

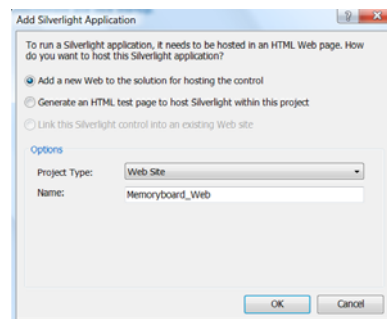
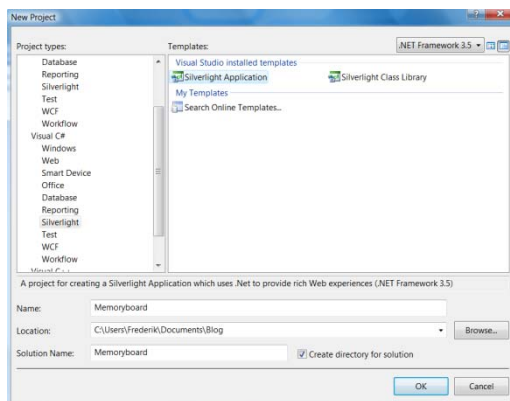
# Silverlight memory board ( Part 1 )

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## Step 1: creating the project

In this step, I will create a new Silverlight application and some css that will position the Silverlight content in the browser.

- Open Visual Studio 2008 and choose File → New Project → Visual C# → Silverlight → Silverlight Application.
- Give your application a name and a location and click ok.
- Visual Studio will ask if you like to create a new web project to host the Silverlight content. Just click ok, otherwise you can also choose to host the Silverlight content in a single html page.



- Open the file page.xaml and set the dimension to 1024 x 768. Remove the grid and insert a canvas because we will only use the Left and Top properties to position our elements. Also give the canvas a background color: Your xaml will look like this:

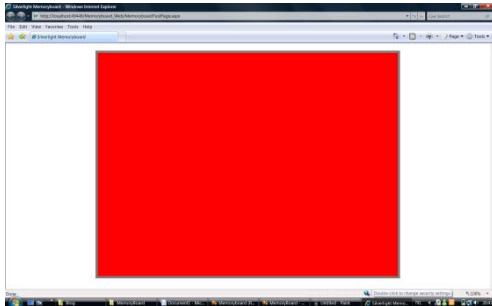
```
<UserControl x:Class="Memoryboard.Page"
    xmlns="http://schemas.microsoft.com/client/2007"
    xmlns:x="http://schemas.microsoft.com/winfx/2006/xaml"
    Width="1024" Height="768">
    <Canvas x:Name="mainCanvas" Background="Red">

        </Canvas>
    </UserControl>
```

- Open MemoryBoardTestPage.aspx ( or whatever your testpage is called ) and find a <div> that contains <asp:Silverlight.... This div will host your Silverlight content. Give the div an ID ( for example: SilverlightHost ) and add this css in the head of the aspx page:

```
<style type="text/css">
    #SilverlightContainer
    {
        margin-top: 25px;
        margin-left: auto;
        margin-right: auto;
        height: 768px;
        width: 1024px;
        border-color:#7D7D7D;
        border-style:solid;
        border-width:8px;
    }
</style>
```

- If you test your project ( F5 ), you should see the Silverlight content in the middle of the browser. Normally, Visual Studio will ask you if you want to change web.config, so debugging can be enabled. Click ok.



## Step 2: create the user interface

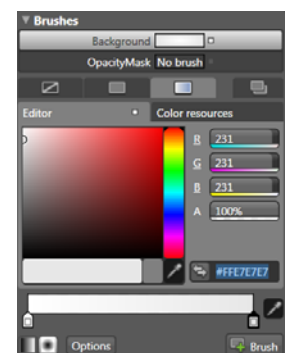
In this step, I will create the user interface for the application. We need:

- The main page ( page.xaml ) that shows the memory board
- A button to add a new note on the board
- A user controls that represents the note

I will use Expression Blend 2.5 March preview to design the user interface. Every Silverlight application can be opened in Expression Blend. So, start up blend and open your solution ( sln file )

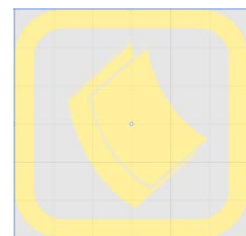
### The memory board ( page.xaml )

- Open the file page.xaml and select the element mainCanvas.
- In the Brushes panel, select Background and choose a Gradient brush. Select radial gradient at the bottom of the panel.
- Set the left handle to pure white (#FFFFFFFF) and the right handle to a light gray (#FFE7E7).



