

# 现代操作系统应用开发实验报告

学号： 14970011

班级： 2015 级教务 2 班

姓名： 宋思亭

实验名称： homework5

## 一 . 参考资料

Windows UWP Namespaces : <https://docs.microsoft.com/en-us/uwp/api/>

课件、Demo

## 二 . 实验步骤

1. 阅读作业需求和课件 PPT
2. 自定义布局动态磁贴

新建xml文件自定义动态磁贴布局：

```
<?xml version="1.0" encoding="utf-8" ?>
<tile>
  <visual>
    <binding template="TileSmall">
      <text>Small</text>
      <text hint-wrap="true" hint-style="captionSubtle">Text Field</text>
      <image src ="Assets/color.jpg" placement ="background"></image>
    </binding>

    <binding template="TileMedium" displayName="ToDoList" branding="name">
      <text hint-style="subtitle">Middle</text>
      <text hint-wrap="true" hint-style="captionSubtle">Text Field</text>
      <image src ="Assets/color.jpg" placement ="background"></image>
    </binding>

    <binding template="TileWide" displayName="ToDoList" branding="name">
      <text hint-style="subtitle">Wide</text>
      <text hint-wrap="true" hint-style="captionSubtle">Text Field</text>
```

```

        <image src ="Assets/color.jpg" placement ="background"></image>
    </binding>

    <binding template="TileLarge" displayName="ToDoList" branding="name">
        <text hint-style="subtitle">Large</text>
        <text hint-wrap="true" hint-style="captionSubtle">Text Field</text>
        <image src ="Assets/color.jpg" placement ="background"></image>
    </binding>
</visual>
</tile>

```

在初始化中添加磁贴队列循环语句：

```

TileUpdateManager.CreateTileUpdaterForApplication().EnableNotificationQueue(tr
ue);

```

在MainPage.XAML文件中添加UpdateTile按钮，点击触发事件修改磁贴内容：

```

private void updatetile_Click(object sender, RoutedEventArgs e)
{
    try
    {
        var AllItems = ViewModel.getItems();
        var updater = TileUpdateManager.CreateTileUpdaterForApplication();
        updater.Clear();
        foreach (var n in AllItems)
        {
            XmlDocument tile = new XmlDocument();
            tile.LoadXml(File.ReadAllText("Tile.xml"));
            XmlNodeList tileText = tile.GetElementsByTagName("text");
            for (int i = 0; i < tileText.Count; i++)
            {
                ((XmlElement)tileText[i]).InnerText = n.title;
                i++;
                ((XmlElement)tileText[i]).InnerText = n.details;
            }
            TileNotification notification = new TileNotification(tile);
            updater.Update(notification);
        }
    }
    catch (Exception err)
    {
        Debug.WriteLine(err.ToString());
    }
}

```

```
}
```

### 3. 实现分享功能

在MainPage.Xaml文件中添加Share按钮，点击触发事件修改磁贴内容：

```
private async void share_Click(object sender, RoutedEventArgs e)
{
    var dc = (sender as FrameworkElement).DataContext;
    var item = (ToDoListView.ContainerFromItem(dc) as ListViewItem).Content as
    TodoItem;

    sharetitle = item.title;
    sharedetail = item.details;
    shareimgname = item.imgname;
    var date = item.date;
    sharedate = "\nDue date: " + date.Year + '-' + date.Month + '-' + date.Day;
    if (shareimgname == "")
    {
        shareimg = await
        Package.Current.InstalledLocation.GetFilesAsync("Assets\\fruit.jpg");
    }
    else
    {
        shareimg = await
        ApplicationData.Current.LocalFolder.GetFilesAsync(shareimgname);
    }
    DataTransferManager.ShowShareUI();
}
```

实现数据发送函数：

```
private void DataRequested(DataTransferManager sender, DataRequestedEventArgs e)
{
    Debug.WriteLine(e.Request.ToString());
    DataRequest request = e.Request;
    DataPackage requestData = request.Data;
    requestData.Properties.Title = sharetitle;
    requestData.SetText(sharedetail + sharedate);
    DataRequestDeferral deferral = request.GetDeferral();
    try
    {
        requestData.SetBitmap(RandomAccessStreamReference.CreateFromFile(shareimg));
    }
    finally
    {

