

```
using System;
using SplashKitSDK;

namespace ShapeDrawing
{
    public class Program
    {
        private enum Shapekind
        {
            Rectangle,
            Circle,
            Line
        }

        public static void Main()
        {
            //Set window size and title
            Window window = new Window("ShapeDrawing_Task 5.3C", 800, 600);
            Drawing myDrawing = new Drawing();
            Shapekind kindToAdd = Shapekind.Circle; //Default shape to add
            //Main loop
            do
            {
                SplashKit.ProcessEvents();
                SplashKit.ClearScreen();

                //Change background color when space key is pressed
                if (SplashKit.KeyTyped(KeyCode.SpaceKey))
                {
                    myDrawing.Background = SplashKit.RandomRGBColor(255);
                }
                //When left-clicked mouse, it will draw rectangle as the
                //default shape
                if (SplashKit.MouseClicked(MouseButton.LeftButton))
                {
                    Shape newShape;
                    switch (kindToAdd)
                    {
                        case Shapekind.Circle:
                            newShape = new MyCircle();
                            newShape.X = SplashKit.MouseX();
                            newShape.Y = SplashKit.MouseY();
                            break;
                        case Shapekind.Line:
                            newShape = new MyLine();
                            newShape.X = SplashKit.MouseX();
                            newShape.Y = SplashKit.MouseY();
                            break;
                        default:
                            newShape = new MyRectangle();
                    }
                }
            }
        }
    }
}
```

```

        newShape.X = SplashKit.MouseX();
        newShape.Y = SplashKit.MouseY();
        break;
    }
    myDrawing.AddShape(newShape);
}
//Change to draw rectangle if press R key
if (SplashKit.KeyTyped(KeyCode.RKey))
{
    kindToAdd = Shapekind.Rectangle;
}
//Change to draw circle if press C key
if (SplashKit.KeyTyped(KeyCode.CKey))
{
    kindToAdd = Shapekind.Circle;
}
//Change to draw line if press L key
if (SplashKit.KeyTyped(KeyCode.LKey))
{
    kindToAdd = Shapekind.Line;
}
//Displat border for all shapes with right-clicked mouse
if (SplashKit.MouseClicked(MouseButton.RightButton))
{
    myDrawing.SelectShapesAt(SplashKit.MousePosition());
}
//Changing colors of rectangles when pressing B key
if (SplashKit.KeyTyped(KeyCode.BKey))
{
    foreach (Shape s in myDrawing.Shapes)
    {
        s.Color = SplashKit.RandomRGBColor(255);
    }
}
//Delete selected shapes when pressing Delete or Backspace key
if (SplashKit.KeyTyped(KeyCode.DeleteKey) || SplashKit.KeyTyped(
(KeyCode.BackspaceKey))
{
    foreach (Shape s in myDrawing.SelectedShapes)
    {
        myDrawing.RemoveShape(s);
    }
}
//Save the drawing to a file when pressing S key
if (SplashKit.KeyTyped(KeyCode.SKey))
{
    myDrawing.Save("D:\\University\\May_2025\\
        \\COS20007_Object_Oriented_Programming\\Weekly_exercises\\
        \\5.3C\\TestDrawing.txt");
}

```

```
}
//open file
if (SplashKit.KeyTyped(KeyCode.OKey))
{
    try
    {
        myDrawing.Load("D:\\University\\May_2025\\
                        \\COS20007_Object_Oriented_Programming\\
                        \\Weekly_exercises\\5.3C\\TestDrawing.txt");
    }
    catch (Exception e)
    {
        Console.Error.WriteLine("Error loading file: {0}",
                                e.Message);
    }
}
myDrawing.Draw();
SplashKit.RefreshScreen();
} while (!window.CloseRequested);
}
}
```