ADAPTER

Design Pattern

INTERNATIONAL ISLAMIC UNIVERSITY ISLAMABAD

Report
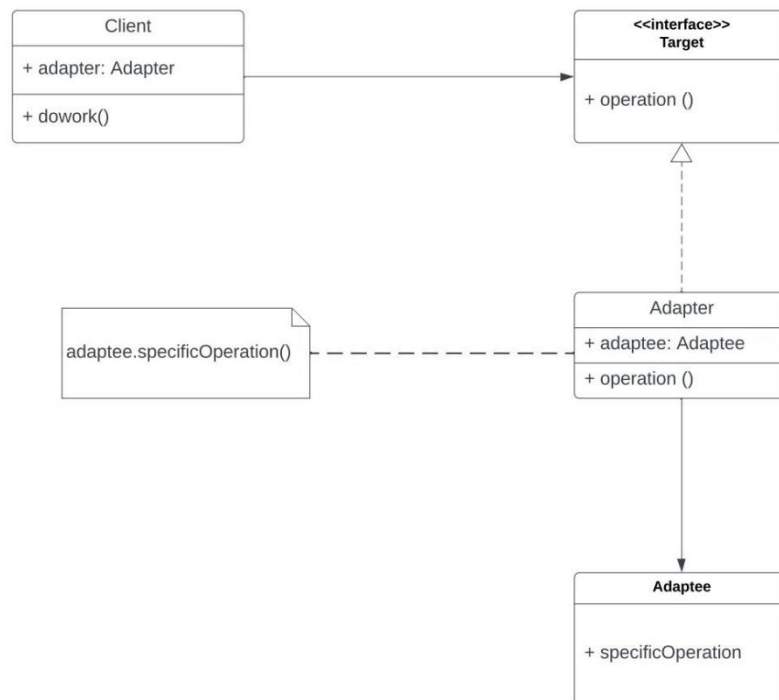
Name:	Tamoor Ahmad
Registration No:	4125-FBAS/BSSE/F20
Course Code:	SE322
Course Title:	Software Design and Architecture

Submitted to: Dr. Muhammad Nasir

Class Diagram:

Consider a real-life example of three pin to two pin power socket adapters.

Source Code:

```csharp
using System;

namespace Adapter.Structural
{    /// <summary>      /// Adapter Design Pattern      /// </summary>

    public class Program
    {
        public static void Main(string[] args)
        {              // Create adapter and place a request

            TwoSwitch target = new Adapter();
            target.Request();

            // Wait for user

            Console.ReadKey();
        }
    }

    /// <summary>      /// The 'Target' class      /// </summary>
```
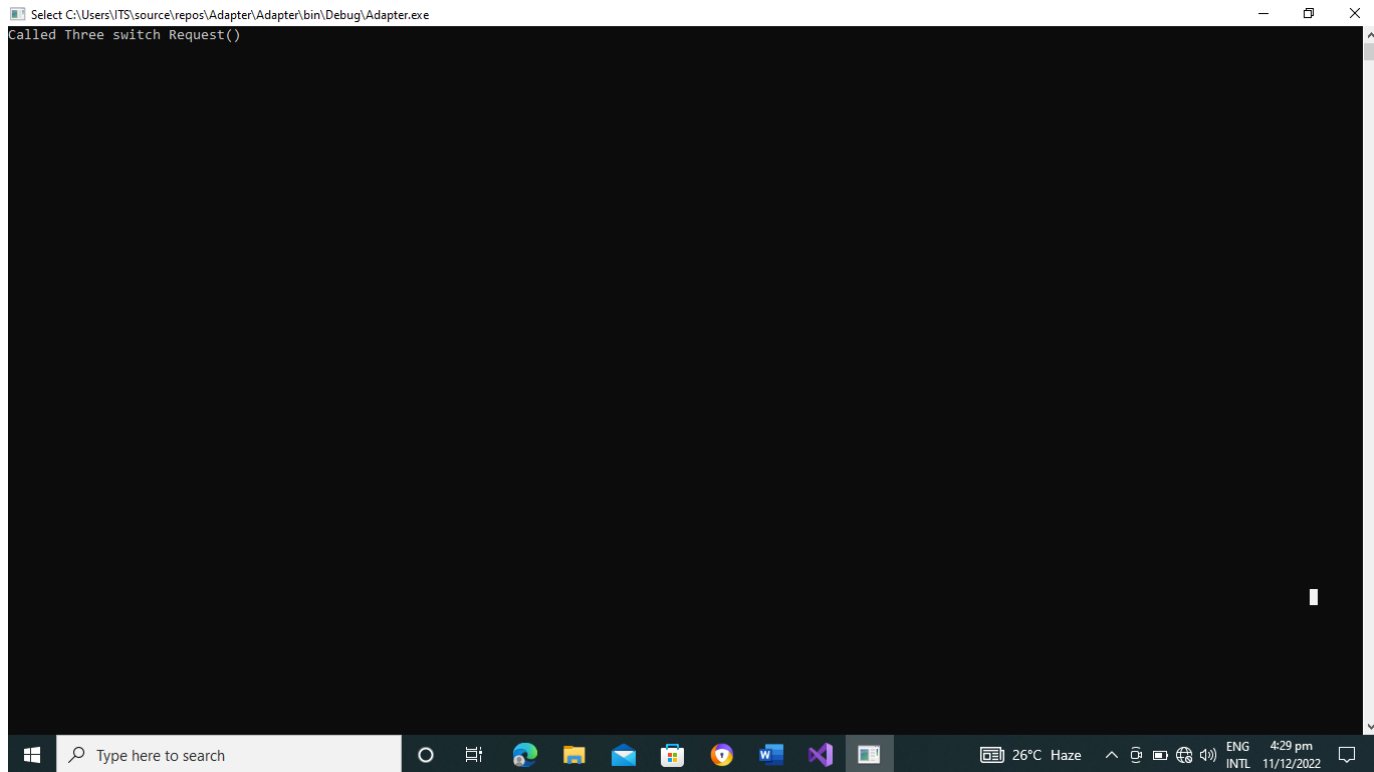
```csharp
    public class TwoSwitch
    {
        public virtual void Request()
        {
            Console.WriteLine("Called Two Switch Request()");
        }
    }

    /// <summary>    /// The 'Adapter' class    /// </summary>

    public class Adapter : TwoSwitch
    {
        private ThreeSwitch adaptee = new ThreeSwitch();

        public override void Request()
        {            // Possibly do some other work            // and then call
SpecificRequest

            adaptee.SpecificRequest();
        }
    }

    /// <summary>    /// The 'Adaptee' class    /// </summary>

    public class ThreeSwitch
    {
        public void SpecificRequest()
        {
            Console.WriteLine("Called Three switch Request()");
        }
    }
}
```