



Laboratory Manual #4  
CC 106 – Applications Development and Emerging Technologies  
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**Laboratory #4:** Exploring RadioButton, CheckBox, and ComboBox in C# Windows Forms

**Note:** Paste your output here and renamed this file as 'Lab4\_LASTNAME\_FIRSTNAME' in PDF. **Just submit this part** to the designated LMS. No submission of multiple files, everything must be on this file alone.

**Part 1 – Favorite Color Selector (25 points)**

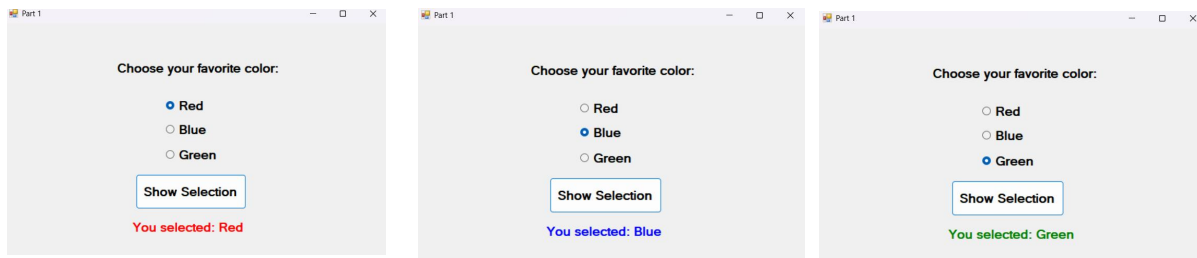
Code:

```
private void button1_Click(object sender, EventArgs e)
{
    string color;

    if (radioButton1.Checked)
    {
        color = "Red";
    }
    else if (radioButton2.Checked)
    {
        color = "Blue";
    }
    else if (radioButton3.Checked)
    {
        color = "Green";
    }
    else
    {
        color = "No color selected";
    }

    label3.Text = "You selected: " + color;
    label3.ForeColor = Color.FromName(color);
}
```

Output:



Explanation:

- On this part of the manual, I design and put the tools needed for this part and I begin with the simple if statement for handling the user's decision in the radiobutton. After the user checked a radiobutton it will be outputted In the label3.text and change its color to whatever the user selects in the radio button.



## Part 2 – Hobbies Selection (25 points)

Code:

```
private void button1_Click(object sender, EventArgs e)
{
    string hobbies = "";
    bool chosen = false;

    if (checkBox1.Checked)
    {
        hobbies += "Reading,";
        chosen = true;
    }
    if (checkBox2.Checked)
    {
        hobbies += "Sports,";
        chosen = true;
    }
    if (checkBox3.Checked)
    {
        hobbies += "Music,";
        chosen = true;
    }
    if (checkBox4.Checked)
    {
        hobbies += "Gaming,";
        chosen = true;
    }
    if (chosen == false)
    {
        label2.Text = "You did not select any hobbies.";
        return;
    }

    label2.Text = "You selected: " + hobbies.Remove(hobbies.Length - 1);
}
```

output:

Explanation:

- On this part, I created a 2 variable for handling the checkBox and if the user did not select any of the choices. Then just like what I learned in the last meeting I created 5 if statement to follow the user's input in the checkBox and then output it in the label2.text. I also applied the removing of the comma just like in the last meeting for better output.



### Part 3 – Program Enrollment (25 points)

Code:

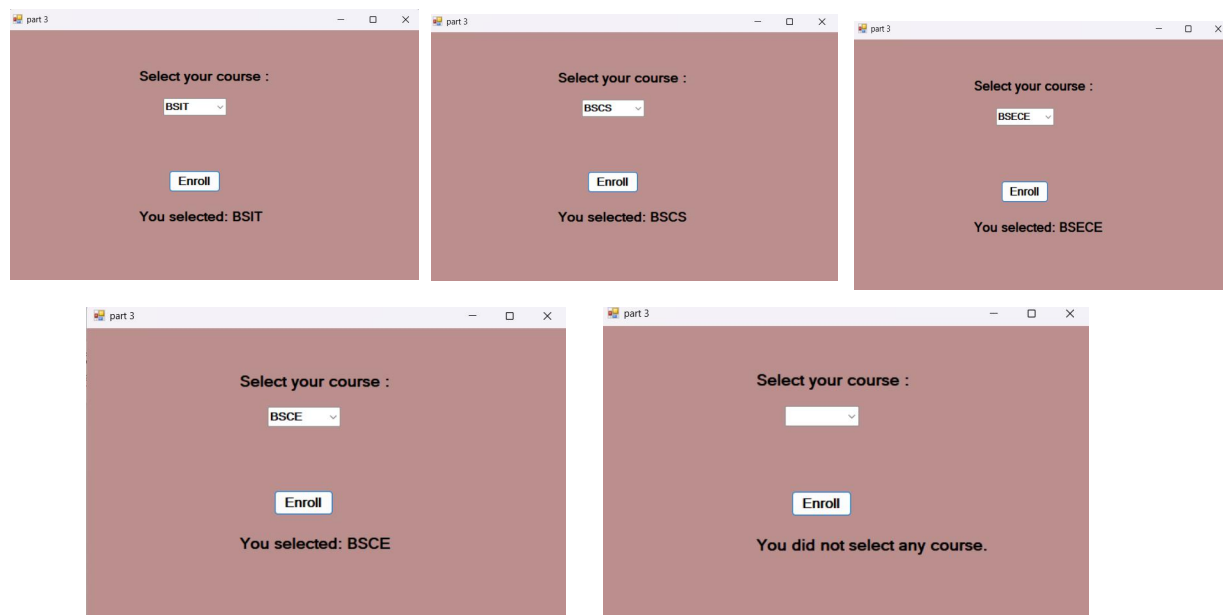
```
private void button1_Click(object sender, EventArgs e)
{
    string course = "";

    course = comboBox1.Text;

    if (course == "")
    {
        label2.Text = "You did not select any course.";
        return;
    }

    label2.Text = "You selected: " + course;
}
```

Output:



Explanation:

- On this part 3, it is a simple comboBox process for user's course selection. I first created a variable called "course" and whatever the user selects in the combobox it will be output in the label2.Text. If the user did not select a course it will output a text in the label2 then return to the program.



Part 4 – Food Ordering System (25 points)

Code:

```
1 reference
private void button1_Click(object sender, EventArgs e)
{
    string meal = "";
    string size = "";
    string extras = "";

    if (radioButton1.Checked)
    {
        size = "Small";
    }
    else if (radioButton2.Checked)
    {
        size = "Medium";
    }
    else if (radioButton3.Checked)
    {
        size = "Large";
    }
    else
    {
        label4.Text = "You did not select a size.";
        return;
    }

    meal = comboBox1.Text;
    int extrasCount = 0;

    if (checkBox1.Checked)
    {
        extras += "Cheese";
        extrasCount++;
    }
}
```

```
        extras += "Cheese";
        extrasCount++;
    }
    if (checkBox2.Checked)
    {
        if (extrasCount > 0)
        {
            extras += ", Fries";
        }
        else
        {
            extras += "Fries";
        }
        extrasCount++;
    }
    if (checkBox3.Checked)
    {
        if (extrasCount > 0)
        {
            extras += ", Drink";
        }
        else
        {
            extras += "Drink";
        }
        extrasCount++;
    }

    if (extrasCount > 1)
    {
        int lastCommaIndex = extras.LastIndexOf(", ");
        if (lastCommaIndex >= 0)
        {
            extras = extras.Remove(lastCommaIndex, 2).Insert(lastCommaIndex, " and ");
        }
    }

    string message = "You ordered a " + size + " " + meal;
    if (extrasCount > 0)
    {
        message += " with " + extras;
    }

    label5.Text = message;
}
```

```
if (extrasCount > 1)
{
    int lastCommaIndex = extras.LastIndexOf(", ");
    if (lastCommaIndex >= 0)
    {
        extras = extras.Remove(lastCommaIndex, 2).Insert(lastCommaIndex, " and ");
    }
}

string message = "You ordered a " + size + " " + meal;
if (extrasCount > 0)
{
    message += " with " + extras;
}

label5.Text = message;
}
```

Output:

Part 4

Welcome to Food Ordering System

Choose you meal : Pizza

Choose your size : ☐ Small ☐ Medium ☒ Large

Add extras : ☒ Cheese ☐ Fries ☒ Drink

Place Order

You ordered a Large Pizza with Cheese and Drink

Part 4

Welcome to Food Ordering System

Choose you meal : Burger

Choose your size : ☐ Small ☒ Medium ☐ Large

Add extras : ☐ Cheese ☒ Fries ☒ Drink

Place Order

You ordered a Medium Burger with Fries and Drink



**Explanation:**

- On this part 4, I first created 3 variables for: Meal,size,extras to store a user's input. Then I start to create a if statement to check whether the user choose a correct size. Then I assigned a value to the meal variable for the radio button input. Lastly, for the extras I encounter a logic problem when the user select 1 choice in the check box it will only print without the string "and" if the user selects more than 1 extras. So I added a counter to check if the user selects multiple check box then a temporary "," to be replace with "and", because of its index I can use It to add a string "and".