

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 four versions that they can select - a default mode, zen mode, chaos 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
- Info toggle on the right of the navbar
- Background music !
- 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.
- 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.
- 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.
- Score and time is shown on side, including end game early button and a keyboard under the grid with the leftover characters
- Default Mode
  - Kahoot music

- Time based (120 seconds)
- Gain time for completing fast (1 minute)
- Hard Mode
  - Heavy Metal music
  - Time based (90 seconds)
  - Gain less time for completing fast (30 seconds)
  - Penalties for making bad guesses
    - Guessing with letters that you already know do not exist in the word removes 10 seconds per error.
- Chaos Mode (recommended by Big Birds)
  - Megalovania (music from undertale)
  - Time based (60 seconds)
  - Gain even less time for completing fast (15 seconds)
  - More difficult and fast paced than hard
- Zen Mode (recommended by Big Birds)
  - Peaceful music (lofi zen)
  - No timer, play however long you want

#### “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.
- Longest timer available with longest added time

#### 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

#### Chaos Mode Page

- ^
- Shortest timer available with shortest added time

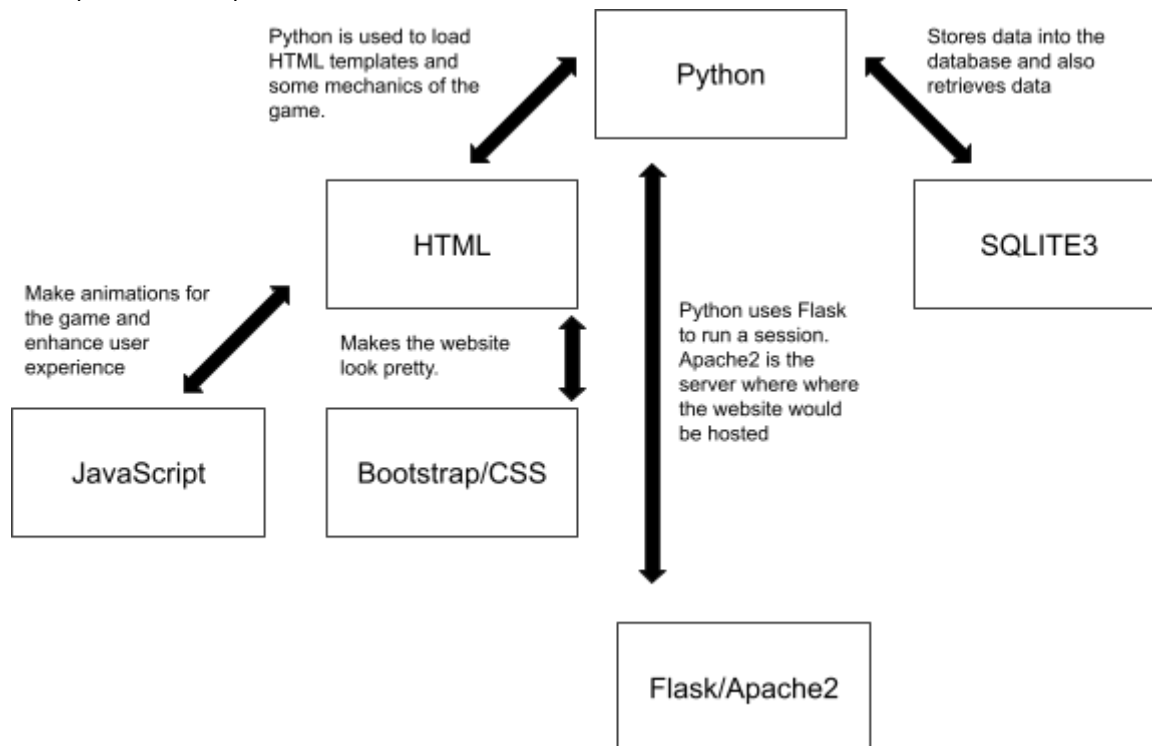
#### Zen Mode Page

- ^ ^
- 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 default mode, the hard mode, and chaos 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 (turning the letters green or yellow) to enhance the user experience. It will also be used for the bulk of the functionality whenever the user makes keypresses.
- Python
  - This will be used to add functionality to the website by enabling flask/html to create our pages and also parse any files that we will need (ex. Wordle.txt file that holds the words used).
- HTML
  - Provides the text/skeleton of the website, also used for audio.

