CIS 152 Program Design Sheet

# Name **Kevin Pharsi**

# Project **#17 Calories/Diet**

# Assignment

You may do the following in any order. You may look at processing to figure out what inputs are. You may know some or all of your inputs and what the output is expected to be and from that figure out the processing.

# Requirements

Copy & paste your requirements here:

Stage 1

Fill out the Program design sheet.

Take at least two data input items (although most of you will need 3)

You must use Parse to convert numeric string inputs to numbers

At least one is a number

At least one is a string.

All input, output, and interim (in-between) data must be stored in variables.

The variables should have names that explain what they represent.

The variables should be declared at the beginning of the procedure.

Use appropriate conventions (not just variable & control names but also hotkeys).

Some type of calculation should be done.

The calculation should be triggered by a button

Output

All data (see Item 3) should be displayed back to the user in the Listbox

Numeric data must be formatted using ToString()

Number, Percent, & Currency pararameters as appropriate

Make sure the output has appropriate spacing

Buttons should also be used to clear the inputs/outputs and to exit the program.

Stage 2

Update Program Design Sheet

Check the validity of numeric entries

Convert all Parses to TryParses.

Create separate boolean variables to represent the validity of each numeric entry.

Use boolean variables in an if statement.

If you have multiple numeric inputs the if should be a compound if statement

All regular processing should only appear if numeric entries are valid.

Add the appropriate error messages coded in the else portion and display them in the Listbox.

Include the quit code we did in class (generally this is the only place you should use a MessageBox).

Add Radio buttons and a Group box.

There should be at least 3 choices.

One of the radio buttons must be selected as the default (In the form load event).

The code must use the checked changed event procedures.

Use a switch statement with at least 3 non-default cases.

Save switch choices as named constants and use the named constants in all places.

Use 1 or 2 class-level variables appropriately.

Make sure you add new variables to the output.

# Input(s)

What do you have and/or what will you need in order to do your processing?

* Name of the dieter
* The food
* How many calories are in the food item
* The target weight of the dieter

What are good variable names for these inputs?

* inputName
* InputFood
* numericCalories
* numericTargetWeight

How will you get those inputs into your program?

* Using Textboxes

# Processing (How do you take your inputs and produce your outputs?)

Do you need to do any conversions to get your inputs into the right format for your processing?

* + Convert the calorie and weight inputs into integer and double

What is your process?

* Parse the inputs into the correct data type

# Output(s)

What are your outputs? (this may include more than just “the answer” it may also include your inputs and intermediate variables.)

* Display the inputs and messages calculating the recommended calorie intake

Does your output need to be formatted?

**Yes**

# Testing

Write at least 2 test cases for your program- include both inputs and answers.

# Error Processing

What errors can/did happen?

How will you handle the errors?

# Clarifications/assumptions

List any assumptions you made in your program

* The program assumes all the inputs entered are valid

Is anything unclear in the directions?