

Grace Muzny – muznyg@cs.washington.edu
Rowan W. Hale – rowanh@cs.washington.edu

Project Proposal: Tile to the Top

Overview:

Tile to the Top is a vocabulary building game somewhat like backwards Scrabble. In Tile to the Top, the user is given definitions, and in turn attempts to guess the words that those definitions belong to. While there are many word games out there, most fall into a category of tools that are either A) not educational or B) not fun. The goal of Tile to the Top is to help people expand their vocabulary and refine their spelling while hopefully having fun in the process, and we plan to deliver this in a technologically advanced setting.

It was decided that Tile to the Top would be developed as a web application rather than a standalone software application because of the ease of access of web applications, as well as the increasing popularity of web applications over the past decade.

How It Works:

The game involves a single user (although see the possible expansions section for potential upgrades to this) being given a list of definitions of words, without the words being listed. The user is then given some assortment of letter tiles that is sufficient, if not more than necessary, to spell out any of the words whose definitions are being shown. Upon guessing any of the words correctly, the tiles are removed, a new definition is fetched to replace that of the previously guessed word, and the user is given points (possibly scaling with the amount of time that it took them to guess the word). If the user guesses an incorrect word, or misspells the word (s)he is trying to guess, points are deducted from their score (again, possibly scaling with the time elapsed before the guess).

Technology:

Front end:

The front end will just be a website done in HTML/CSS to hold the main game logic, which will be done in Javascript.

Back end:

The back end will consist of the actual server that the game runs on, as well as the database that holds the word and definitions data. The server will be done in Python/Django, and the database querying will be done with MySQL.

Possible Risks:

The main risk seems to lie mostly in acquiring the data needed to drive the game (i.e. a database full of words with their definitions). There is also the potential for lack of prior knowledge of tools to slow down development, but hopefully this will not prove to be a problem.

Minimum Viable Product:

The minimum viable product that we could hope to complete would just be a web application that lists word definitions from the database, and allows the user to form words from word tiles in an attempt to guess the correct answer(s).

Possible Expansions:

While the base game isn't incredibly involved, it does leave room for many possible areas of expansion, including, but not limited to:

-Login/User data. The game could keep track of past statistics and allow you to view a profile that lists this information. With the addition of statistics could come rankings.

-Multiplayer. Multiplayer could allow two users to compete to see who can score the most points in some amount of time, or who could reach a certain score threshold first.

-Multiple Languages. Tile to the Top is only planned to be in English as of right now, but given more databases with definitions for other languages, the game could be expanded.

-Word Feeding. The user could be allowed to feed in a pool of words for Tile to the Top to draw from. This would allow people to use Tile to the Top as a study tool for a particular group of words that they choose.