

# CO453 Application Programming

Week 12 – Etch-a-Sketch Project

.NET part 7

# Windows Programming



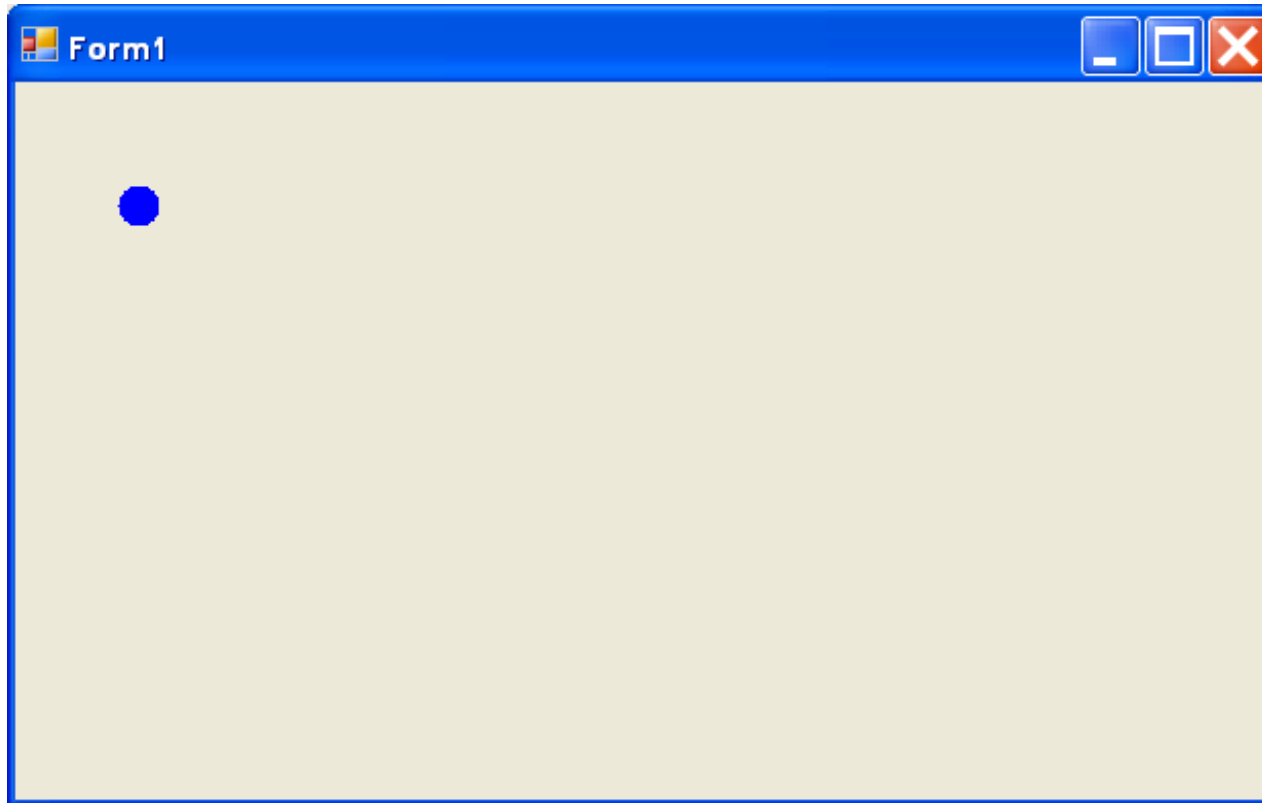
**C#  
.NET  
Project**

**Etch-A-Sketch: The Project**

# The Basic