Tutorial – Where is the mouse? (Windows Store App)

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About This Document

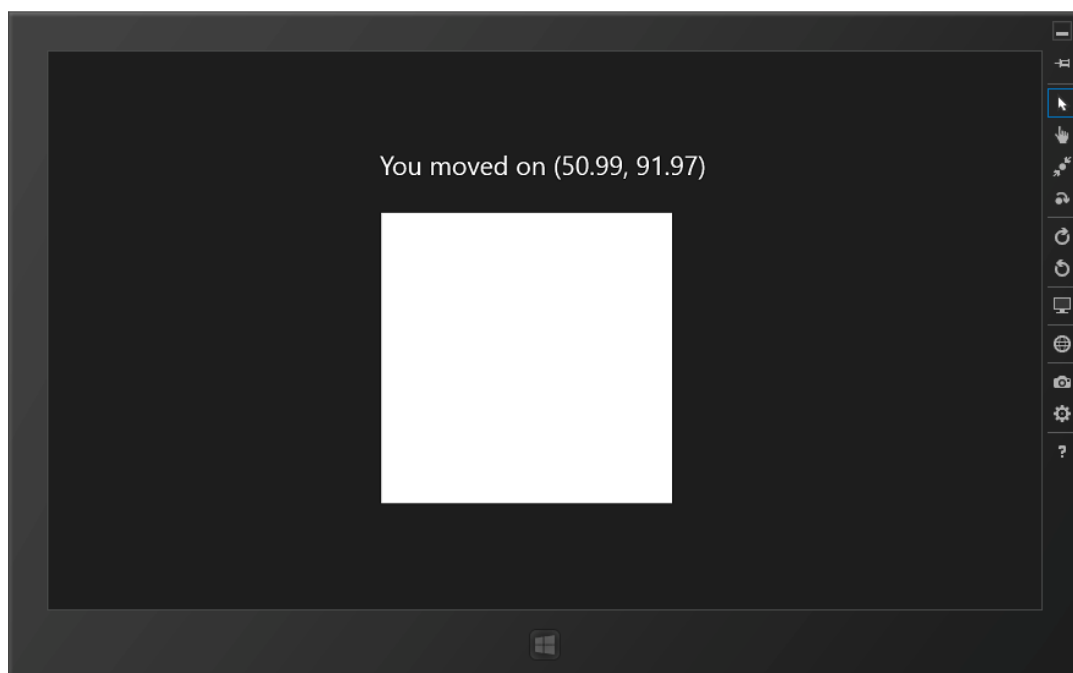在本次的練習中，將會練習到如何在 Canvas 中註冊點擊及移動的事件。

Figure 1 Interaction Application

Tutorial – Where is the mouse?

Step 1　Setup Environment

　　打開 Visual Studio 2015 後，點選 File > Visual C# > Windows > Universal > Blank App(Universal Windows)，若發現沒有此項可選擇，請使用下方說明來取得。

　　因為 Windows10 以上版本的 Visual Studio 2015 預設是沒有內建 Windows Store App 的專案工具，所以必須先至以下網站下載需要工具，請先關閉 Visual Studio 2015，下載完成後點選安裝 Figure. 2 所選取的項目，並等候安裝更新。

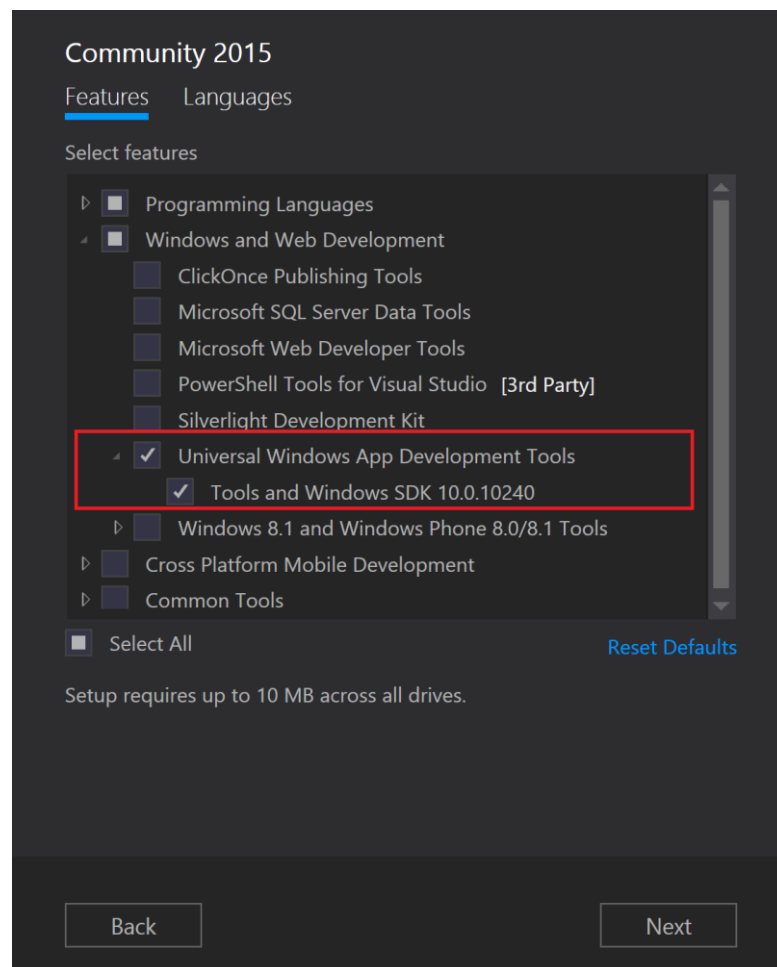　　**http://go.microsoft.com/fwlink/?LinkID=619615**

Figure 2 Run setup and choose items which you need

(whether Community Vision or Enterprise Vision)

　　打開 Visual Studio 2015 後，點選 File > Visual C# > Windows > Universal > Blank App(Universal Windows)，然後輸入專案名稱，即可成功建立一個空白的 Windows Store App 專案。

Step 2　Register and Implement event

在 MainPage.xaml 中加入一個 Canvas 和 TextBlock，接著開啟 MainPage.xaml.cs 並在加入以下程式碼，註冊點擊和移動的事件

```csharp
private const int CANVAS_SIZE = 400;
private const String MESSAGE = "Where is the mouse?";
private SolidColorBrush _whiteColor =
                                new SolidColorBrush (Colors.White);

public MainPage()
{
    this.InitializeComponent();
    _textBlock.Text = MESSAGE;
    _canvas.Width = CANVAS_SIZE;
    _canvas.Height = CANVAS_SIZE;
    _canvas.Background = _whiteColor;
    _canvas.PointerPressed += PressOnCanvas;
    _canvas.PointerMoved += MoveOnCanvas;
}

private void MoveOnCanvas(object sender, PointerRoutedEventArgs e)
{
    double moveX = Math.Round(e.GetCurrentPoint(_canvas).Position.X,
2);
    double moveY = Math.Round(e.GetCurrentPoint(_canvas).Position.Y,
2);
    _textBlock.Text = "You moved on (" + moveX + ", " + moveY + ")";
}

private void PressOnCanvas(object sender, PointerRoutedEventArgs e)
{
    double pressX =
            Math.Round(e.GetCurrentPoint(_canvas).Position.X, 2);
    double pressY =
            Math.Round(e.GetCurrentPoint(_canvas).Position.Y, 2);
    _textBlock.Text = "You pressed on (" + pressX + ", " + pressY +
")";
}
```

按下執行後，可以看到結果如 Figure 1

- The End -