

Technicalities of self assessment system

1. „Match the meaning” in this test the user is presented with eight words (four pairs), half of which are in English and half of which are the Welsh counterparts. It is the user's job to match the correct translations by ordering the words so that the correct pairs are presented side by side. On the top right of the page it shows the user how many right and wrong answers they have in that specific test.

```
Dictionary_array[]    //Array with all words

Test_array[]    //Array with words used for current test

Int numOfTestWords;    //Number words used in test

Int CorrAnswers = 0;

Int WrongAnswers = 0;

Public getRandomWords(){    //Method for getting random words to tests

Random rand = new Random();

Do{
Int w_rand = rand.nextInt(dictionary_array.length)    //getting random index
For(int i = 0; i < numOfTestWords;i++){
    If(test_array>0){    //if there is more than 1 word check if it's not same as new word
        If(test_array[i].getEng!=dictionary_array[w_rand].getEng ||
        test_array[i].getWelsh!=dictionary_array[w_rand].getWelsh){
            test_array.add(dictionary_array[w_rand]);
        }else{
            Break;}
    }else{
        test_array.add(dictionary_array[w_rand]);}
}while(test_array.length<numOfTestWords);
}

For(int l = 0; l < 8;l++){    //Printing out word to match
If(l<4){
System.out.print(test_array[l].getEng)}
Elseif(l>4){
System.out.print(test_array[l/2].getWelsh)}
Else{
System.err.print("Error with printing words");
}
}
```

Here should be some method to check if matched words are correct or not. At this point I don't know if this will be done in real time or after pressing button.

2. "6 meaning" test. The user is then presented with a large word in either Welsh or English and a bundle of words in the opposite language. It's the users job to click the word that matches the large word. On the top right of the page it shows the user how many right and wrong answers they have in that specific test.

Beginning of the code will look similar to first test (getRandomWord method), writing out part will be different.

```
Boolean English = true;
```

```
For(int l=0;i<6;i++){
    If(i==2){ //one of the words from test array
        If(English){ //determine if large word is in eng or welsh
            System.out.print(test_array[i].getEng); //print as big
            System.out.print(test_array[i].getWelsh); //print as correct answer
        }else
            System.out.print(test_array[i].getWelsh); //print as big
            System.out.print(test_array[i].getEng); //print as correct answer
        }
    Else{
        If(English){
            System.out.print(test_array[i].getWelsh); //Fill rest fields
        }else{
            System.out.print(test_array[i].getEng); //Fill rest fields
        }
    }
}
```

At this point we will have to check if correct button was pressed probably some way of implementing onClick event listener will be used.

3. "Translation" test. The user is then presented with a large word in either Welsh or English and a text box in which they need to type in the translation. On the top right of the page it shows the user how many right and wrong answers they have in that specific test.

First bit is similar to other test. We have to get random word.

```
Boolean Eng = true;
```

```
Scanner keyboard = new Scanner(System.in);
```

```
If(Eng){
    System.out.print(test_array[i].getEng); //Print large word
}else{
    System.out.print(test_array[i].getWelsh); //Print large word
}
```

```
String input = keyboard.nextString();

If(input == test_array[i].getEng || input== test_array[i].getWelsh){
//Chcek if answer is correct
    System.out.print("Correct");
    CorrAnswers++;
}else{
    System.out.print("Wrong");
    WrongAnswers++;
}
```

When having welsh word as one to translate to eng adding type of word might be helpful if have two meanings.