

Programming Logic - Beginning
152-101

**Gas Estimate Program Design Evaluation
Form**

Name _____

Score _____ / 10

Update Value _____

[Make all corrections and resubmit to earn update points](#)

☒ Update Recommended

IOP

- ☐ (1/2 point) Eight inputs included
- ☐ (1/2 point) Inputs do not include verbs
- ☐ (1/2 point) Three outputs included
- ☐ (1/2 point) Outputs do not include verbs
- ☐ (1/2 point) Processing includes getting inputs
- ☐ (1/2 point) Each output calculated
- ☐ (1/2 point) Processing includes displaying outputs
- ☐ (1/2 point) Variable names are appropriate (camelBack)

Screen Layout

- ☐ (1/2 point) Screen layout includes textboxes for seven inputs
- ☐ (1/2 point) Date input appears as a date picker
- ☐ (1/2 point) Inputs labeled properly
- ☐ (1/2 point) Layout includes labels for three outputs
- ☐ (1/2 point) Outputs labeled properly
- ☐ (1/2 point) Layout appearance is appropriate

TOE

- ☐ (1/2 point) Task list includes *getting* eight inputs
- ☐ (1/2 point) Object names for inputs appropriate
- ☐ (1/2 point) Date object is a date picker
- ☐ (1/2 point) Events for all inputs designated as None

- ☐ (1/2 point) Task list includes calculating three outputs
- ☐ (1/2 point) Object for all calculations is calculate button
- ☐ (1/2 point) Event for all calculation is Click (for calculate button)

- ☐ (1/2 point) Task list includes clearing the form
- ☐ (1/2 point) Object list for clearing form includes btnClear, all input fields, all output fields
- ☐ (1/2 point) Clear Object/Event is Clear button Click
- ☐ (1/2 point) Task list includes ending program
- ☐ (1/2 point) End program Object/Event is Exit button Click

- ☐ (1/2 point) Task list includes displaying all outputs
- ☐ (1/2 point) Objects for outputs named appropriately (labels)
- ☐ (1/2 point) Events for all outputs designated as Calculate button Click

Pseudocode

btnCalculate.Click

- ☐ (½ point) Event name designated
- ☐ (½ point) Six inputs first transferred to variables (2 not needed for calcs)
- ☐ (½ point) Equation for gallons needed correct
- ☐ (½ point) Equation for gas cost correct
- ☐ (½ point) Equation for estimate expiration date correct
- ☐ (½ point) Equation results transferred to labels
- ☐ (½ point) End statement included
- ☐ (½ point) Statements between event name and End indented

btnClear.Click

- ☐ (½ point) Event name designated
- ☐ (½ point) Seven textboxes cleared (inputs)
- ☐ (½ point) Date picker set to current date (input)
- ☐ (½ point) Three output labels cleared
- ☐ (½ point) End statement included
- ☐ (½ point) Statements between event name and End indented

btnExit.Click

- ☐ (½ point) Event name designated
- ☐ (½ point) Command to close form included
- ☐ (½ point) End statement included
- ☐ (½ point) Statements between event name and End indented

Flowchart

- ☐ (½ point) Flowchart logic matches pseudocode logic, line for line
- ☐ (½ point) Correct terminal symbols used
- ☐ (½ point) Correct symbols used when transferring inputs to variables
- ☐ (½ point) Correct symbols used for calculations
- ☐ (½ point) Correct symbols used for transferring outputs to labels
- ☐ (½ point) Correct symbols used for clearing objects
- ☐ (½ point) Correct symbol used for closing form

Test Plan

- ☐ (½ point) Test plan includes five sets of sample inputs
- ☐ (½ point) Anticipated equations provided for each set of sample data
- ☐ (½ point) Anticipated results provided for each set of sample data
- ☐ (½ point) Test included to test month/year boundary
- ☐ (½ point) Test included for city miles or highway miles equal zero
- ☐ (½ point) One input that causes error included
- ☐ (½ point) Sample data varied enough to test program