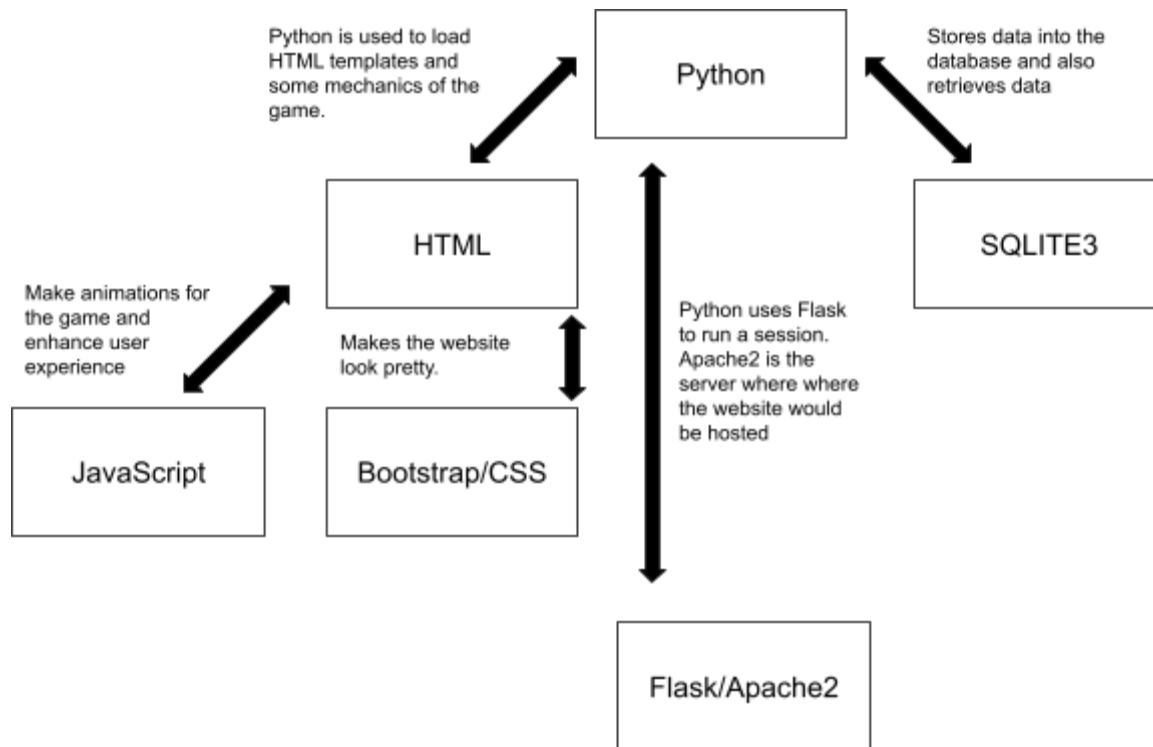
#### Zen Mode Page

- Like the default page, the user can begin playing upon first guess
- Can also navigate to the other parts of the website
- There is no timer, and it's endless until the user doesn't want to play anymore.

#### Leaderboard Page

- Displays the leaderboard from the ascending order of the user with the highest points score. This is separated into different leaderboards, the hard mode, zen mode, rude mode, and default mode.
- Can also navigate to the other parts of the website.

#### Component Map:



#### Project Components:

- SQL3
  - We will use SQL3 to store leaderboard information in a table, and interact with flask accordingly to generate the leaderboard html page.
- JavaScript
  - We will use JavaScript to add animations to the website (maybe slowly turning the words green or yellow or gray) and the game in order to enhance the user experience. It will also be used for functionality whenever the user clicks on specific parts of the game.
- Python
  - This will be used to add functionality to the website by programming the game mechanics and other features of the website.
- HTML
  - Provides the text/skeleton of the website.
- Bootstrap/CSS

- We will use bootstrap as our framework to create a visually pleasing and user friendly website. We hope to use the cells and buttons already provided in bootstrap.
- Flask/Apache2
  - Flask will allow the use of templates and session variables, and apache will be the server that our website will be hosted on.