- 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.

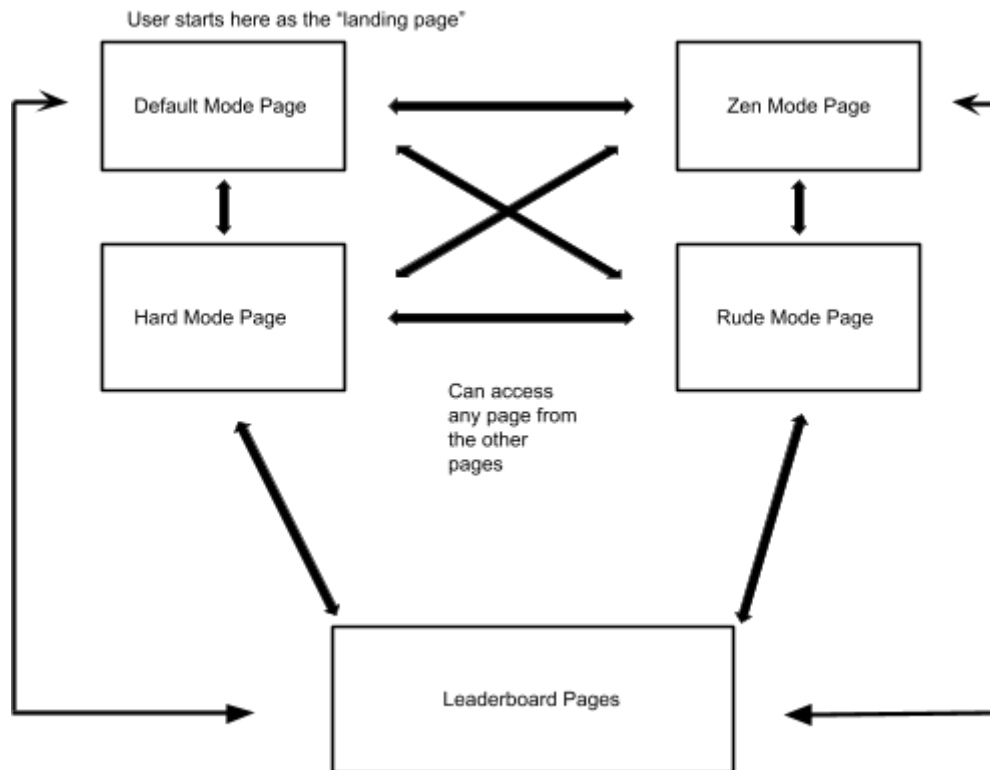
#### Database Organization:

- Leaderboard table

User (TEXT)	Score (INTEGER)	MODE (TEXT)
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- Possible five letter words will be stored in a text file (.txt)
  - We will use the wordle list but only select common words for the final wordle (clarifying for team PPP Mode)
- Other variables, like the words already guessed, can be saved as variables in javascript or as flask session variables

