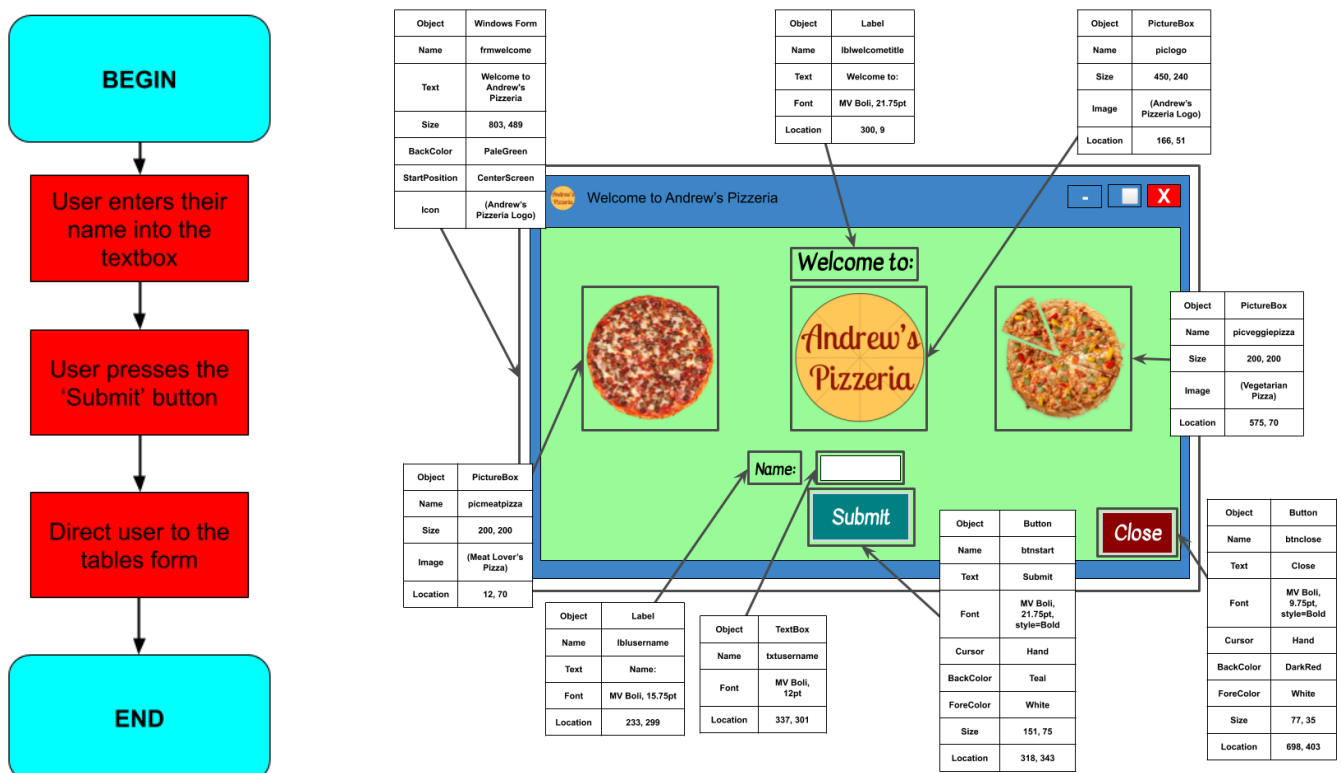Andrew Youssef
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Restaurant Booking System Programming Portfolio - Andrew Youssef