Program

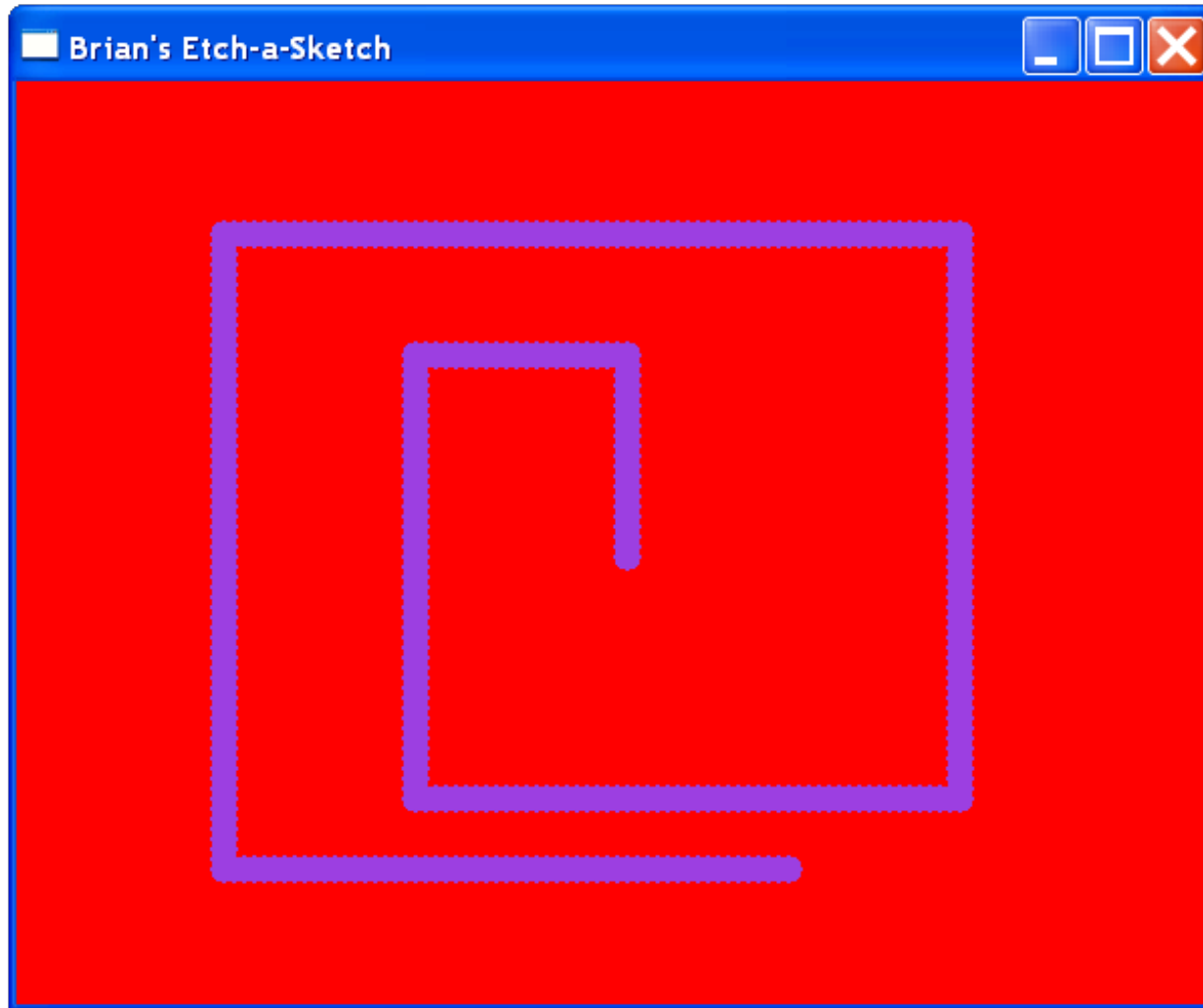
# The main window

A Blue Circle centred on a Blank Form



# Program Running

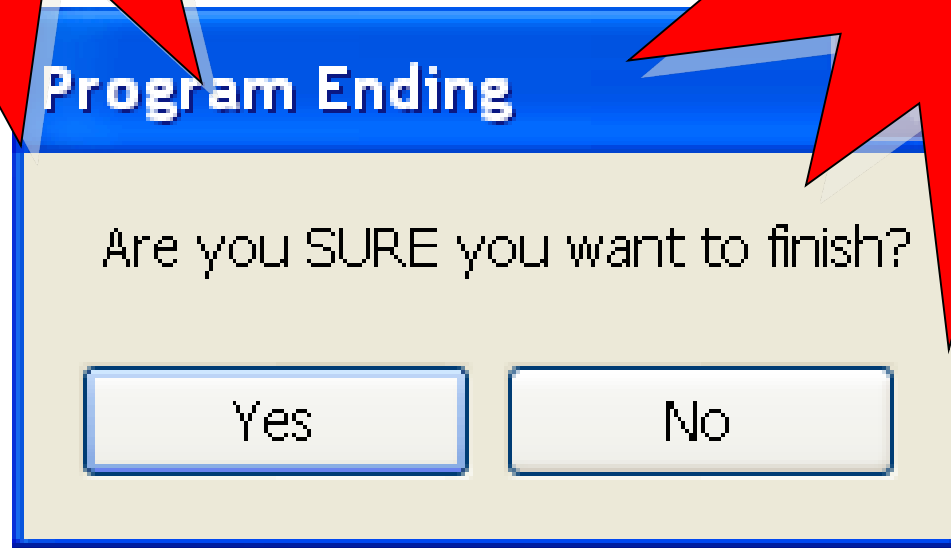
Draw using Up, Down, Left and Right arrow keys



