**Quiz Project**

**Project Brief**

**Quiz**

Create a quiz 3 geography questions

* What is the capital city of Scotland
* What is the capital city of Ireland
* What is the capital city of Peru

If the user get the question correct they get a point

Also if the question is correct manipulate the dom to show that the answer is correct by changing text and colour to green(background)

If the question is incorrect show the correct answer and use dom to change text to show the correct answer and change colour (background) to red

Display total score

You must set and retrieve the questions from an array

The user input should be converted to lower case

You must use a function to set questions and a separate function to check answers

**Structure Diagram**

**Designs**

**Data dictionary**

|  |  |  |
| --- | --- | --- |
| **Name** | **Scope** | **Type and Description** |
| Questions(q0, q1,q2) | Global | String array to hold the questions |
| aq0 | Local to checkAnswers() | String used to store user answer |
| aq1 | Local to checkAnswers() | String used to store user answer |
| aq2 | Local to checkAnswers() | String used to store user answer |
| counter | Local to checkAnswers() | Integer used to store how many correct answers |
| i | Local to setQuestions() | Integer for loop |
| setAns0 | Local to checkAnswers() | String stores ‘edinburgh’ |
| setAns1 | Local to checkAnswers() | String stores ‘dublin’ |
| setAns2 | Local to checkAnswers() | String stores ‘lima’ |
|  |  |  |

**Functions**

|  |  |
| --- | --- |
| **Name** | **Description** |
| setQuestions() | Contains an array which is used to display the questions onscreen. |
| checkAnswers() | Checks if the user has entered the correct answers. Must convert to lowercase. Must display total points. Manipulates the DOM. |
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**Pseudocode – Step wise refinement**

1. **Set questions**
   1. **Questions array with 3 questions**
   2. **for loop i=0,i<questions.length,i++**
      1. **get element id q[i] use innerHTML to add question[i]**

**1.3 End loop**

1. **Check answers**
   1. **if aq0 toLowercase() == setAns0**
      1. **counter++**
      2. **get element by id q0 use DOM to highlight answer in green**
   2. **else**
      1. **get element by id q0 use DOM to display correct answer,provide feedback and highlight in red**
   3. **if aq1 toLowercase() == setAns1**
      1. **counter++**
      2. **get element by id q1 use DOM to highlight answer in green**
   4. **else**
      1. **get element by id q1 use DOM to display correct answer,provide feedback and highlight in red**
   5. **if aq2 toLowercase() == setAns2**
      1. **counter++**
      2. **get element by id q2 use DOM to highlight answer in green**
   6. **else**
      1. **get element by id q2 use DOM to display correct answer,provide feedback and highlight in red**
2. **Display score**

**Test Strategy**

**All testing will be white box, as code will be tested by developer.**

**The system will be tested as it is developed. Functions will be created and the control of the program will be tested before any functionality is created. This will make use of stub testing.**

**Functions will be tested individually to ensure functionality. The test data and expected result for each function will be shown in a test log.**

**The actual result from the run of the code must be shown.**

**Once the entire program is completed, performance testing will be carried out to ensure that the program meets the requirements of the user.**

**Test Data**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Subroutine**  **Name** | **Test**  **Reason** | **Test Data** | **Expected**  **Result** | **Actual**  **Result** | **Comments** |
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**Code Listing**

**Completed Test Logs**

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| --- | --- | --- | --- | --- | --- |
| **Subroutine**  **Name** | **Test**  **Reason** | **Test Data** | **Expected**  **Result** | **Actual**  **Result** | **Comments** |
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**Screen Dumps of running code:**