

# Generic parameter interface

```
using System;
using System.Collections.Generic;
using System.Text;
using System.Threading;

public interface IPresentation {
    string Title {
        get;
    }
    string Content {
        get;
    }
}

public class Presentation : IPresentation {
    private string title;
    public string Title {
        get {
            return title;
        }
    }

    private string content;
    public string Content {
        get {
            return content;
        }
    }

    public Presentation(string title, string content) {
        this.title = title;
        this.content = content;
    }
}
```

```

public class ProcessPresentations
where TPresentation : IPresentation
where TPresentationManager : IPresentationManager {
public static void Start(TPresentationManager dm) {
new Thread(new ProcessPresentations(dm).Run).Start();
}

protected ProcessPresentations(TPresentationManager dm) {
documentManager = dm;
}

private TPresentationManager documentManager;

protected void Run() {
while (true) {
if (documentManager.IsPresentationAvailable) {
TPresentation doc = documentManager.GetPresentation();
Console.WriteLine("Processing document {0}", doc.Title);
}
Thread.Sleep(20);
}
}

public interface IPresentationManager {
void AddPresentation(T doc);
T GetPresentation();
bool IsPresentationAvailable {
get;
}
}

public class PresentationManager : IPresentationManager {
private Queue documentQueue = new Queue();

public void AddPresentation(T doc) {
lock (this) {
documentQueue.Enqueue(doc);
}
}
}

```

```
}

public T GetPresentation() {
    T doc;
    lock (this) {
        doc = documentQueue.Dequeue();
    }
    return doc;
}

public bool IsPresentationAvailable {
    get {
        return (documentQueue.Count > 0) ? true : false;
    }
}

class Program {
    static void Main(string[] args) {
        PresentationManager dm = new PresentationManager();

        ProcessPresentations.Start(dm);

        for (int i = 0; i < 1000; i++) { Presentation d1 = new
        Presentation("title" + i.ToString(), "content");
        dm.AddPresentation(d1); Console.WriteLine("added document
        {0}", d1.Title); Thread.Sleep(10); } } } [/csharp]
```