Tutorial – Rendering Text in GDI

In this tutorial, we will be building on top of the application that we created last session, and adding some text to it.

As with before, information regarding GDI+ can be found at:

https://msdn.microsoft.com/en-us/library/aa983623(v=vs.71).aspx

Getting ready to Render Text

1. Ensure you have overridden the Paint function for the applications Form, and that you have got a reference to the Graphics object currently in use. If you aren't sure how to do this, look over the exercise from the last session.

```
private void Form1_Paint(object sender, PaintEventArgs e)
 {
     //Get the Graphics Object that we will use for drawing
     Graphics g = e.Graphics;
```

2. Create a new Brush Object that will describe the colour of our text. For now, we will just use a SolidBrush, but you can experiment with the different types of brushes if you want a different look.

```
//Create the brush we are going to use for our text
Brush redBrush = new SolidBrush(Color.Red);
```

3. Now we need to create a new Font object that describes the font and size we want our text to be.

```
//Create a new Font, using the Times New Roman fontfamily,
//with a size of 24
 Font exampleFont = new Font("Times New Roman", 24);
```

4. Finally, we call DrawString on the Graphics Object in order to actually render the text, using the Brush and Font that we just created:

```
g.DrawString("Some example text", exampleFont, redBrush, new Point(10, 10));
```

5. Finally, don't forget to dispose of the Font and Brush when you are finished using them.

```
            exampleFont.Dispose();
            redBrush.Dispose();
```

Some things to try:

1. Modify your application to render out the x and y coordinates of your mouse as you move it around the screen.

2. Experiment with using different types of Brushes and Fonts to customize the look of your text.

Advanced:

Using the advanced features from last session, add in some text rendering to each node/marker that has been placed, noting its location on the grid.