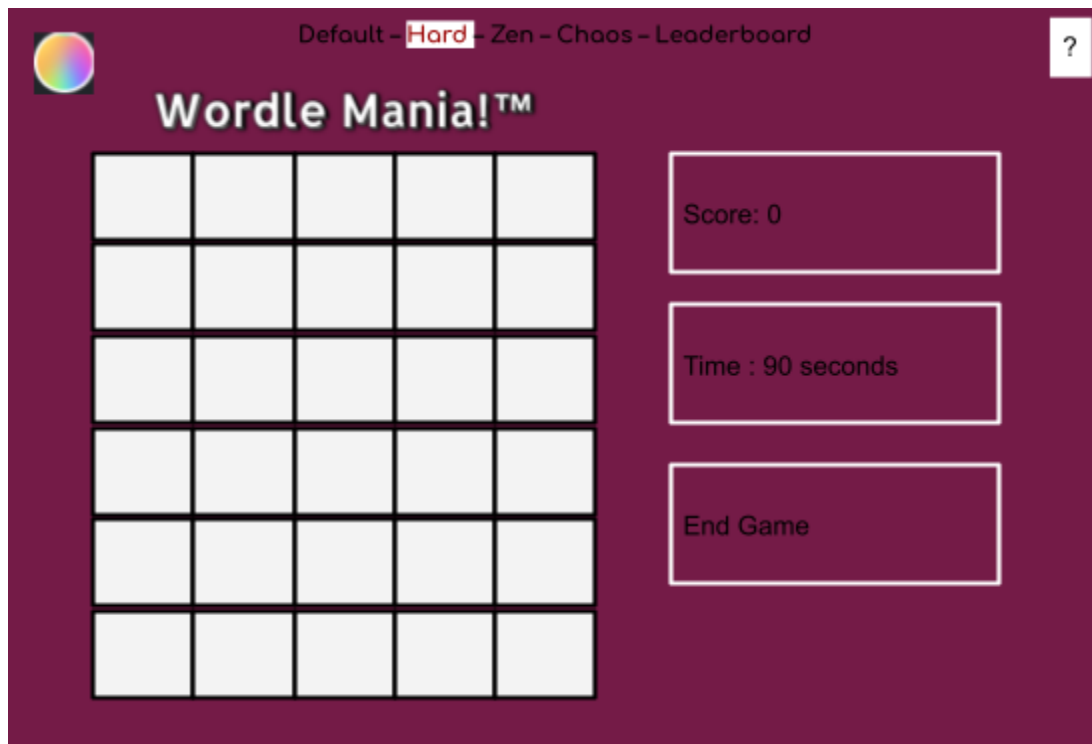
#### Site Map:



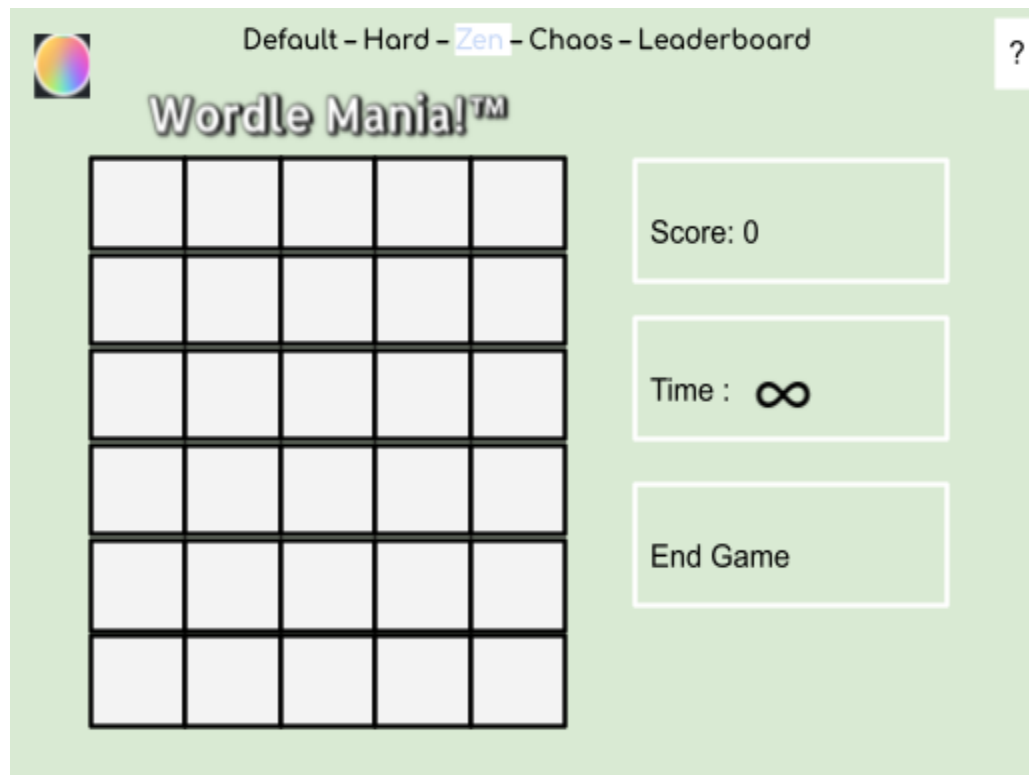
Site Templates:  
(Default)