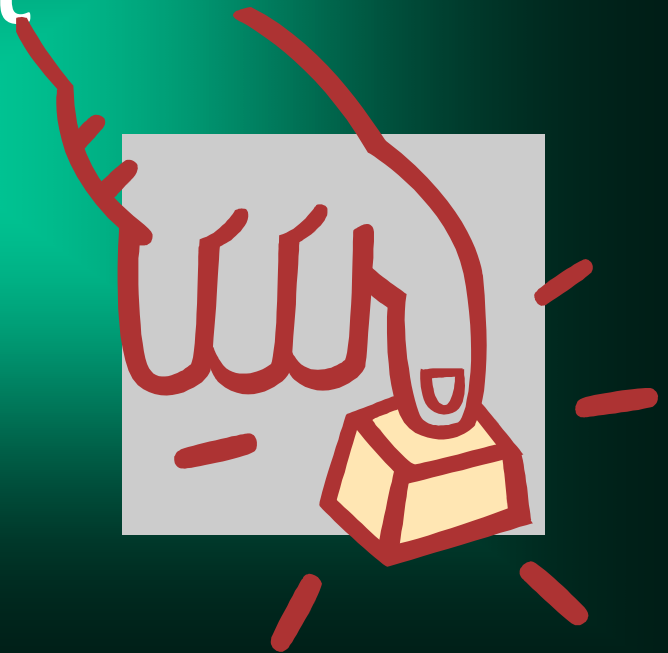
# C and Esc keys

**Esc** key quits  
the program

**C** key clears  
the screen



# Reminder: How to Detect A Key Press



# Overriding ProcessCmdKey() method

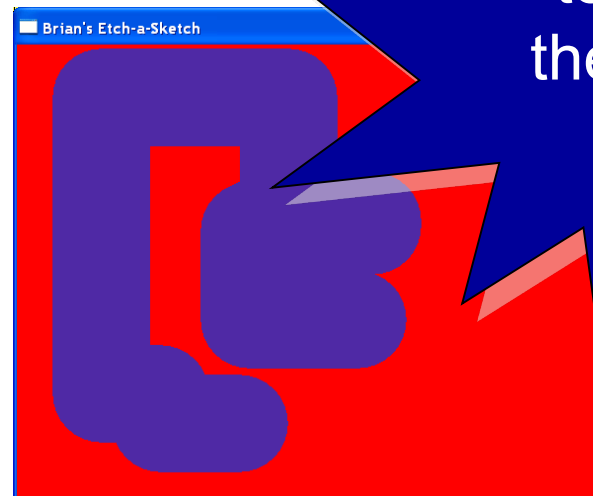
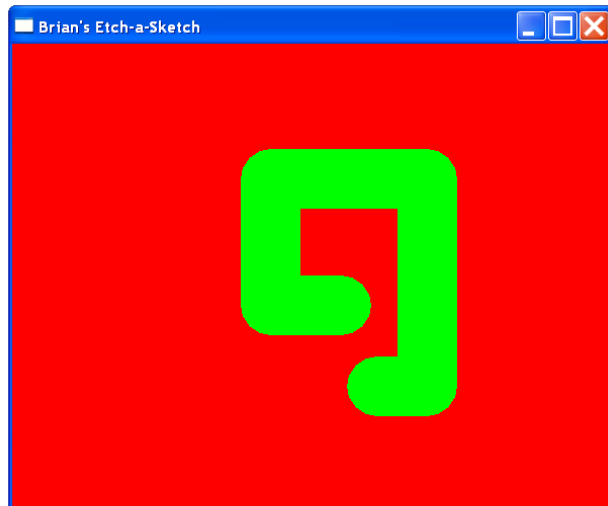
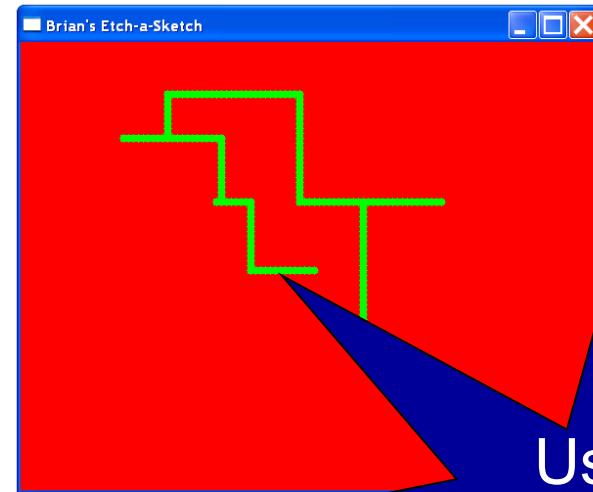
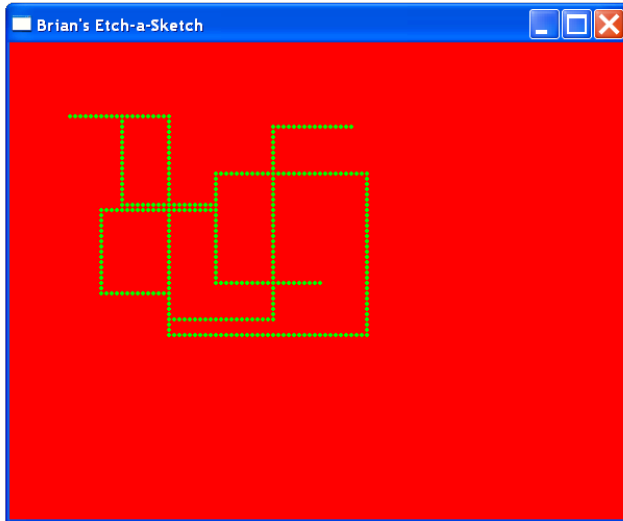
```
protected override bool ProcessCmdKey (ref Message msg,  
                                           Keys keyData)  
{  
    string input;  
    input = keyData.ToString();           // collect the key data  
    if (input == "B")  
    {  
        MessageBox.Show("You pressed the B key");  
        return true;  
    }  
    return false;           // return false if no key pressed  
}
```



