
Making applications more secure

COMP3310: Assignment 2

Group Name: Project 2

Members: Ethan, James, Max

Wordle - What we analysed

Primary Java Files Analysed

Cell.java

Grid.java

Board.java

App.java

Cell

Coding Issues

If (isActive) { - over complex boolean return, if statement is more prone to error

reset() - Sets all cells to " ", still regarded as a character, can be used in injection

toString() - Not used, can be exploited, should be in separate file for debugging

switch(celstate) - Redundant code, can cause runtime errors

No significant tainted variables

Cell

User stories

As a player, I would like to change the active cell, so i can insert a correct letter into the correct space before completing the word.

As a player, I would like to paste a character i have copied into the cell, so that I can avoid typing it

Architectural issues

Cells allow for special characters using 'ctrl', and capital letters

Although not displayed, it can cause issues as it should only accept standard lowercase letters

Cell

Changes or additions to user stories

As a player, I would only like to insert lowercase letters, so i don't accidentally get my word wrong.

As a developer, I would like to void any key that isn't a character, so that I can avoid errors in the cells from players

Changes to the code

Removed toString entirely

Simplified celState

Changed if(setActive) to remove complexity

Changed reset()'s ' ' to " (removed space)

Grid

— Question 1 —

any coding issues

any potentially tainted variables

any user stories that might potentially be a cause for a security weakness

any architectural issues with the codebase

Grid

— Question 2 —

Changes or additions to any user stories

some changes to the code base

Board

— Question 1 —

any coding issues

any potentially tainted variables

any user stories that might potentially be a cause for a security weakness

any architectural issues with the codebase

Board

— Question 2 —

Changes or additions to any user stories

some changes to the code base

App

— Question 1 —

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App

— Question 2 —

Changes or additions to any user stories

some changes to the code base

3 Additional Features

Cell flashes a colour when an invalid input is given (e.g. flashes red when a capital or special character is inputted)

Thank You for listening