

现代操作系统应用开发实验报告

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实验名称： HW4-Todos

一．参考资料

请在这里列出对本实验有帮助你所参考的资料或者网站。

资料：2017week4 课件、2017-homework4.pptx 课件、2017-homework4-demo

2017-week4-demo 等等

二．实验步骤

请在这里简要写下你的实验过程。

这次实验比较简单，TA 给的 demo 也很全，再加上 homework 课件上给了

OnNavigationTo 方法的实现，所以依样画葫芦，很快就实现了要求的功能。

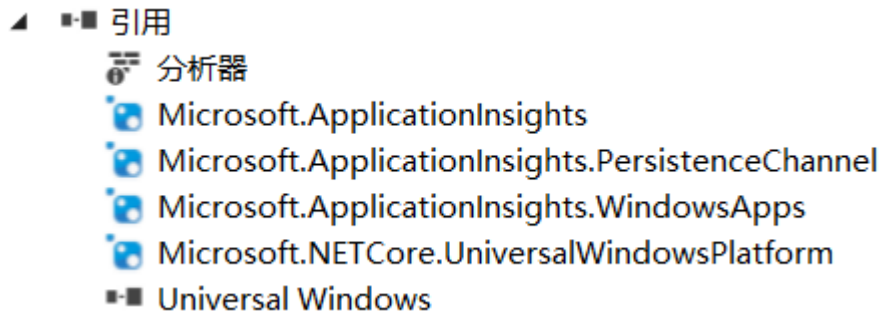
既然说是实验过程，下面简单罗列一下步骤吧。

① 这次实验主要通过课件和 demo 就能完成，时间也大部分花在这里。从老师的课件开始，

简单学习 Application Lifecycle。

② 运行老师给的 demo。一开始没添加如图所示的引用：无法运行。解决了这个问题并运

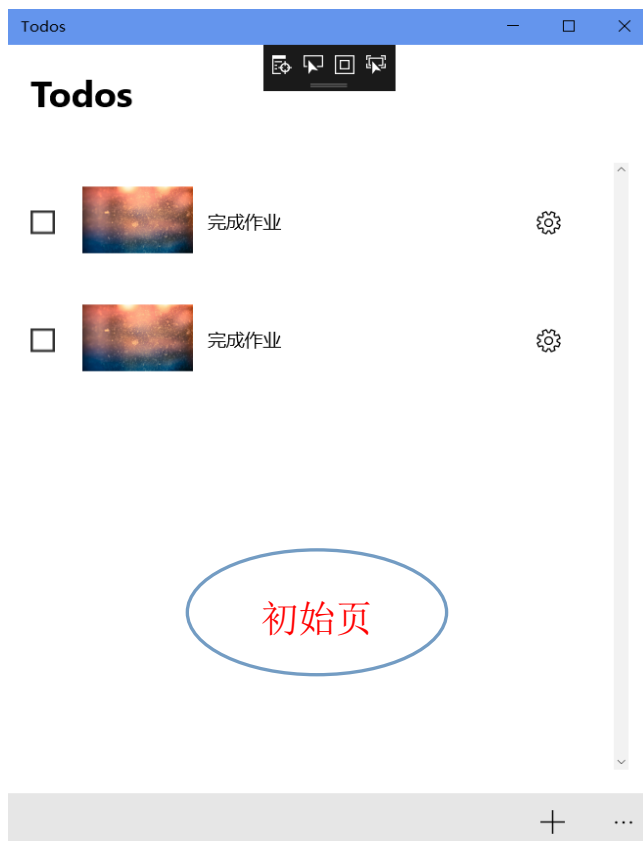
行后，发现给的 demo 不就是我们实验要实现的功能，至少大同小异。（愉快）



- ③ 仔细分析了课件 demo 的代码，对 Application Lifecycle 有了更深地理解了。接下来看作业要求，发现里面 Newpage 的 OnNavigationTo 已经帮我们实现好了，OnNavigationFrom 也给了很多提示，感谢 TA！
- ④ 接下来就是实现功能了。逻辑很简单，这个过程花的时间较短。这里不作详述，在第四点【实验过程遇到的问题】再陈述。

