



E T H 8 N 'S

W O R D L E

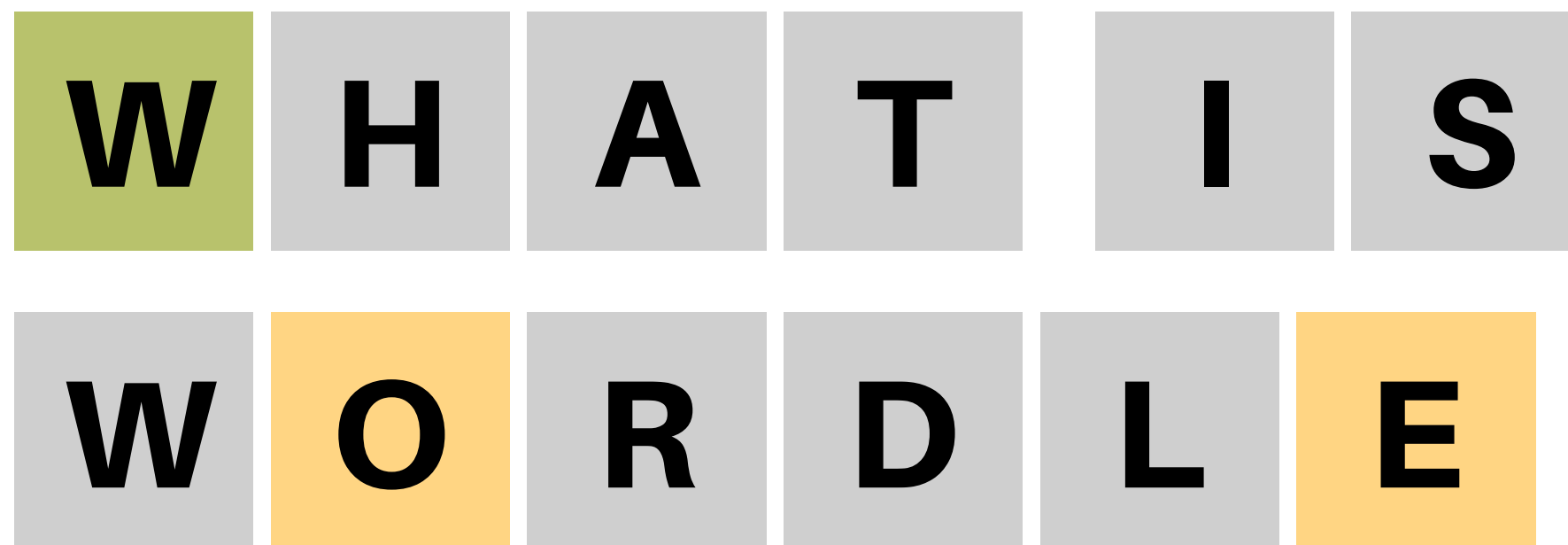
H E L P E R

F I N A L

Building a helper for the popular NYT word game Wordle



The Basics



5 letter word game

green: the letter is in the right place

yellow: the letter is in the word, but not in the right place

grey: the letter is not in the word

How I Approached It:

- What user input do I need?
- What variables can I pull out?
- How do those variables interact with one another?

```
//checkWin(dict);
for(int z=0; z<6;z++){

    ArrayList<String> rlb = buildGrey();
    ArrayList<ArrayList<String>> ylb = buildYellow();
    ArrayList<String> glb = buildGreen();
    ArrayList<String> cWord = getWord();
    ArrayList<String> cColor = getColor();

    dict = possibleMatches(dict,cWord,cColor,glb,ylb,rlb);

    if(dict.size()==1){ //end situation
        printList(dict);
        StdOut.println("was this the winning word? (input: y/n)");
        String answer = StdIn.readString();
        if(answer.equals("n")) StdOut.print("sorry! This bot is a w
        if(answer.equals("y")) StdOut.print("congratulations! You b
        break;
    }
    printList(dict);
}
```



Green

```
ArrayList<String>
```

```
glb = buildGreen();  
glb = updateGreen(glb,  
    "a", 3)
```

*****a***

Letter Banks



Yellow

```
ArrayList<ArrayList<<  
    String>>
```

```
ylb = buildYellow();  
ylb = updateYellow(ylb,  
    "a", 3)
```

[a][a][a][*][a]



Grey

```
ArrayList<String>
```

```
rlb = buildGrey();  
rlb = updateGrey(rlb,  
    "a", 3)
```

a

Example:

C R A N E

First for loop:

```
if(cColor.get(i).equals("g")) green = updateGreen(glb, cWord.get(i),i);  
if(cColor.get(i).equals("y")) yellow = updateYellow(ylb, cWord.get(i),i);  
if(cColor.get(i).equals("r")) grey = updateGrey(rlb, cWord.get(i));
```

Word Banks:

*******e**

[r][*][r][r][*]

c,a,n

Example:

C R A N E

Second for loop:

```
if(cColor.get(i).equals("g")) dictionary=checkGreen(dictionary, green);  
if(cColor.get(i).equals("y")) dictionary=checkYellow(dictionary, yellow);  
if(cColor.get(i).equals("r")) dictionary=checkGrey(dictionary, grey);  
return dictionary;
```

Deduced Words:

**there are 40 remaining viable words. Try: dirge, puree,
rouse, surge, or worse**