



**CTU** training solutions

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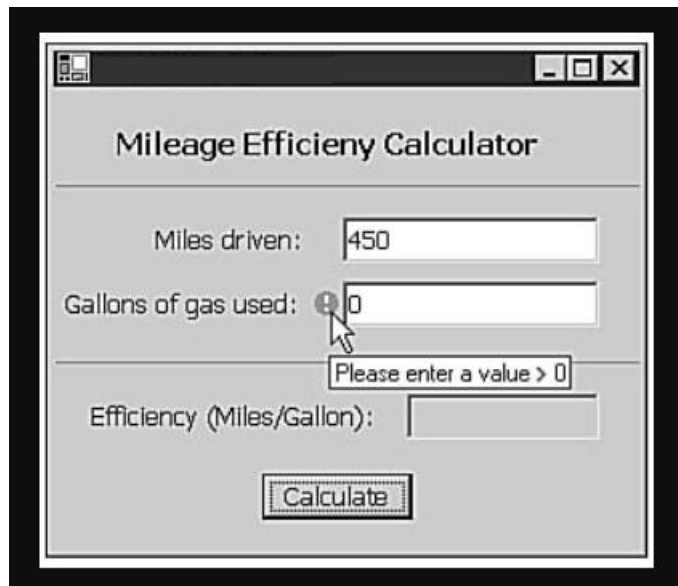
<b>Faculty of Information Technology</b>								
<p>I declare that I am familiar with, and will abide to the Examination rules of CTU</p>     <hr/> <p><b>Signature</b></p>	<p align="center"><b>SUBJECT NAME: INTERMEDIATE PROGRAMMING</b></p> <p align="center"><b>SUBJECT CODE: PRG521</b></p>							
	<p><b>Formative Assessment 3</b></p> <p><b>Duration:</b></p> <p><b>Date: -</b></p> <p><b>Total Marks: 100</b></p> <p><b>Total pages: 5</b></p>				<p><b>Examiner:</b> Mr. Isaac L</p> <p><b>Moderator:</b> Mrs. Lerato</p>			
	<b>Student number</b>							
	<b>Surname:</b>				<b>Initials:</b>		/	%

**Instructions:**

- Recall to keep a copy of all submitted assignments.
- All work must be typed using Microsoft Word and convert the word document to PDF before uploading to COLCampus.
- Kindly note that you will be evaluated on your writing skills in all your assignments.
- Negative marking will be applied if you are found guilty of plagiarism, poor writing skills or if you have applied incorrect or insufficient referencing.
- Each assignment must include a cover page, table of contents and full bibliography, based on Harvard referencing style.
- Students are not allowed to offer their work for sale or to purchase the work of other students. This includes the use of professional assignment writers. If this should happen, CTU training Solutions reserves the right not to accept future submissions from a student.  
Spelling, style, fonts, font size, line spacing
  - Please copy the questions onto your answer sheet (single space the questions), and make sure to use numbers to indicate the answers to each question.
  - Always use a spell checker before you submit assignments! We reserve the right to deduct point for each obvious misspelling.
  - Always double-space your answers.
  - Please use Arial (or Calibri (Body)), 12 point as the font for your assignments. Certain fonts have been known not to come across in the PDF files.
  - Use only black or blue font face colors. Do not use red!

**Scenario****100 MARKS**

In every program data must be validated before the program can proceed with further processing and storage of the input data. As a Windows developer for a data analysis company, you are tasked to develop an application using Windows form / Windows Presentation Foundation (WPF) named mileage efficiency. Your interface should look as shown below.



You should include the following in your program

1. Exception handling should be used to prevent users from entering invalid input (text, character...) (try, catch and final)- 20 Marks
2. All exception messages should be display using a message box and save in a text file called Exceptionfile.txt- 20 Marks
3. All result (miles divided by gallon) should be save in a file called MilesperGallon.txt. The result should be saved once the calculate button is pressed – 20 Marks
4. Meaning your program will have two separate text files one to record all exception thrown – message and the other to record all calculation and the date and time the operation occurred- 10

Submission format

1. Include a 5 minutes video where you demonstrate how the program is working the program should be visible in the video.- 20 Marks

2. Submit a pdf document with all the program code together with the program output-screenshot of the interface- 10 Marks

Run the project. Enter values for miles and gallons and click Calculate. The program calculates the mileage efficiency, as expected. When you enter an invalid value into any of the `TextBox` controls, the error icon starts blinking and displays the error message when the mouse is hovered over the error icon, as shown in

**NB**

**Use Visual studio- C# (Windows Form or Windows Presentation Foundation (WPF)) to develop the Application**

**Very Important**

***Do not screenshot the code of the program, only the output of the program will need to be screenshot. Include all your code-copy and paste the program code on the word document, with explanation, before converting the document to pdf.***

### Completed Declaration of Authenticity

I \_\_\_\_\_ hereby  
(FULL NAME)

declare that the contents of this assignment \_\_\_\_\_ is entirely my own work except for the following documents: (List the documents and page numbers of work in this portfolio that were generated in a group)

Activity	Date

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