三．实验结果截图

请在这里把实验所得的运行结果截图。



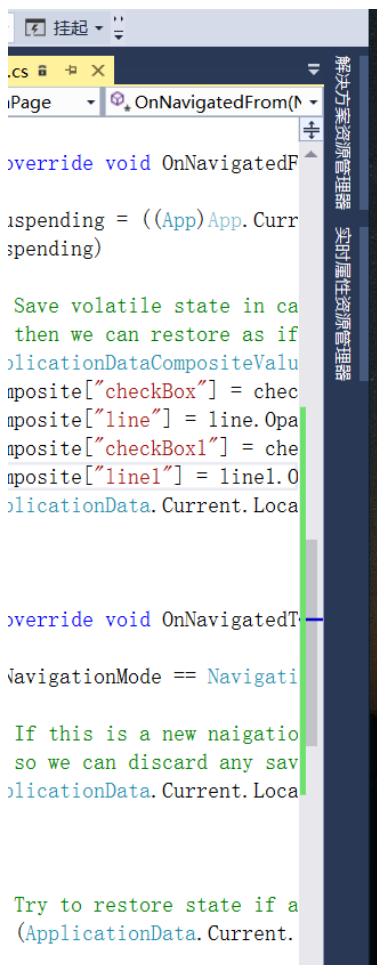


Todos

点击



挂起



```
override void OnNavigatedF
```

```
ispending = ((App)App.Curr  
ispending)
```

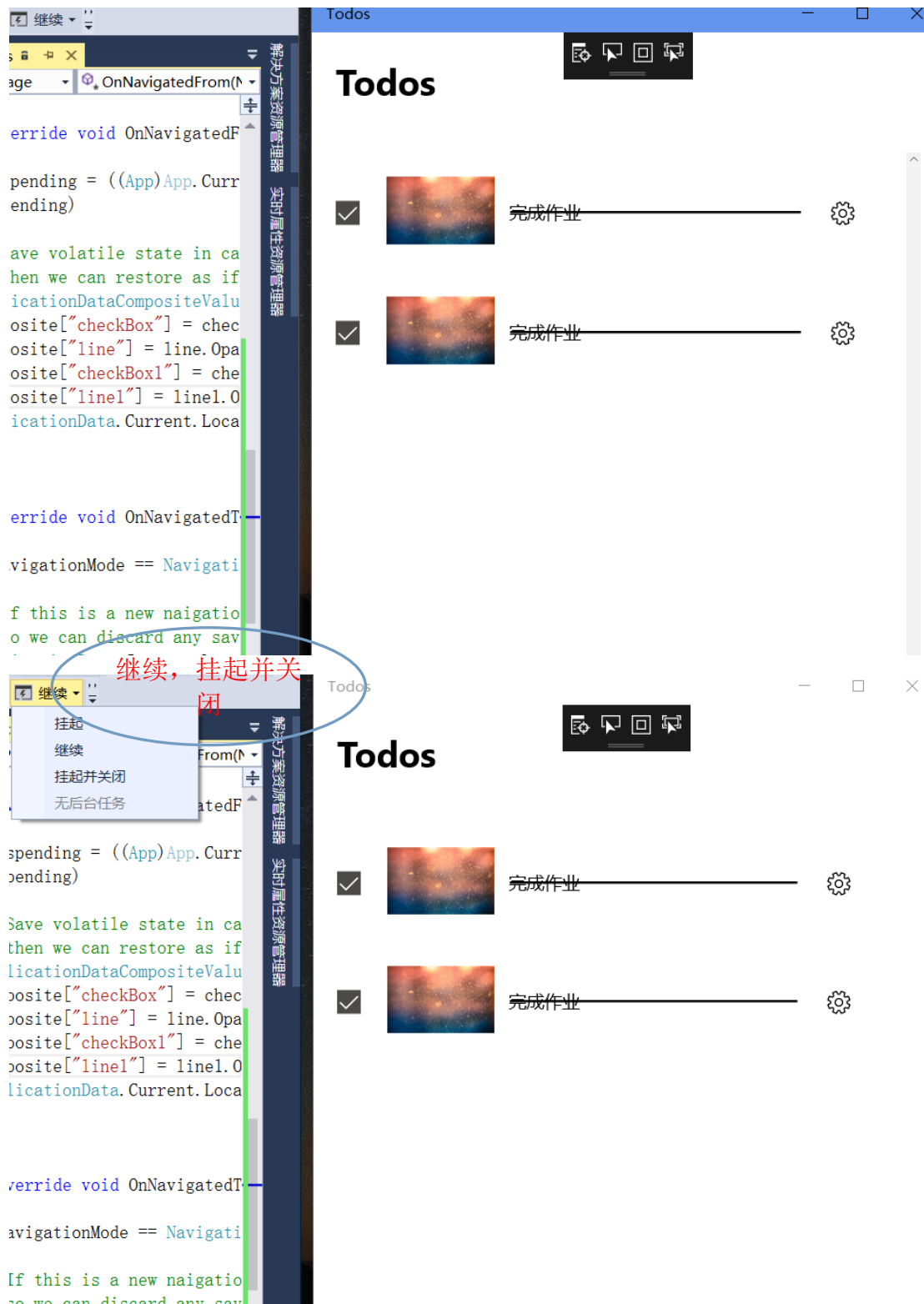
```
Save volatile state in case of a crash
then we can restore as if nothing happened
ApplicationDataCompositeValue composite;
composite["checkBox"] = checkBox.Checked;
composite["line"] = line.Text;
composite["checkBox1"] = checkBox1.Checked;
composite["line1"] = line1.Text;
ApplicationData.Current.SaveLocalState(composite);
```

```
override void OnNavigatedTo
```

```
NavigationMode == Navigati
```

```
If this is a new naigation
so we can discard any sav
applicationData.Current.Loca
```

```
Try to restore state if a
(ApplicationData.Current.
```