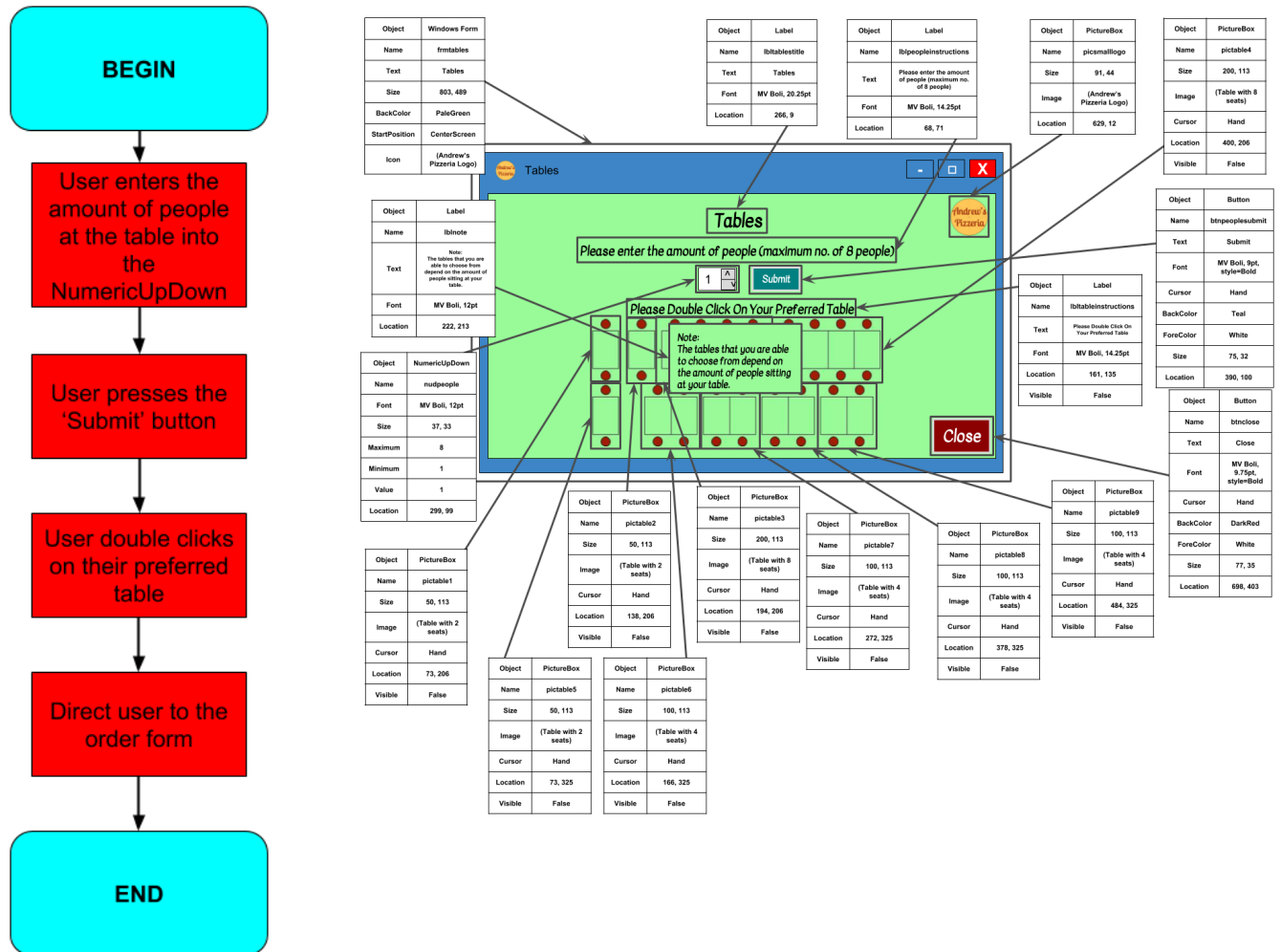## ★ Define the Problem:

The Restaurant Booking System is targeted to people between the ages 16-40. This program lets the potential customer choose their seat at **"Andrew's Pizzeria"**. The tables that are available to the user is dependant on the amount of people that are attending, this ensures that big tables won't be wasted on small groups of people. The order form of **"Andrew's Pizzeria"** offers an extensive list of foods and beverages. With the mains, toppings can be either added or removed. The extras and removals sections of the menu are only visible when any of the meals have been added to the order. Once the order is complete, the user is directed to the confirmation form, this shows the user the total price for each of the categories and the total sum, including GST. This age group was chosen because people of these ages commonly order their food online through applications like this Restaurant Booking System.
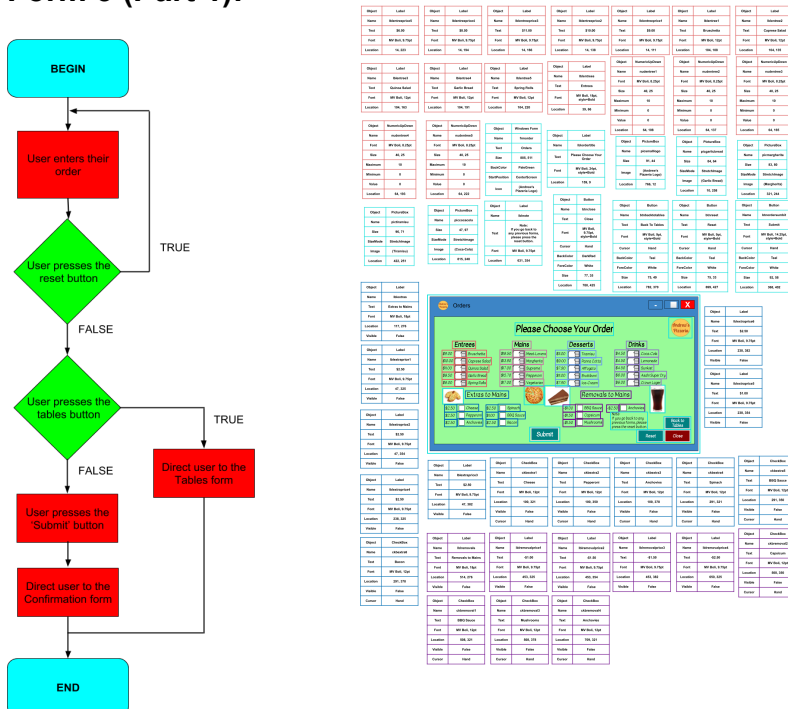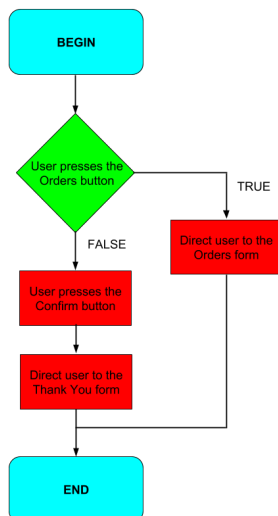
★ Design the Solution

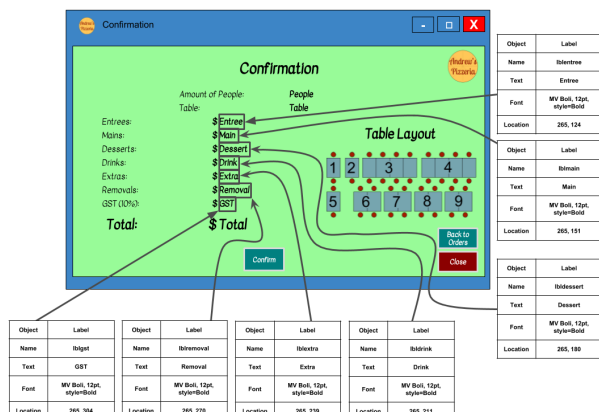**Form 1:**

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Form 2:

Flowchart (left):

- BEGIN
- User enters the amount of people at the table into the NumericUpDown
- User presses the 'Submit' button
- User double clicks on their preferred table
- Direct user to the order form
- END

Object tables:

Object	Windows Form
Name	frmtables
Text	Tables
Size	803, 489
BackColor	PaleGreen
StartPosition	CenterScreen
Icon	(Andrew's Pizzeria Logo)

Object	Label
Name	lbltablestitle
Text	Tables
Font	MV Boli, 20.25pt
Location	266, 9

Object	Label
Name	lblpeopleinstructions
Text	Please enter the amount of people (maximum no. of 8 people)
Font	MV Boli, 14.25pt
Location	68, 71

Object	PictureBox
Name	picsmalllogo
Size	91, 44
Image	(Andrew's Pizzeria Logo)
Location	629, 12

Object	PictureBox
Name	pictable4
Size	200, 113
Image	(Table with 8 seats)
Cursor	Hand
Location	400, 206
Visible	False

Object	Label
Name	lblnote
Text	Note: The tables that you are able to choose from depend on the amount of people sitting at your table.
Font	MV Boli, 12pt
Location	222, 213