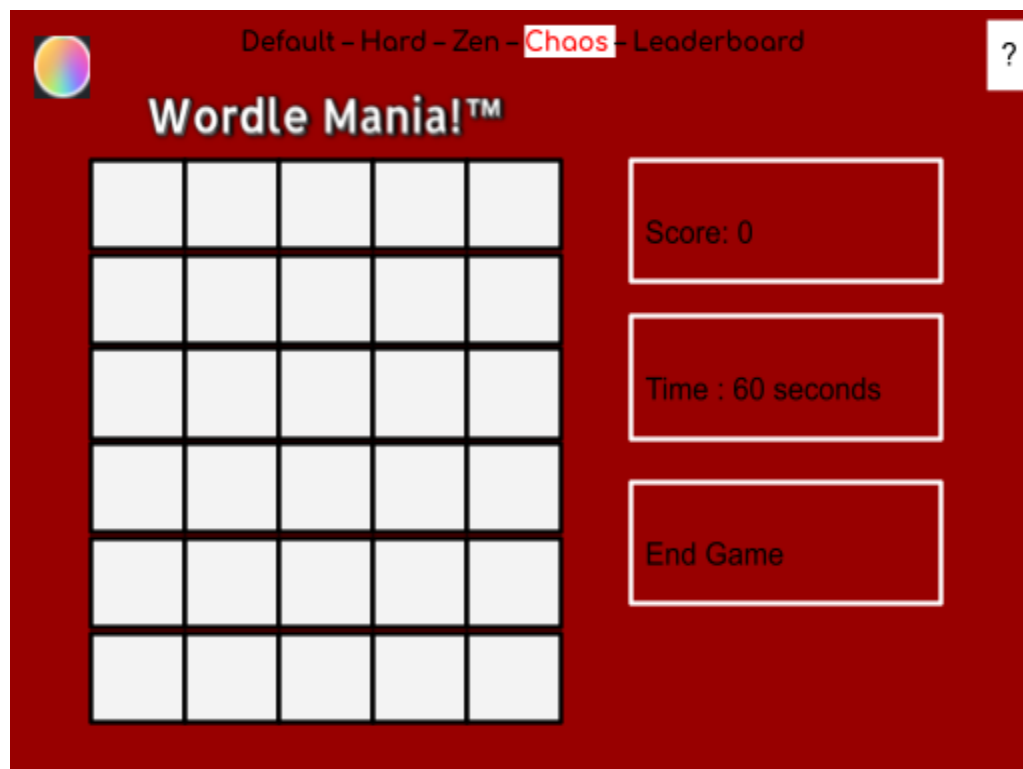
(Hard)



(Zen)



(Chaos)



Others:



## Leaderboard

**Normal** | **Hard** | **Chaos**

Username

Score

Billy 2800 points

Bill 2600 points

Willie 2500 points

Will 2000 points

Do you want to submit your score?

Username:

APIs: (advice from Big Birds review)

- None in use!

Task Allocation:

Angela (PM): bootstrap/html and python

Jonathan: sql/python and css/bootstrap

Jesse: html and javascript

Target Date:

March 23, 2022