Programming Logic - Beginning
152-101

Unit 5 – Belts Ice Cream Evaluation Form

Name _____

Score ____ / 20

Update Value _____

Make all corrections and resubmit to earn update points

☑ Update Recommended

Form Objects

❒ (½ point) Form centered on screen, icon changed, title bar

❒ (½ point) Radio buttons added to form to allow user to select type of sundae
❒ (½ point) Radio buttons added to form to allow user to select size of sundae
❒ (½ point) Radio buttons appropriately named

❒ (½ point) Check boxes added to form to allow user to select toppings
❒ (½ point) Check boxes appropriately named

❒ (½ point) Calculate button is form Accept button
❒ (½ point) Clear button is form Cancel button

❒ (½ point) Tab order is appropriate

Form Constants and Variables

❒ (½ point) Class-level variables created to hold value for current radio buttons
❒ (½ point) Class-level constants created for costs for each type of sundae
❒ (½ point) Class-level constants created for costs for each size of sundae
❒ (½ point) Class-level constants created for toppings costs (2 constants)
❒ (½ point) Class-level constant created for discount percentage
❒ **(+½ point)** Class-level constants created to hold number of toppings threshold
❒ **(+½ point)** Class-level constants created to describe "special"
❒ (½ point) Class-level variables and constants are appropriately named, typed and described

Calculate Click Event

- ❒ (½ point) Method has variable for number of sundaes ordered
- ❒ (½ point) Variable has appropriate name, is of type integer, and is appropriately described
- ❒ (½ point) Try-Catch block used to capture input errors (if appropriate)
- ❒ (½ point) Error message appropriate
- ❒ (½ point) Number of sundaes input transferred to variable
- ❒ (½ point) Variables created to hold three outputs.
- ❒ (½ point) Output variables have appropriate names, are of type decimal, and are appropriately described
- ❒ (½ point) Topping cost calculated by determining the number of selected toppings
- ❒ (½ point) Number of toppings multiplied by correct constant
- ❒ (½ point) Sundae cost calculated by adding sundae type cost and size cost
- ❒ (½ point) Total cost calculated correctly
- ❒ (½ point) Calculation included to give 20% (const) discount for large, strawberry sundaes
- ❒ (½ point) Program displays cost without toppings, topping cost and total cost
- ❒ (½ point) Outputs are appropriately formatted

- ❒ (½ point) Additional label included that shows order information
- ❒ (½ point) Label concatenates number of sundaes, size of sundae, type of sundae and total cost of sundae.
- ❒ (½ point) Label message is a complete sentence without grammatical errors
- ❒ **(+½ point)** Code handles single/plural *sundae* properly
- ❒ **(+½ point)** Message includes selected toppings.
- ❒ **(+½ point)** Selected toppings included in a grammatically correct way
- ❒ (½ point) Focus set to btnClear after all processing

Clear Click Event

- ❒ (½ point) *Clear* method selects default radio buttons
- ❒ (½ point) Clears all check boxes
- ❒ (½ point) Resets the quantity control
- ❒ (½ point) All outputs cleared
- ❒ (½ point) Sets focus to first input

Form Load Event

- ❒ (½ point) Form Load selects default radio buttons

Radio Button Check Changed Event

- ❒ (½ point) Radio button Checked Changed events merged into two methods
- ❒ (½ point) Method created to determine sundae flavor and cost
- ❒ (½ point) All flavor buttons wired to this method
- ❒ (½ point) Method created to determine sundae size and cost
- ❒ (½ point) All size buttons *wired* to this method
- ❒ (½ point) Case statements used to determine appropriate values
- ❒ (½ point) Individual cases set appropriate values

Indentation

❒ (½ point) Source code indented properly

Form Level Documentation

❒ (½ point) Methods alphabetized
❒ (½ point) Spacing used to make code readable
❒ (½ point) Appropriate in-line comments included

❒ (½ point) Each method includes a purpose description.
❒ (½ point) Purpose descriptions use complete sentences, grammatically correct, without spelling errors.
❒ (½ point) Purpose descriptions are accurate

Program Documentation

❒ (½ point) Documentation appearance is professional (can be combined with Form documentation)
❒ (½ point) Program name included
❒ (½ point) Student's name included
❒ (½ point) Program date included
❒ (½ point) Program's purpose uses complete sentences, is grammatically correct, without spelling errors.
❒ (½ point) Program's purpose is accurate and complete

❒ (½ point) Change log included with initial submission date
❒ (½ point) (Updates Only) Dated change log entry provided

Program Design

❒ (½ point) Pseudocode for btnCalc matches code
❒ (½ point) Pseudocode for radio button processing matches code
❒ (½ point) Flowcharts match pseudocode
❒ (½ point) Labels provided for all flowchart IF and CASE paths