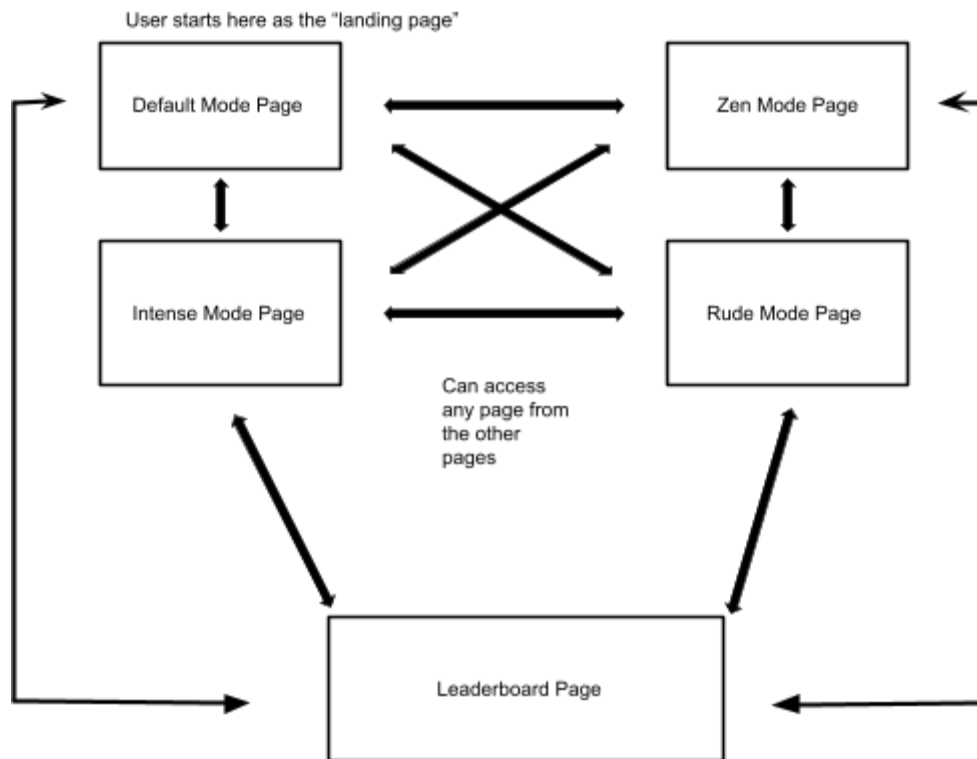
#### Database Organization:

- Leaderboard table

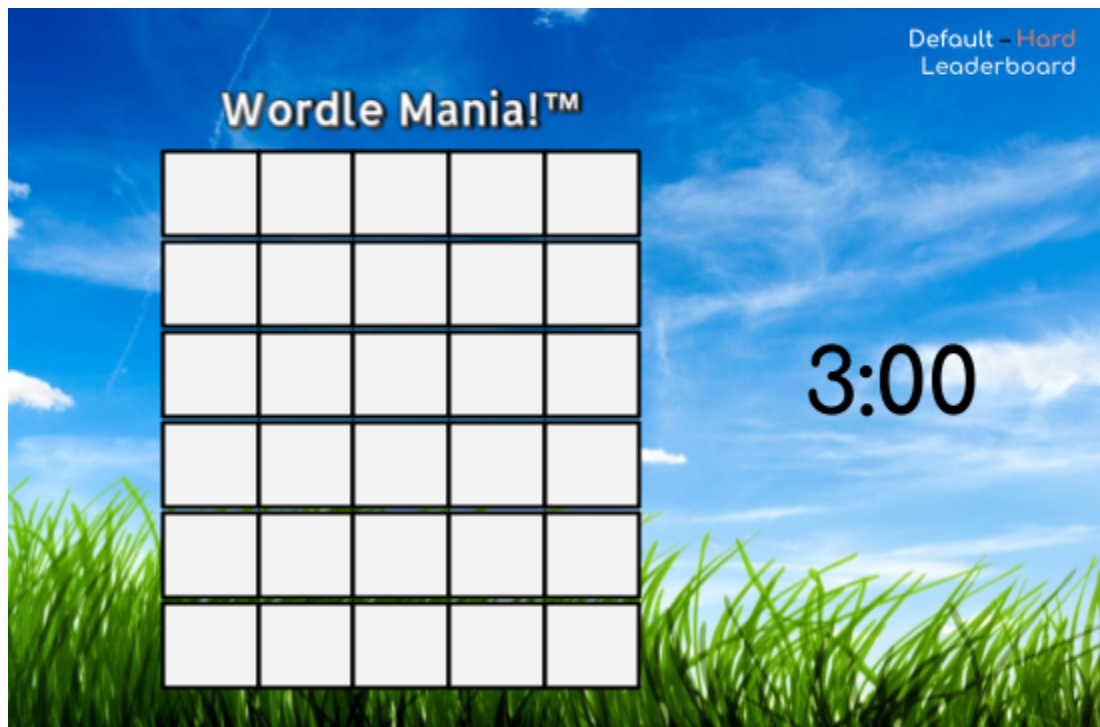
Username (TEXT)	Score (INTEGER)
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- Possible five letter words will be stored in a text file (.txt)
  - We will use the wordle list but maybe remove words we find to be too easy or too difficult (clarifying for team PPP Mode)
- Other variables, like the words already guessed, will be saved as session variables.