Object	NumericUpDown
Name	nudpeople
Font	MV Boli, 12pt
Size	37, 33
Maximum	8
Minimum	1
Value	1
Location	299, 99

Object	Label
Name	lbltableinstructions
Text	Please Double Click On Your Preferred Table
Font	MV Boli, 14.25pt
Location	161, 135
Visible	False

Object	Button
Name	btnpeoplesubmit
Text	Submit
Font	MV Boli, 9pt, style=Bold
Cursor	Hand
BackColor	Teal
ForeColor	White
Size	75, 32
Location	390, 100

Object	Button
Name	btnclose
Text	Close
Font	MV Boli, 9.75pt, style=Bold
Cursor	Hand
BackColor	DarkRed
ForeColor	White
Size	77, 35
Location	698, 403

Object	PictureBox
Name	pictable1
Size	50, 113
Image	(Table with 2 seats)
Cursor	Hand
Location	73, 206
Visible	False

Object	PictureBox
Name	pictable2
Size	50, 113
Image	(Table with 2 seats)
Cursor	Hand
Location	138, 206
Visible	False

Object	PictureBox
Name	pictable3
Size	200, 113
Image	(Table with 8 seats)
Cursor	Hand
Location	194, 206
Visible	False

Object	PictureBox
Name	pictable7
Size	100, 113
Image	(Table with 4 seats)
Cursor	Hand
Location	272, 325
Visible	False

Object	PictureBox
Name	pictable8
Size	100, 113
Image	(Table with 4 seats)
Cursor	Hand
Location	378, 325
Visible	False

Object	PictureBox
Name	pictable9
Size	100, 113
Image	(Table with 4 seats)
Cursor	Hand
Location	484, 325
Visible	False

Object	PictureBox
Name	pictable5
Size	50, 113
Image	(Table with 2 seats)
Cursor	Hand
Location	73, 325
Visible	False

Object	PictureBox
Name	pictable6
Size	100, 113
Image	(Table with 4 seats)
Cursor	Hand
Location	166, 325
Visible	False

Form 3 (Part 1):

Flowchart (left):

- BEGIN
- User enters their order
- User presses the reset button — TRUE
- FALSE
- User presses the tables button — TRUE → Direct user to the Tables form
- FALSE
- User presses the 'Submit' button
- Direct user to the Confirmation form
- END

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Form 3 (Part 2):

Form 4 (Part 1):

A flowchart with the following nodes:

- BEGIN
- User presses the Orders button — TRUE → Direct user to the Orders form
- FALSE → User presses the Confirm button
- Direct user to the Thank You form
- END

Form 4 (Part 2):

Object	Label
Name	lblentree
Text	Entree
Font	MV Boli, 12pt, style=Bold
Location	265, 124

Object	Label
Name	lblmain
Text	Main
Font	MV Boli, 12pt, style=Bold
Location	265, 151

Object	Label
Name	lbldessert
Text	Dessert
Font	MV Boli, 12pt, style=Bold
Location	265, 180

Object	Label
Name	lbldrink
Text	Drink
Font	MV Boli, 12pt, style=Bold
Location	265, 211

Object	Label
Name	lblgst
Text	GST
Font	MV Boli, 12pt, style=Bold
Location	265, 304

Object	Label
Name	lblremoval
Text	Removal
Font	MV Boli, 12pt, style=Bold
Location	265, 270

Object	Label
Name	lblextra
Text	Extra
Font	MV Boli, 12pt, style=Bold
Location	265, 239

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Form 5:

★ **Produce the Solution:**

See 'Restaurant_Booking_System-Andrew_Youssef'

★ **Evaluate the Solution:**

I encountered the challenges/issues of:

1. Figuring out how to cater for people who wanted to purchase the same item multiple times.
2. Figuring out how to make the user only see the tables that would cater to the amount of people attending.
3. Figuring out how to calculate GST for the order.
4. Figuring out how to make the extras and removals only appear when the user orders a main course
5. Figuring out how to make a reset button work on the order form

Those challenges/issues were overcome by:

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1. Adding a NumericUpDown object next to each of the menu items.
2. Adding a NumericUpDown object and using "IF" statements.
3. Referring to Activity 11 in the 'Visual Basic Lesson Activities' booklet.
4. Using "IF" statements
5. Researching how to set variables to 0