

COMP125

Midterm Test

Duration: 60min

Total: 20 points (20%)

Introduction

In this test, you are asked to implement features in the existing web page using JavaScript. To complete this task, you can use internet resources as well as lecture notes and code.

This test is an individual assignment. You are not permitted to communicate or exchange code in any manner. Any attempt to do so will result in failing the test by both parties involved.

Instructions

1. Download and unzip test1.zip file from e-centennial.
2. Review index.html file.
3. Rename script file script.js to your initials(e.g. for John Doe the file will have a name jd.js).
4. Link script from step 3 to index.html page **(2 points)**
5. Create 2 new functions in the script with the names: `calculateSpeed()` and `clearResults()` **(2 points)**
6. Modify script to invoke function `calculateSpeed()` when **Calculate** button is clicked and `clearResults()` when **Clear** button is clicked **(4 points)**
7. Implement function `calculateSpeed()` to perform the following:
 - read user name, travel distance and travel time **(2 points)**
 - calculate speed and display the following text in `div` element with id **resultText**
 - *Result: user <user name> speed is <speed>* **(4 points)**
 - draw a chart time/distance, so it is clear how far user travelled for each hour **(4 points)**
 - use `for` loop and `appendChild()` method
8. Implement function `clearResults()` to perform the following **(2 points)**:
 - clear text of `div` element with id **resultText**
 - clear chart
9. Zip all files, rename archive to **T1-YourName.zip** and submit to e-centennial.

Total: 20 points (20%)

Example

Distance Calculator

Input Values

| | |
|----------------------|-------|
| User name | Peter |
| Travel Distance (km) | 25 |
| Travel Time (hours) | 4 |

Result: Speed of user Peter is 6.25km/h

Chart (Time - distance)

0 hr - 0km

1 hr - 6.25km

2 hr - 12.5km

3 hr - 18.75km