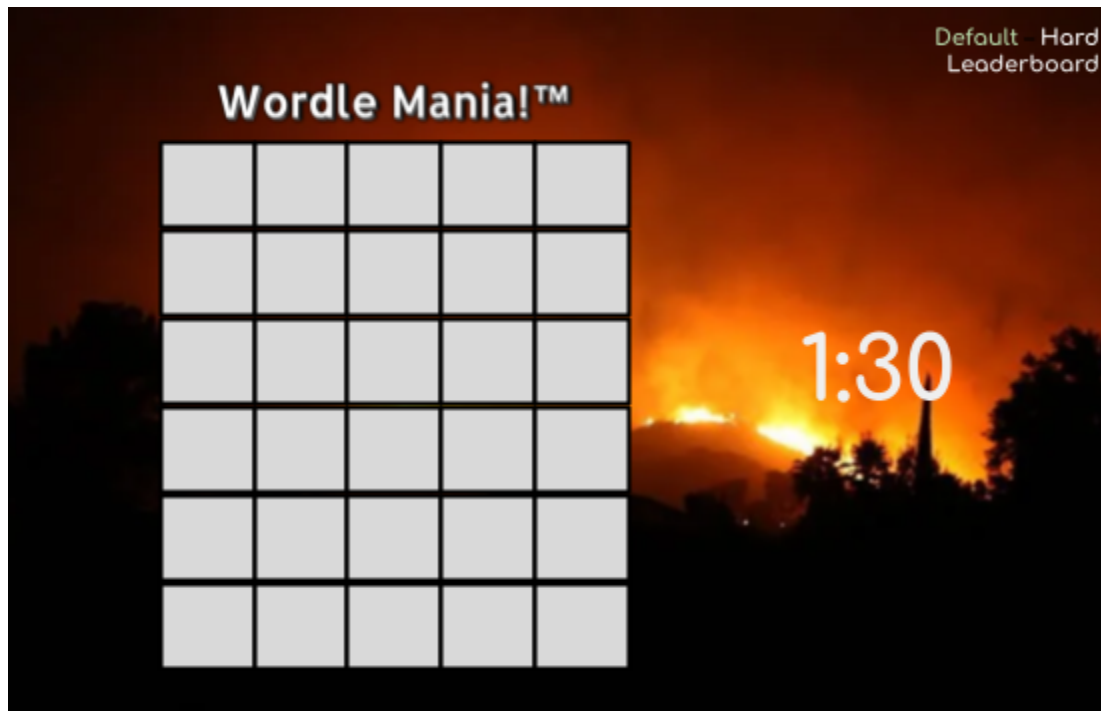
#### Site Map:



Site Templates:  
(Default)



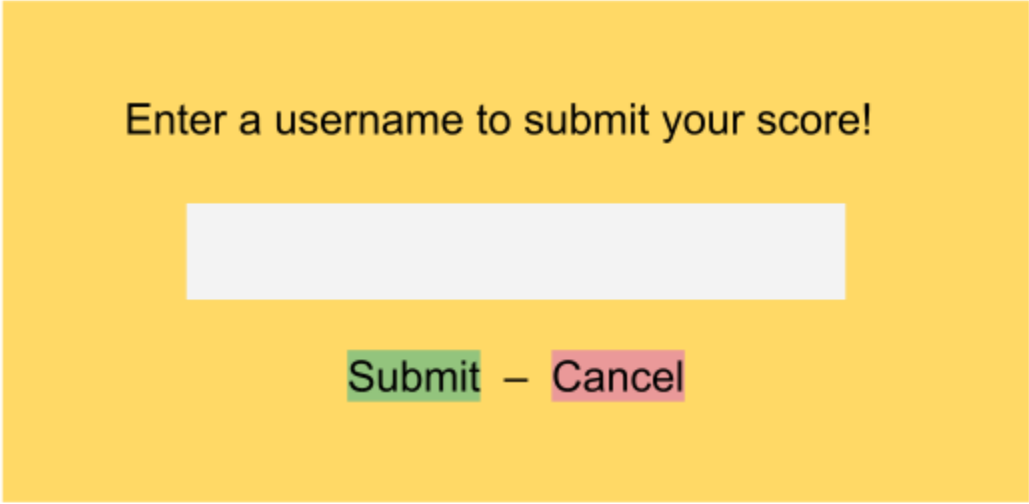
(Hard)



## LEADERBOARD

Normal Mode <- press to toggle normal/hard mode

#1	Billy	2800 points
#2	Bill	2600 points
#3	Willie	2500 points
#4	Will	2000 points



Enter a username to submit your score!

**Submit** – **Cancel**

APIs: (from Big Birds review)

- None in use!

Task Allocation:

Angela (PM): bootstrap and python

Jonathan: sql/python and css/bootstrap

Jesse: html and javascript

Target Date:

March 28, 2022