CSSE 290 Homework 5 Word Search puzzle (80 homework points)

grumblebabarkni

retnawhiporpull

obzlronofangdac

woifsledgsisrto

lintrvonbnstick

freezenisotrnus

ciortsbfgwrutxj

harshiwohnhgold

uzanplobutogreb

noqustuzsnwlixs

gesbprnakulerth

ezmeltdpyerjqui

riaribxlztrailv

oprnstreamcadxe

sttbxstubborntr

bark

fang

freeze

gold

growl

grumble

harsh

howl

hunger

husky

melt

pull

shiver

sled

smart

snow

stick

stream

struggle

stubborn

trail

whip

wolves

wound

Word search puzzles are a popular pastime. In the simplest form, the player is presented with a rectangular grid of letters and a list of words that can be found in the grid. Each word is in a straight line horizontally, vertically, or diagonally (eight possible directions).

**Puzzle file format:** The data for each puzzle will be contained in a single text file (extension .ws). The first lines will contain the grid of letters. Then an empty line, then the words to search for, one per line. All of the files will be contained in a folder named puzzles. The provided file (northlands.ws) is shown at the right.

**Your code:** In the provided HW5 folder, you should have a main page, ws.php, that allows the user to choose from available puzzles, then creates a page that uses JavaScript to allow the user to interact with the puzzle.

The user should be able to use the mouse to select words that she/he finds (for example, clicking on the first letter of the word, and then on the last letter). The page should show a visual indication of which words have been found (and where), and which words still need to be found. When all words have been found, a congratulatory message should appear

There should be a way for a user to get a hint (for example, clicking on a word causes a randomly-chosen letter from that word on the grid to be highlighted). In terms of appearance and other features, be creative.

For display purposes, you may assume that the grid will have at most 20 rows and 20 columns (a grid is rectangular, but is not required to be square), and that there are at most 30 words to look for. Your page should work well in a 1280 x 1024 browser window.

**Submitting your work.** You should add your entire HW5 folder to your Public/HTML/webProgramming folder on wwwuser.csse.rose-hulman.edu. Be sure to test your submitted code after you submit it. The URL should be (substitute your actual username): <http://wwwuser.csse.rose-hulman.edu/~username/webProgramming/HW5/ws.php> .