

ISIT307 - Web Server Programming

Assignment – 2 (Score It)

Tutorial-03 (FT)

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Start.php



Quiz Test! Score It

Please Enter Your Name:

John Doe

Enter

```

<!-- After Submit-->
<?php
    session_start();

    $nameErr = "";
    $name = "";

    // Validate form
    $fields = array('name');
    $error = false; //No errors yet

    if ($_SERVER["REQUEST_METHOD"] == "POST")
    {
        //$_SESSION["name"] = $_POST['name'];

        if (empty($_POST["name"])) {
            $nameErr = "Please enter your name";
        } else {
            $name = test_input($_POST["name"]);
            //check if name only contains letters and whitespace
            if (!preg_match("/^[a-zA-Z ]*$/", $name)){
                $nameErr = "Only letters and white space allowed";
                $error = true;
            }
        }
        foreach ($fields AS $fieldname) { //Loop through each field
            if (!isset($_POST[$fieldname]) || empty($_POST[$fieldname])) {
                $error = true; //error is present
            }
        }
    }
}

```

- After user submit, Validate user name and check for error.

```


//If Got Error
if($error == true)
{
    echo "<p style='text-align:center; font-weight:bold; font-size:20px; color:red;'>" . $nameErr. "</p>";
}
else{
    header('location:Category.php'); //Else, Redirect to Category page
    $_SESSION['name'] = $name;
}
}

function test_input($data) {
    $data = trim($data);
    $data = stripslashes($data);
    $data = htmlspecialchars($data);
    return $data;
}
?>

```

- If Got Error, Display on the Main page. Else, Redirect to Choose Subject Page.

Category.php



Choose One Subject

Welcome: John Doe

Please Choose Any Subject:

☐ Mathematics

☒ English Literature

Start Test

Exit

```
<!-- After Submit-->
<?php
session_start();
if(isset($_SESSION['name'])) { //Get user name
    echo "<h2 style='text-align:center;'>" . "Welcome: <u>" . $_SESSION["name"] . "</u></h2><br/>\n\n";
}
if(isset($_POST['submit'])) //If user submit
{
    if($_POST['options'] == "Math"){
        header('location:MathQuiz.php');
    }
    elseif ($_POST['options'] == "Eng") {
        header('location:EngQuiz.php');
    }
}
if(isset($_POST['exit']))
{
    header('location:Exit.php'); //Or Back to Main Page
}
?>
```

- If User Choose “Math” , Redirect to “MathQuiz.php” page
- Else, Redirect to “EngQuiz.php” page

Math Quiz!

Welcome: John Doe

For every correct answer, 5 points will be added to your total score.

For every wrong answer, 3 points will be deducted from your total score.

Choose Another
Subject

Please Answer the following questions:

1. How much Square root of 144?

2. How much Square root of 100?

3. What is (15 / 3) equal to?

4. What is (25 / 5).

Submit Answers

Clear

Math Quiz!

Welcome: John Doe

For every correct answer, 5 points will be added to your total score.

For every wrong answer, 3 points will be deducted from your total score.

You have answered correctly! ' How much Square root of 144? ' is 12.

You have answered correctly! ' How much Square root of 100? ' is 10.

You have answered correctly! ' What is (15 / 3) equal to? ' is 5.

You have answered correctly! ' What is (25 / 5) ' is 5.

You scored :20/20

Select Other Subject

Re-attempt Quiz

End Quiz

- Take the quiz and submit the Answers & Display the Score on the page.

Math Quiz!

Welcome: John Doe

*For every correct answer, 5 points will be added to your total score.
For every wrong answer, 3 points will be deducted from your total score.*

Choose Another
Subject

Please Answer the following questions:

Your Current Highest Score is: 20/20

1. How much is $4 + 2$?

2. How much is 80 divided by 10?

3. How much is $6 - 4$?

4. How much Square root of 100?

Submit Answers

Clear

- If User Press "Re-attempt", Will Display Current Highest Score on the page.

