# Weekly Assignment 5 - Instructions

Read the requirements document and use cases closely so you understand the program requirements. Please save the events document in your Project folder. Submit your GitHub link or Zip. Demo video here.

## **Requirements Document**

## REQUIREMENTS DOCUMENT

Date: May 11, 2019

Date Submitted:

Application Title: Comic Convention

Purpose: This Windows Classic Desktop application computes the registration cost of

attending a Comic Convention.

**Program Procedures:** The user enters the size of the group attending the Comic Convention. The

application computes the registration cost for the group based on badge type.

Algorithms, Processing, and Conditions:  A user must be able to enter the size of the group and select the desired badge type. The user can select the following badge types:

• Convention + Superhero Experience (\$380)

· Convention + Autographs (\$275)

Convention (\$209)

2. The user must be able to initiate the registration calculation and the display of

the registration cost.

3. The user must be able to clear the entries and results.

Notes and Restrictions: 1. If the user enters a nonnumeric value for the group size or does not enter a group size, the user should be advised and asked for a valid entry.

2. If the user enters a negative group size, the user should be advised and asked

for a valid entry.

3. If the value entered is greater than 20, the user should be advised and asked for

a valid entry.

4. The registration cost should be displayed in currency format.

Comments:

Obtain an image for this program from CengageBrain.com. The name of the image file is comic.

FIGURE 5-95

## **Use Cases**

## Comic Convention

#### USE CASE DEFINITION

- 1. The Windows Classic Desktop application window opens.
- 2. The user enters the group size and selects the type of convention badge.
- 3. The user clicks the Calculate button.
- 4. The program displays the cost of the convention tickets using currency format.
- 5. A MsgBox appears and displays a warning if the user enters a negative number for the group size.
- 6. A MsgBox appears and displays a warning if the user enters a value for the group size that exceeds 20.
- 7. The user can clear the input and the results by clicking the Clear button.

#### Screenshot of GUI

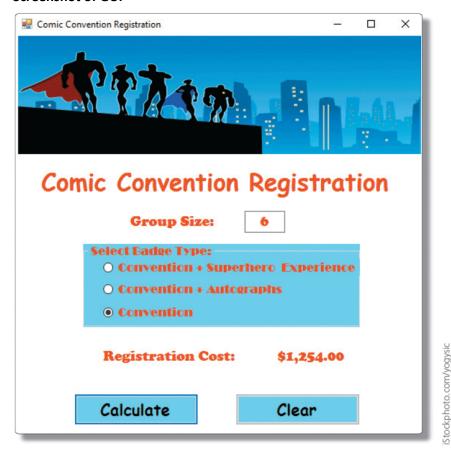


FIGURE 5-97

## Instructions:

Rename all controls using our naming conventions. Note: don't rename the form.

Form Load event (hint: could you call the btnClear event handler to do this work???)

- Label control cleared.
- 2. The textbox is cleared and has focus.
- 3. One of the radio button options is preselected.

### btnClear click event:

- 1. Label control is cleared.
- 2. The textbox is cleared and has focus.
- 3. First radio button option is preselected as was at Form Load

## btnCalculate click event:

- 1. Declare then variables and initialize the three cost levels.
- 2. Use 3 nested IF statements to determine IF
  - a. group number entered is numeric
  - b. group number entered is between 1 and 20
  - c. which cost level is selected
- 3. Calculate the total cost amount and display the results on the form by converting the total cost amount to String, formatted as currency
- 4. If the group size is not between 1 and 20, display an error message box
- 5. If the group size is not numeric, display an error message box