

Making the Word Class (Wordle)

Create a new class. Answer is the word that is on the screen.

```
public class Word
{
    private String answer;
    private String possible[] = {"koala", "twirl", "abyss"};
}
```

Don't add more possible words yet. Do that later after you have tested.

Add these methods inside the above class. Make sure they are commented!!

The constructor:

```
public Word ()
{
    int pos = (int) (Math.random () * possible.length);
    answer = possible [pos];
}
```

The accessor:

```
public String getWord ()
{
    return answer;
}
```

A mutator/accessor/reset:

```
public String getNewWord ()
{
    int pos = (int) (Math.random () * possible.length);
    answer = possible [pos];
    return answer;
}
```

A facilitator needed to know if the letter will turn yellow:

```
public boolean contains (char a)
{ //turns yellow if contains the param 'a'
    if (answer.indexOf (a) != -1)
        return true;
    else
        return false;
}
```

A facilitator needed to know if the letter will turn green:

```
public boolean correct (char a, int pos)
{ //turns green if param 'a' in right place
    if (answer.charAt (pos) == a)
        return true;
    else
        return false;
}
```

Add in these methods too:

1. Equals
2. CompareTo
3. toString
4. custom Constructor
5. setWord

Comment the class fully to indicate your understanding.

Possible changes and additions:

- Add a hint method that gives you the first letter of the word. (this can count for a String function)
- Add a hint 2 method that gives you the last letter of the word. (this can also count for a String function)
- Editing setWord so that it only takes valid words in the dictionary. This is very tricky (you can count the higher levels of search for this)