### The button

- Select a button from the toolbox and draw it on the canvas. Give the button a name, for example btnNew.
- Give it a width and a height of 48 px, and position it in the upper left corner of the canvas.
- Now, we change the controltemplate ( look and feel ) of the button. For a WPF desktop application this can be done in Expression Blend. In Silverlight, you have to work in pure xaml. A little workaround is to create a new WPF application in Blend, create your button and copy / paste the xaml in you Silverlight project. But be careful, not everything that is supported in WPF, is also supported for Silverlight.
- I also used Adobe Illustrator to create the button and then used the converter that Mike Swanson wrote (<http://www.mikeswanson.com/xamlexport/>) to convert the Illustrator file to xaml for Silverlight.



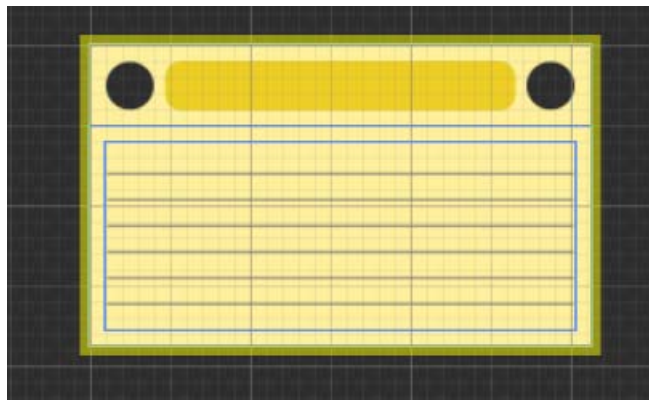
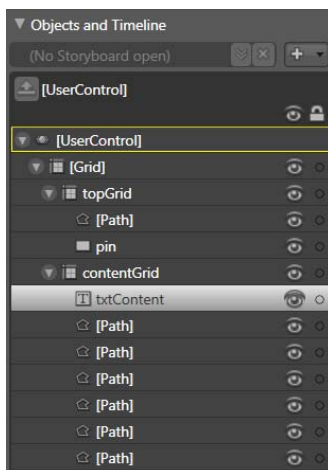
- After some design work, the xaml looks a little bit like this:

```
<UserControl.Resources>
  <Style x:Key="newButton" TargetType="Button">
    <Setter Property="Template">
      <Setter.Value>
        <ControlTemplate>
          <Border ... ComnerRadius="8,8,8,8">
            <Canvas>
              ...
            </Canvas>
          </Border>
        </ControlTemplate>
      </Setter.Value>
    </Setter>
  </Style>
</UserControl.Resources>
...
<Button Style="{StaticResource newButton}" x:Name="btnNew" ... />
```

## The Note

I will create a new user control that contains all the controls for a single note on my memory board. A user controls also has his own .cs file.

- Go to the project tab in Expression Blend and right click the silverlight project. Choose Add new item → User Control and give the control a name ( for example: note.xaml ). Make sure the checkbox “Include code file” is on.
- Set the width of the control to 250 and the height to 150.
- Design the control like you want, but make sure it contains:
  - A shape that we will use for drag and drop ( called pin in my example )
  - A textbox that we will use to add text to the note ( called txtContent in my example )
- Your note control can look like this:



Now, you have designed all the controls you need for the rest of this tutorial. In the second part, we will write some code to add, update and delete new notes on the memory board. It will also be possible to drag and drop the notes on the board.