United International University (UIU)

Dept. of Computer Science & Engineering (CSE)

Final Exam   Year: 2024   Trimester: Fall

CSE 4165/CSE 465 Web Programming

Total Marks: 30   Duration: 2 Hours

Any examinee found adopting unfair means will be expelled from the trimester / program as per UIU disciplinary rules.

1.	Create a JavaScript game where a user tries to guess a secret number generated by your code. Strategies are as follows:	[10]

Index.html:

Create a text filed (input type text) to take the users' guess and a submit button, below the submit button there is a label field to show the feedbacks and results.

Script.js:

1. Generate a random secret number between 500 and 5000.
2. Take the user's guess from the input field in the HTML file.
3. Inside a function:
   a) Compare the user's guess to the secret number.
   b) Display "Too high!" or "Too low!" in the feedback area of your web page.
   c) If the guess is correct, display "Correct!" and optionally disable the input field to prevent further guesses.
   d) Keep track of the number of guesses the user has made.
   e) If the user runs out of guesses (after 5 attempts), display "Out of guesses!" and optionally disable the input field.

Sample Input	Sample Output	
User Guesses (from html)	**Output/Feedback** (on html file using JS file)	**Result**
50, 25, 35, 38, 37	*(suppose random number:37)* Too high!, Too low!, Too low!, Too high!, Correct!	Correct!
10, 50, 90, 80, 85	*(suppose random number:82)* Too low!, Too low!, Too high!, Too low!, Too high!	Out of guesses!
1, 5, 10, 20, 15	*(suppose random number:15)* Too low!, Too low!, Too low!, Too high!, Correct!	Correct!

2.	**PHP:**	[10]

It's the end of the Web Programming course, and we want to celebrate it by having a pizza party. You need to figure out how many pizzas to order and how many slices will be left over. Write a PHP function that takes three integers as input: the number of students in the class, the number of slices each student wants, and the number of slices each pizza has. The function should calculate the minimum number of pizzas you need to order to ensure every student gets enough pizza (you must order whole pizzas; you cannot order fractions of pizzas). The function should also calculate the number of pizza slices that will be left over after all the students have had their fill. Moreover, if the price of each pizza is 1050 BDT (irrespective of size), how much money was wasted based on the leftover slices?

Sample Input (from html file text fields)				Sample Output (print on PHP file)		
Number of Students:	Slices per Student:	Slices per Pizza:		Total Pizzas:	Leftover Slices:	Wasted Money (BDT):
10	3	8		4	2	262.5
7	2	6		3	4	700
12	2	4		6	0	0

| 3. | **PHP & MYSQL:** | **[10]** |

Create a dataset named 'uiuweb_final' and a table named 'student_final'. The student table has the following structure and values:

StudentID	StudentName	CourseID	CourseTitle	Grade	LetterGrade
1	Karim Uddin	101	Web Programming	85	B
2	Rahim Ahmed	101	Web Programming	92	A
3	Jashim Hossain	102	Project Management	78	C
4	Jasica Ahmed	101	Web Programming	65	D
5	Faria Karim	102	Project Management	95	A
6	Niassoh Dihan	103	System Analysis and Design	80	B

Now, do the following:
1. Show the total number of students who received each letter grade (A, B, C, D) across all courses.
2. If a student has a grade below 75 and their current letter grade is not 'D', change their letter grade to 'C'.
3. If a student has a grade greater than 80, add 5 bonus points to their grade, but only if the resulting grade is less than or equal to 90.
4. For each course, display the course titles and the number of students enrolled in that course, sorted by the number of students (most popular first).