生命周期事件

- 挂起
- 继续
- 挂起并关闭
- 无后台任务

```
spending = ((App)App. Curr
ending)

Save volatile state in ca
then we can restore as if
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NewPage

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If this is a new naigation
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Try to restore state if a
(ApplicationData. Current.

var composite = Applicat
```

Todos

Edit Todo Item



select

Title

Details

Due Date

2019年	3月	20日
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Create Cancel

Debug

解决方案配置

OnNavigatedTo

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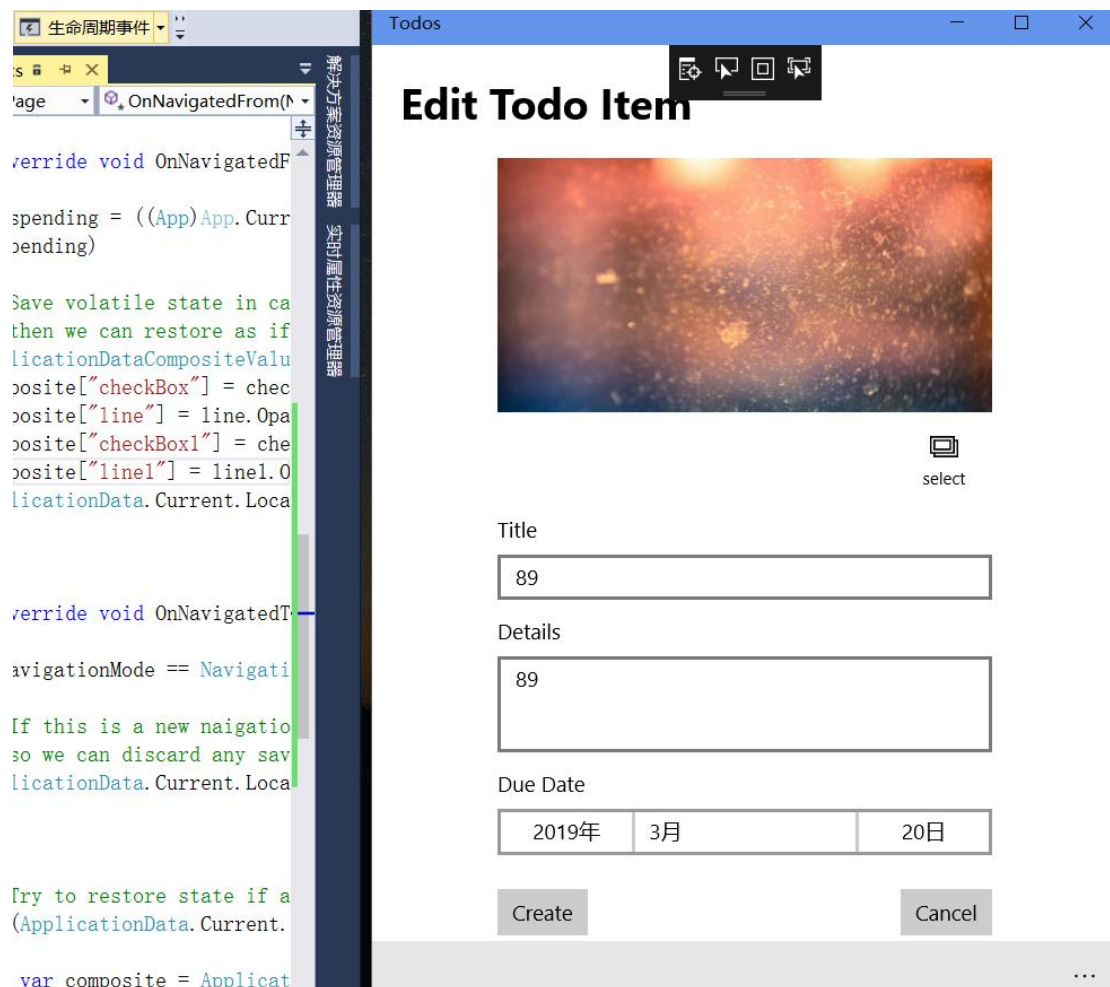
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```