```

```
        deferral.Complete();  
    }  
}
```

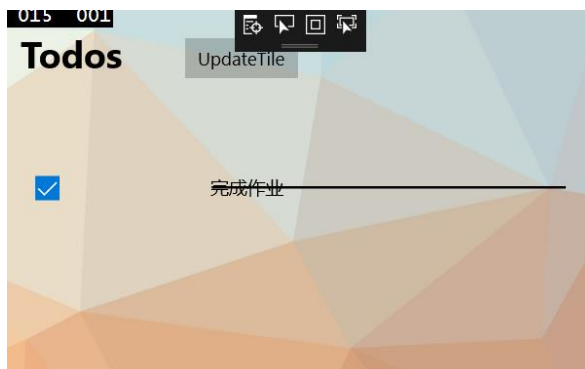
#### 4. 调试项目

### 三 . 实验结果截图

#### 1. 大中小三种磁贴样式：



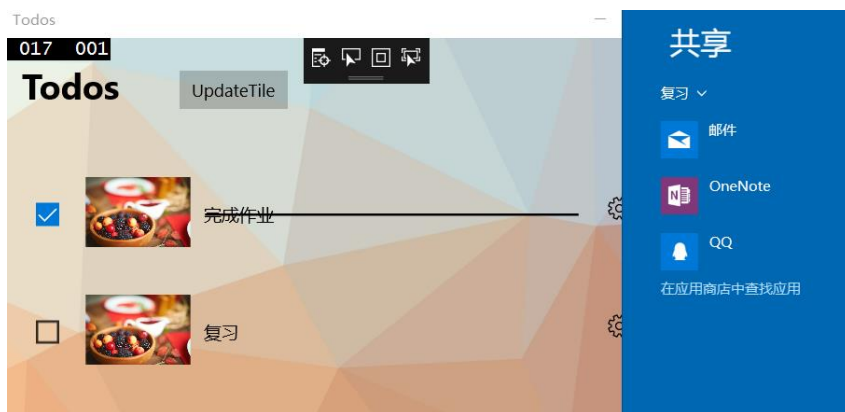
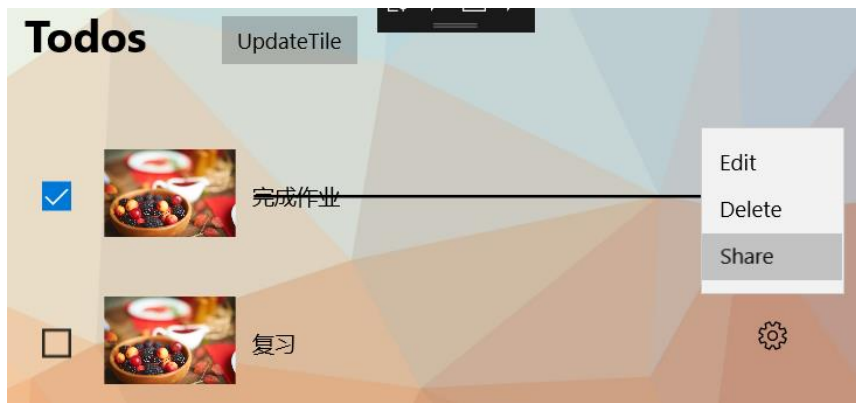
删去最下方的【复习】项：