Code Explanation

```
//Total 10 Ques , put it in Associative Array
$MathQues = array(
    "How much is 4 + 2?" => "6",
    "How much Square root of 144?" => "12",
    "How much is 80 divided by 10?" => "8",
    "How much is 6-4?" => "2",
    "How much is 10/2?" => "5",
    "How much is 40 x 2?" => "80",
    "How much Square root of 100?" => "10",
    "What is (6 - 5) equal to?" => "1",
    "What is (15 / 3) equal to?" => "5",
    "What is (25 / 5)" => "5",
);

$RandQues = array_rand($MathQues,4);

//to calculate the score
function calculatesscore($correct,$wrong) {
    $total = ($correct * 5)-($wrong * 3);
    return $total;
}
```

- Create Associative Array for Math question and answers Key-Value pairs.
- Generate 4 Random Questions from the above Associative array.
- Create Function to calculate the score.

```

$wrong = 0;
$correct = 0;
$counter = 1;
$displayscore = 0;
if (isset($_POST['submit'])) {
    $Answers = $_POST['ans'];           //Get User's Ans Input value
    if (is_array($Answers)) {
        foreach ($Answers as $Questions => $Response) { //Iterate through Each user's Input Value for that ques
            $Response = stripslashes($Response);
            if (strlen($Response)>0) {
                if (strcasecmp($MathQues["$Questions"],$Response)==0) { //Compare with $MathQues-Array's Value
                    echo "<span style='color:green;'><label>You have answered correctly! ' $Questions ' is " . $MathQues[$Questions] . "</label></span><br />";
                    $correct++;
                }
                else {
                    echo "<span style='color:red;'><label>Sorry, your answer is incorrect! The correct answer for ' $Questions ' is : " . $MathQues[$Questions] . "</label></span><br />";
                    $wrong++;
                }
            }
            else {
                echo "<label>You did not answer $Questions.</label><br /><br /><br />";
            }
        }
    }
}

```

- After user Click “submit “ button , get the input value and store them in array → `$Answers = $_POST['ans']` ;
- Iterate through each user’s input value and compare with Association array.
- If Same Value, then `Correct++`;
- Otherwise, `Wrong++`;

```

//To Display Score
$displayscore = calculatescore($correct,$wrong);
if ($displayscore > 0) { //If User get Score
    if (empty($_SESSION["MathScore"])) {
        $_SESSION["MathScore"] = $displayscore;
    }

    elseif ($displayscore > $_SESSION["MathScore"]) { //Update User's Score
        $_SESSION["MathScore"] = $displayscore;
    }
}
else if ($displayscore < 0){ //Instead of showing a -ve score, show the score as 0.
    $displayscore = '0';
    $_SESSION["MathScore"] = $displayscore;
}

echo "<h1 style='color:blue;'>You scored : " . $displayscore . " /20</h1><br/><br/>";
echo "<button onclick='\"window.location.href = \"Category.php';\">Select Other Subject</button>&nbsp;";
echo "<button onclick='\"window.location.href = \"MathQuiz.php';\">Re-attempt Quiz</button>&nbsp;";
echo "<button onclick='\"window.location.href = \"Exit.php';\">End Quiz</button>";
}

```

- Pass that “Correct” & “Wrong” scores to the function and get the Total Return points.
- If user’s Total points is `> 0`, then display it on the page. Store the points to the `$_SESSION['MathScore']`;
- If get negative points `< 0`, then wont display. Will Store the score to `$_SESSION['MathScore']`; for later Overall marks computation.

```
else {  
    //Display the Category Page  
  
    echo "<button onclick=\"window.location.href = 'Category.php';\" >Choose Another Subject</button><br><br>";  
    echo "<h4 style='color:black; font-weight:bold; margin-left:250px; padding:20px;'> Please Answer the following questions: </h4>";  
  
    if(!empty($_SESSION["MathScore"])){        //If user already get Score,, Display Current points  
        echo "<b style='color:blue;'> Your Current Highest Score is: </b>";  
        echo "<span style='color:blue; font-weight:bold;'> ".$_SESSION["MathScore"];  
        echo "/20</span><br><br>";  
    }  
  
    //Display 4-Attempt Questions  
    echo "<form action='MathQuiz.php' method='POST' autocomplete='off'>\n";  
    for ($i=0; $i < 4 ; $i++) {  
        echo "<p style='font-weight:bold;'>$counter. ";  
        echo "$RandQues[$i].</p>";  
        echo "<input type='text' required pattern='[0-9]\d*' name='ans[" . $RandQues[$i] . "]" /><br /><br />;    //Get user input  
        $counter++;  
    }  
  
    echo "<input style='width:200px; background-color: green;' type='submit' name='submit' value='Submit Answers' />";  
    echo "&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&~";  
    echo "<input type='submit' name='clear' value='Clear'/>";  
    echo "<br/><br/>";  
    echo "</form>\n";  
}
```

- If user haven't Press "submit" button, then Display 4 Random Questions.

Similar Code and procedure for “EngQuiz.php” (Only Array different)

English Quiz!

