CP 202 - Website Design

Assignment 6

Starting the Assignment:

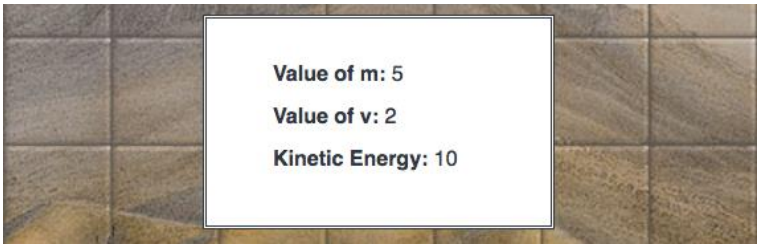
1. Download the A6_StarterCode from the MLS.
2. Use t1.html and t1.js for task 1, t2.html and t2.js for task 2 and t3.html and t3.js for task 3.
3. You cannot make any changes in the HTML or CSS documents. You can only edit the .js file in this assignment.
4. Use mathematical operations to calculate necessary values so that your programs run and produce the correct output for any input.

Task 1: **[2 marks]**

1. You need to write code to calculate and display the kinetic energy for given values of *m* and *v*.
2. Initial values for *m* and *v* are given but your program may be graded with different values of *m* and *v*.
3. Insert the formulae for calculating kinetic energy in line 3.

$$K = \frac{1}{2}mv^2$$

4. Get the proper elements from the HTML by passing right arguments to *getElementById*.
5. Display the values of *m*, *v* and *kinetic energy*.
6. The output will be similar to:



Note: The output above shows a subset of the complete webpage.

Task 2: **[4 marks]**

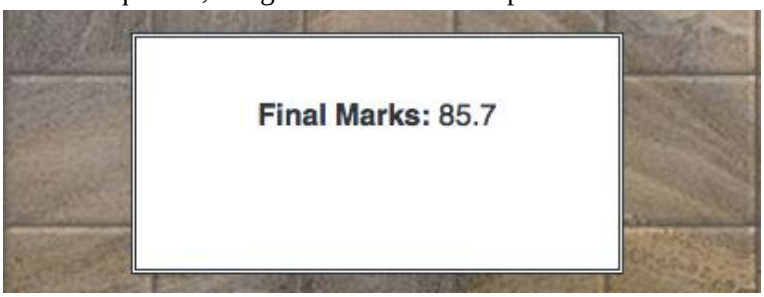
1. Create an array named *courses* with the following elements: CP102, CP104, CP164, CP312, CP202, CP414, CP321, CP361, CP112, CP211.
2. Retrieve a random value from the array above.
3. Use the value from point 2 above and use String concatenation to display the following output: "You are registered in the course: <*course code from step 2 above*>"

Task 3: **[4 marks]**

1. The starting code shows marks for a student in 4 quizzes, 5 assignments, project, midterm and the final.
2. Each quiz, assignment and the project is graded out of 10.
3. Midterm and final are out of 100.
4. The weightage for each assessment is given below:

Assessment	Weighting
Online Quizzes	30%
Assignments	20%
Project	10%
Midterm	20%
Final Exam	20%
Total	**100%**

5. Calculate the total marks out of 100 and display it on the webpage. The program can be checked by changing the marks of quizzes, assignments etc. The output will look like:



Note: The output above shows a subset of the complete webpage.

Submission Details

1. Upload a single zip file named FIRSTNAME_LASTNAME_A6.zip containing all the three tasks.
2. Upload the zip file in the appropriate dropbox on MyLS.
3. Redownload the file you uploaded and confirm all the files are included in the zip file.
4. Check dropbox for the due date.