

## Task 6.1

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Class: NT106.M21.ANTN

Class 1: build the API Helper to help the system get the API

```
namespace DemoLibrary
{
    2 references
    public static class ApiHelper
    {
        4 references
        public static HttpClient ApiClient { get; set; }
        1 reference
        public static void InitializeClient()
        {
            ApiClient = new HttpClient();
            ApiClient.DefaultRequestHeaders.Accept.Clear();
            ApiClient.DefaultRequestHeaders.Accept.Add(new MediaTypeWithQualityHeaderValue("application/json"));
        }
    }
}
```

Class 2: create the SunInfo Processor using to process the Sun Information

```
namespace DemoLibrary
{
    1 reference
    public class SunProcessor
    {
        1 reference
        public static async Task<SunModel> LoadSunInformation()
        {
            string url = "https://api.sunrise-sunset.org/json?lat=41.494804&lng=-75.536852&date=today";

            using (HttpResponseMessage response = await ApiHelper.ApiClient.GetAsync(url))
            {
                if (response.IsSuccessStatusCode)
                {
                    SunResultModel result = await response.Content.ReadAsAsync<SunResultModel>();
                    return result.Results;
                }
                else
                {
                    throw new Exception(response.ReasonPhrase);
                }
            }
        }
    }
}
```

Class 3, 4: SunModel, SunResultModel to get and set data input and output

```
namespace DemoLibrary
{
    2 references
    public class SunModel
    {
        1 reference
        public DateTime Sunrise { get; set; }
        1 reference
        public DateTime Sunset { get; set; }
    }
}
```

```
namespace DemoLibrary
{
    2 references
    public class SunResultModel
    {
        1 reference
        public SunModel Results { get; set; }
    }
}
```

mainWindow: use to show the result from the API

```
public partial class MainWindow : Window
{
    0 references
    public MainWindow()
    {
        InitializeComponent();
        ApiHelper.InitializeClient();
    }

    1 reference
    private async void Button_Click(object sender, RoutedEventArgs e)
    {
        var sunInfo = await SunProcessor.LoadSunInformation();
        sunriseText.Text = $"Mặt trời mọc lúc { sunInfo.Sunrise.ToLocalTime().ToShortTimeString() } ";
        sunsetText.Text = $"Mặt trời lặn lúc { sunInfo.Sunset.ToLocalTime().ToShortTimeString() } ";
    }
}
```

Deploy

## Load Sun Information

Mặt trời mọc lúc 5:36 PM

Mặt trời lặn lúc 6:32 AM