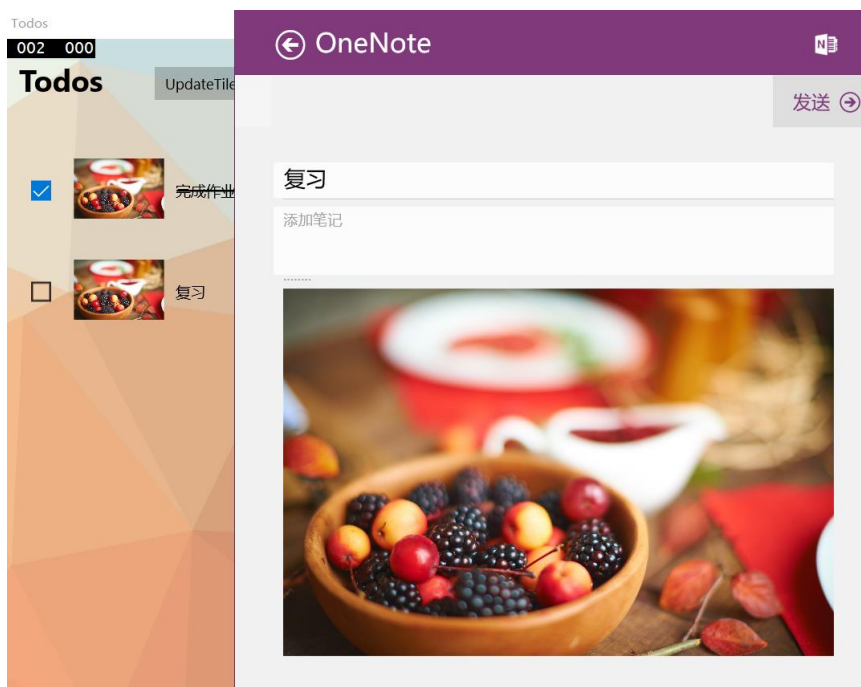
点击 Update\_Tile 更新磁贴循环内容：



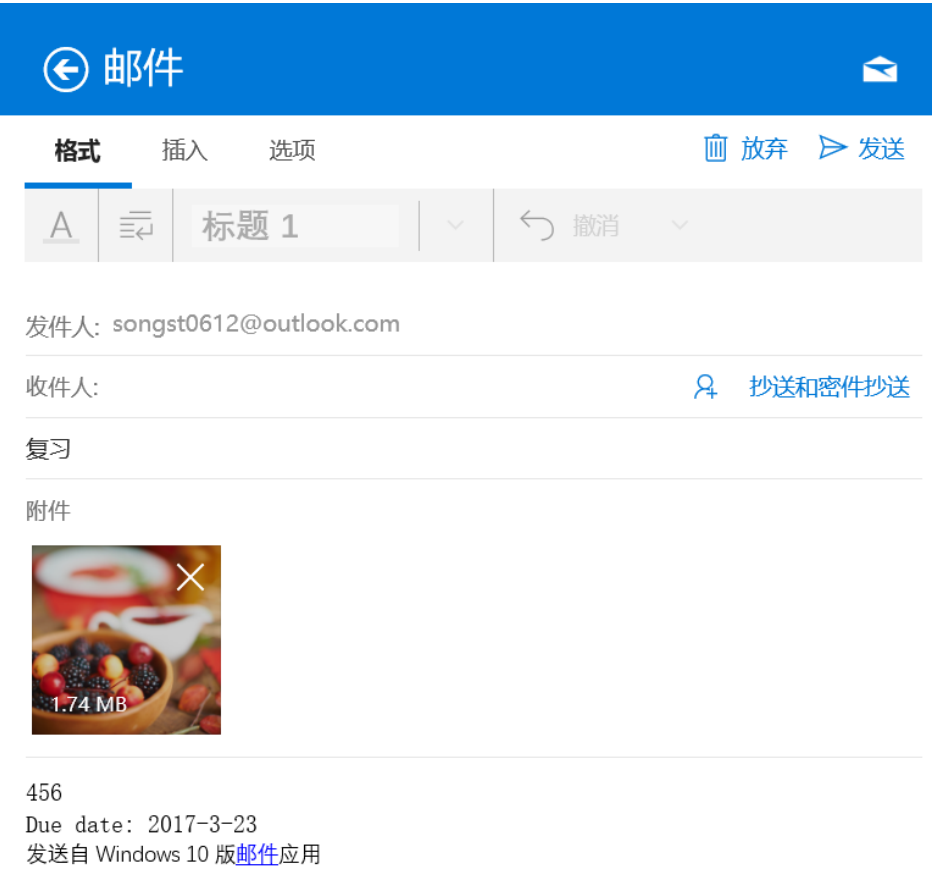
#### 2. 分享功能，点击 Shaer 弹出：



使用 OneNote:



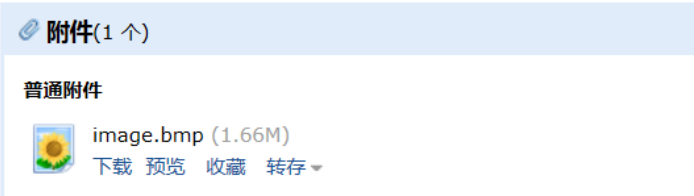
使用邮件发送：



收到邮件：



456  
Due date: 2017-3-23  
发送自 Windows 10 版邮件应用



#### 四 . 实验过程遇到的问题

1. 动态磁贴只能循环一次，暂时没有解决
2. 邮件不能用个人邮箱发送，重新注册 outlook 邮箱解决
3. 找不到 Notifications 的安装包，所以用了 XML 模板

## **五 . 思考与总结**

学习了动态磁贴及分享的方法