Welcome: John Doe

For every correct answer, 5 points will be added to your total score.
For every wrong answer, 3 points will be deducted from your total score.

Choose Another Subject

Please Answer the following questions:

1. Who is the author of The Origin Of Species?.

[illegible]

2. 'The War of The World's' is a famous work of which author?.

--

3. Who is the author of "Roots" that inspired a TV blockbuster?.

--

4. "Rites of Passage" is a novel written by?.

--	--

Submit Answers

Clear

```

<?php
session_start();
echo "<h2>" . "Welcome: <u>" . $_SESSION["name"] . "</u></h2>";
echo "<i> For every correct answer, 5 points will be added to your total score. </i><br>";
echo "<i> For every wrong answer, 3 points will be deducted from your total score. </i>";
echo "<hr/><br/>";

$EngQues = array(
    "Who is the author of The Origin Of Species?" => "Darwin",
    "Tweedledum and Tweedledee are two characters of which Children's book" => "Alice in Wonderland",
    "People of which religion consider 'The Bhagavad Gita' as their sacred text" => "Hinduism",
    "Who invented the character, Robinson Crusoe?" => "Daniel Defoe",
    "Name the mega-selling writer who has written 'Deception Point'?" => "Dan Brown",
    "'The War of The World's' is a famous work of which author?" => "HG Wells",
    "Name the Italian Astronomer who is the author of The Starry Messenger?" => "Galileo",
    "The 'Almagest' is a book written by a Greek Astronomer. What is the name of him?" => "Ptolemy",
    "Who is the author of 'Roots' that inspired a TV blockbuster?" => "Alex Haley",
    "'Rites of Passage' is a novel written by?" => "William Golding",
    | | | );

$RandQues = array_rand($EngQues,4);

```

English Quiz!

Welcome: John Doe

For every correct answer, 5 points will be added to your total score.

For every wrong answer, 3 points will be deducted from your total score.

Sorry, your answer is incorrect! The correct answer for ' Who is the author of The Origin Of Species? ' is :Darwin .

Sorry, your answer is incorrect! The correct answer for ' 'The War of The World's' is a famous work of which author? ' is :HG Wells .

Sorry, your answer is incorrect! The correct answer for ' Who is the author of "Roots" that inspired a TV blockbuster? ' is :Alex Haley .

Sorry, your answer is incorrect! The correct answer for ' "Rites of Passage" is a novel written by? ' is :William Golding .

You scored :0/20

Select Other Subject

Re-attempt Quiz

End Quiz

EndQuiz.php

TOTAL SCORE

Good Bye John Doe

Math Total test points: 20

English Total test points: 0

Overall Points: 20

[Back to Main Page](#)

- Will get user's Both "Eng & Math" Score and calculate the Overall test points and display it on the page.

Exit.php

```
<?php
session_start();
if(isset($_SESSION["name"])){
    echo "<h3 style='text-align:center;'> Good Bye <u>". $_SESSION["name"]. "</u></h3><br/>\n";

    if(!empty($_SESSION["MathScore"])){
        echo "<p style='color:blue; text-align:center; font-size:25px;'> <b>Math Total test points: " . $_SESSION['MathScore'] . " </b></p>\n";
    }
    else{
        //If Score = 0
        $_SESSION["MathScore"] = 0;
        echo "<p style='color:blue; text-align:center; font-size:25px;'> <b>Math Total test points: " . $_SESSION['MathScore'] . " </b></p>\n";
    }
    if(!empty($_SESSION["EngScore"])){
        echo "<p style='color:blue; text-align:center; font-size:25px;'> <b>English Total test points: " . $_SESSION['EngScore'] . " </b></p>\n";
    }
    else{
        //If Score = 0
        $_SESSION["EngScore"] = 0;
        echo "<p style='color:blue; text-align:center; font-size:25px;'> <b>English Total test points: " . $_SESSION['EngScore'] . " </b></p>\n";
    }
    if ($_SESSION["MathScore"] >= 0 && $_SESSION["EngScore"] >= 0) { //Display Overall points
        $OverallPoints = $_SESSION["MathScore"] + $_SESSION["EngScore"] ;
        echo "<br>";
        echo "<h3 style='text-align:center; color:green; font-size:30px;'>Overall Points: " . $OverallPoints . " </h3><br/>\n\n";
    }
}
session_destroy();
?>
```

- Get both `$_SESSION['MathScore']` & `$_SESSION['EngScore']` .
- Display it on the page.
- Calculate the Overall points by sum them up.
- After that, destroy the session and back to the main page again.