Todos

挂起并关闭，重新运行

得到下图



四 . 实验过程遇到的问题

请在这里写下你在实验过程中遇到的问题以及解决方案。

- ① Line 不能用 Visibility , 用 Opacity , 因为 Visibility 无法转换储存在 composite 中 , Opacity 是 double 类型 , 所以可以。

代码如下 :


```

protected override void OnNavigatedFrom(NavigationEventArgs e)
{
    bool suspending = ((App)App.Current).IsSuspending;
    if (suspending)
    {
        // Save volatile state in case we get terminated later on
        // then we can restore as if we'd never been gone
        ApplicationDataCompositeValue composite = new ApplicationDataCompositeValue();
        composite["checkBox"] = checkBox.IsChecked;
        composite["line"] = line.Opacity;
        composite["checkBox1"] = checkBox1.IsChecked;
        composite["line1"] = line1.Opacity;
        ApplicationData.Current.LocalSettings.Values["newpage"] = composite;
    }
}

protected override void OnNavigatedTo(NavigationEventArgs e)
{
    if (e.NavigationMode == NavigationMode.New)
    {
        // If this is a new navigation, this is a fresh launch
        // so we can discard any saved state
        ApplicationData.Current.LocalSettings.Values.Remove("newpage");
    }
    else
    {
        // Try to restore state if any, in case we were terminated
        if (ApplicationData.Current.LocalSettings.Values.ContainsKey("newpage"))
        {
            var composite = ApplicationData.Current.LocalSettings.Values["newpage"]
                as ApplicationDataCompositeValue;
            checkBox.IsChecked = (bool)composite["checkBox"];
            line.Opacity = (double)composite["line"];
            checkBox1.IsChecked = (bool)composite["checkBox1"];
            line1.Opacity = (double)composite["line1"];
            // We're done with it, so remove it
            ApplicationData.Current.LocalSettings.Values.Remove("newpage");
        }
    }
}

```

② 不要忘记在 App.xaml.cs 中加入 public bool IsSuspending = false ;

在 OnSuspending 函数里加入 IsSuspending = true ;

③ 在 NewPage.xaml.cs 中，注意类型的转换。代码如下：

```

protected override void OnNavigatedFrom(NavigationEventArgs e)
{
    bool suspending = ((App)App.Current).IsSuspending;
    if (suspending)
    {
        // Save volatile state in case we get terminated later on
        // then we can restore as if we'd never been gone
        ApplicationDataCompositeValue composite = new ApplicationDataCompositeValue();
        composite["title"] = title.Text;
        composite["details"] = details.Text;
        composite["date"] = date.Date;
        ApplicationData.Current.LocalSettings.Values["newpage"] = composite;
    }
}

protected override void OnNavigatedTo(NavigationEventArgs e)
{
    if (e.NavigationMode == NavigationMode.New)
    {
        // If this is a new navigation, this is a fresh launch
        // so we can discard any saved state
        ApplicationData.Current.LocalSettings.Values.Remove("newpage");
    }
    else
    {
        // Try to restore state if any, in case we were terminated
        if (ApplicationData.Current.LocalSettings.Values.ContainsKey("newpage"))
        {
            var composite = ApplicationData.Current.LocalSettings.Values["newpage"]
                as ApplicationDataCompositeValue;
            title.Text = (string)composite["title"];
            details.Text = (string)composite["details"];
            date.Date = (DateTimeOffset)composite["date"];
            // We're done with it, so remove it
            ApplicationData.Current.LocalSettings.Values.Remove("newpage");
        }
    }
}

```

五 . 思考与总结

请在这里写下你本次试验的心得体会以及所思所想。

心得体会：这次实验比较简单，花的时间很少，主要学习 Application Lifecycle，继续

加油继续努力！

1. 实验报告提交格式为 pdf。
2. 实验内容不允许抄袭，我们要进行代码相似度对比。如发现抄袭，按 0 分处理。