# Extension Work-1

# B, S and F1

Use B and S to make circle bigger/smaller

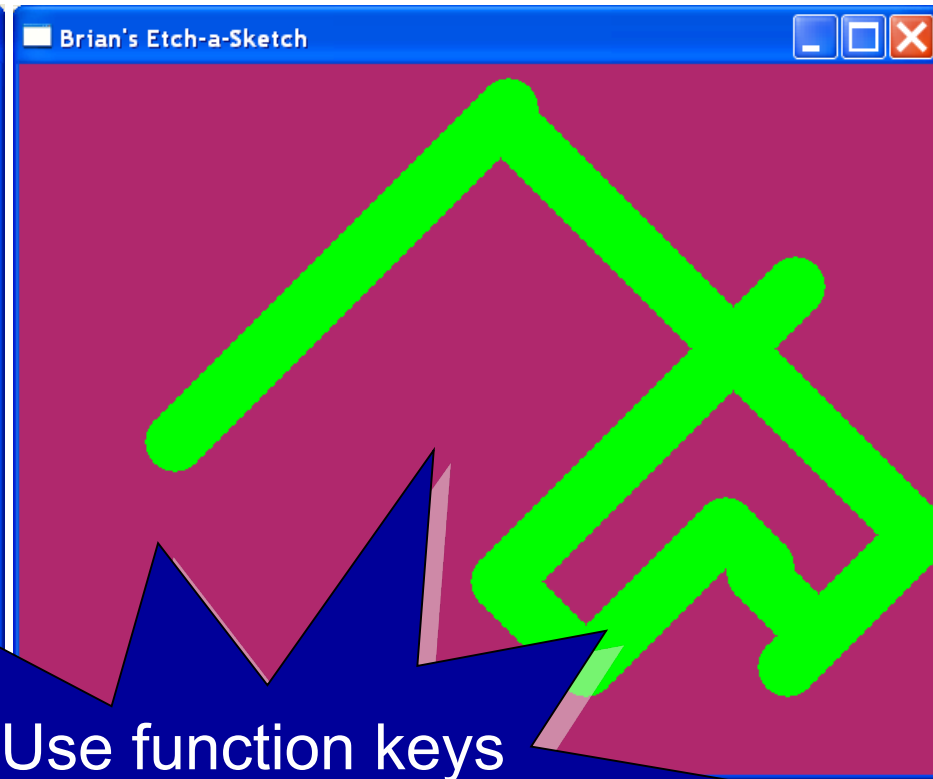
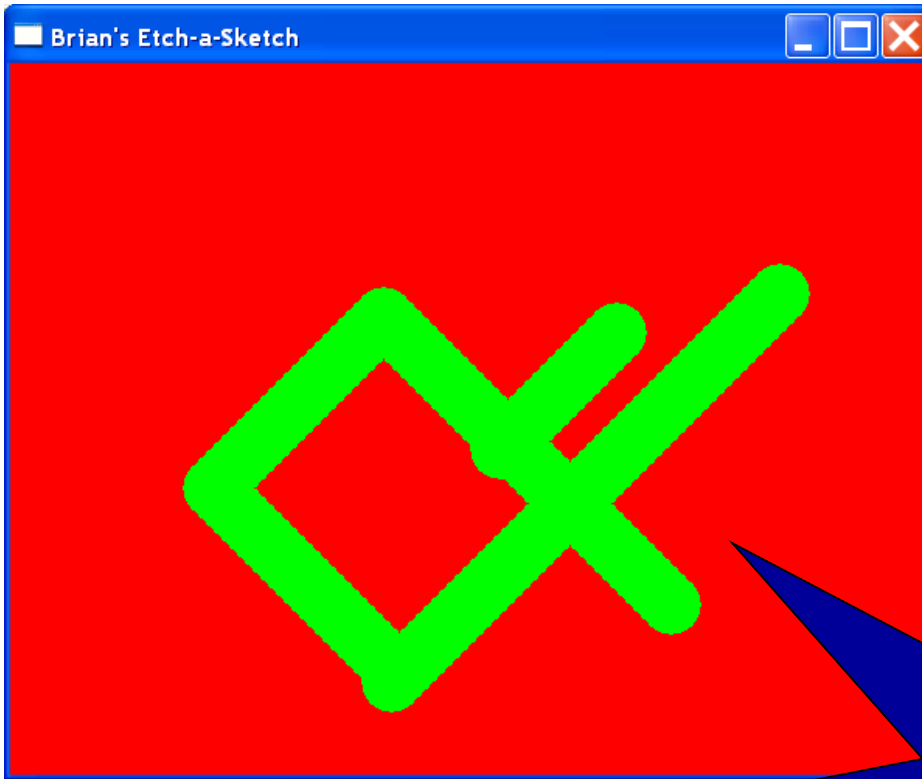


