

Resolution File for the Adapter Pattern Exercise

Exercise

Use the already existing program and add the following things:

Implement an even more advanced media player which can play mp5 and vlx format files. For that you had to create a new Adapter called **AdvancedMediaAdapter**. The already existing audio player has to play mp5 and vlx files.

Solution

New Code

```
namespace AdapterPattern_Audio
{
    interface IEvenMoreAdvancedMediaPlayer
    {
        void PlayVlx(string fileName);
        void PlayMp5(string fileName);
    }

    public class VlxPlayer : IEvenMoreAdvancedMediaPlayer
    {
        public void PlayVlx(string fileName)
        {
            Console.WriteLine("Playing vlx file. Name: " + fileName);
        }

        public void PlayMp5(string fileName)
        {
            //do nothing
        }
    }

    public class Mp5Player : IEvenMoreAdvancedMediaPlayer
    {
        public void PlayVlx(string fileName)
        {
            //do nothing
        }

        public void PlayMp5(string fileName)
        {
            Console.WriteLine("Playing mp5 file. Name: " + fileName);
        }
    }

    class AdvancedMediaAdapter:IMediaPlayer
    {
        IEvenMoreAdvancedMediaPlayer evenMoreAdvancedMusicPlayer;

        public AdvancedMediaAdapter(string audioType)
        {

```

```

        if (audioType == "v1x")
        {
            evenMoreAdvancedMusicPlayer = new V1xPlayer();
        }
        else if (audioType == "mp5")
        {
            evenMoreAdvancedMusicPlayer = new Mp5Player();
        }
    }
    public void Play(string audioType, string fileName)
    {
        if (audioType == "v1x")
        {
            evenMoreAdvancedMusicPlayer.PlayV1x(fileName);
        }
        else if (audioType == "mp5")
        {
            evenMoreAdvancedMusicPlayer.PlayMp5(fileName);
        }
    }
}

public class AudioPlayer : IMediaPlayer
{
    MediaAdapter mediaAdapter;
    AdvancedMediaAdapter advancedMediaAdapter;

    public void Play(string audioType, string fileName)
    {
        //inbuilt support to play mp3 music files
        if (audioType=="mp3")
        {
            Console.WriteLine("Playing mp3 file. Name: " + fileName);
        }

        //mediaAdapter is providing support to play other file formats
        else if (audioType=="vlc" || audioType=="mp4")
        {
            mediaAdapter = new MediaAdapter(audioType);
            mediaAdapter.Play(audioType, fileName);
        }
        else if (audioType=="v1x" || audioType=="mp5")
        {
            advancedMediaAdapter = new AdvancedMediaAdapter(audioType);
            advancedMediaAdapter.Play(audioType, fileName);
        }
        else
        {
            Console.WriteLine("Invalid media. " + audioType + " format not
supported");
        }
    }
}
}

```

Testing

```

static void Main(string[] args)
{
    AudioPlayer audioPlayer = new AudioPlayer();

    audioPlayer.Play("mp3", "beyond the horizon.mp3");
}

```

```
        audioPlayer.Play("mp4", "alone.mp4");  
        audioPlayer.Play("vlc", "far far away.vlc");  
        audioPlayer.Play("avi", "mind me.avi");  
        audioPlayer.Play("vlx", "thunderstruck.vlx");  
        audioPlayer.Play("mp5", "the end.mp5");  
    }
```

```
Playing mp3 file. Name: beyond the horizon.mp3  
Playing mp4 file. Name: alone.mp4  
Playing vlc file. Name: far far away.vlc  
Invalid media. avi format not supported  
Playing vlx file. Name: thunderstruck.vlx  
Playing mp5 file. Name: the end.mp5
```