Use F1 key  
to change  
the drawing  
colour

# Extension Work-2

# Drawing Diagonally

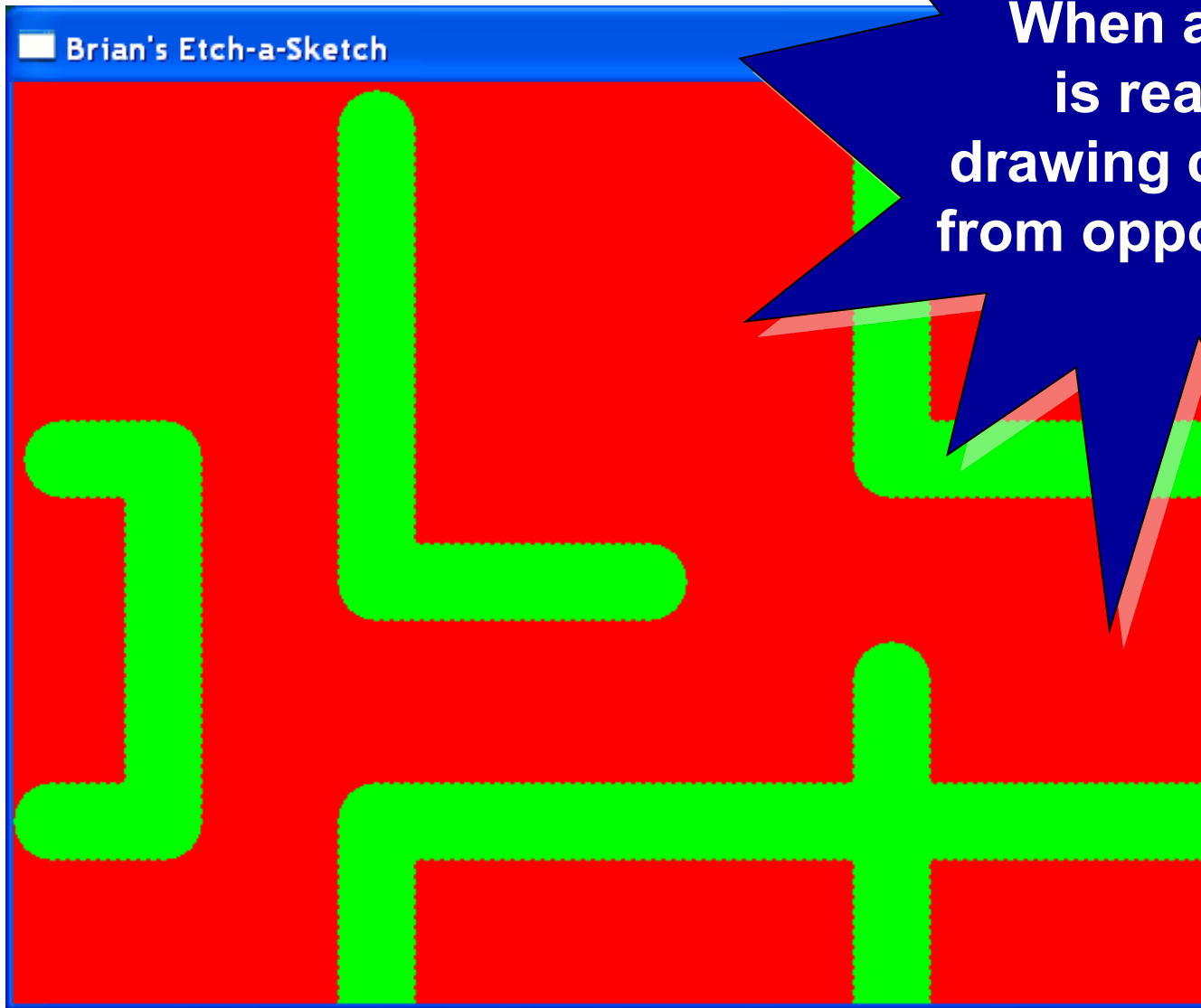
Set up 4 keys to do this



Use function keys  
to change  
the background  
colour

# Extension Work-3

# Hitting an Edge



**When an edge is reached, drawing continues from opposite edge**

# Add a Splash Screen

My Great EtchaSketch



Click here to enter :

# Project Deliverables



# Your Log Book

- 1. Source Code (fully commented)**
- 2. Author name, date, project title etc.**
- 3. Sample outputs from program execution**
- 4. Class Diagrams**
- 5. Completed Test Plans**

# The Last Slide

