

CLASS DEFINATIONS:

BlogPosts

```
using System;
using Admin;
using Validate;
using System.IO;

namespace blogPosts
{
    public class BlogPosts
    {
        private string Video;
        private readonly DateTime dateTime = DateTime.Now;
        private string Status;
        private string BlogPostid;
        private string content;
        private string Image;
        private Admin admin;
        private NewsFeed feed;

        BlogPosts();
        public void RequestUpload();
        public void RequestModification();
        public void DeletePost();
        public void ApproveUpload();

    }
};
```

Calls

```
using System;
using System.Collections.Generic;

namespace Calls
{
    class Calls
    {
        private readonly DateTime dateTime = DateTime.Now;
        private string Duration;
        private string SNumber;
        private string Receipt;
        private string Callid;
        private static List<Calls> Log = new List<Calls>();
        private static List<string> blocked = new List<string>();

        Calls();
        public void NewCall();
        public void ReceiveCall(string caller);
        public void AddNewCallToLog();
        public void DeleteCallFromLog(string CallId);
    }
}
```

```

        public void ClearLog();
        public void BlockCaller(string Callid);
    };
}

```

Communications

```

using System;
using Email;
using Calls;
using BlogPosts;
using Meetings;

namespace communication
{
    public class Communication
    {
        public string SenderId;
        public string ReceiverId;
        public string Type;

        private void CommunicateViaEmail(string TouristId, string
ServiceProviderId, Email emailInstance);
        private void CommunicateViaMessages(string TouristId, string
ServiceProviderId, Message MessagesInstance);
        private void CommunicateViaCalls(string TouristId, string
ServiceProviderId, , Calls CallsInstance);
        private void CommunicateViaMeetings(string TouristId, string
ServiceProviderId, Meetings MeetingsInstance);
    };
}

```

Email

```

using System;
using System.Collections.Generic;
using EmailAPI;

namespace email
{
    class Email
    {
        private readonly DateTime dateTime = DateTime.Now;
        private string Content;
        private string Receipt;
        private readonly string myEmail = "mymail@gmail.com";
        private string EmailId;
        private static List<Email> drafts = new List<Email>();
        private static List<Email> received = new List<Email>();
        private static List<Email> sent = new List<Email>();

        Email();
        public void NewEmail();
        public void MakeDraft();
        public void SendEmail(string Content, string Receipt);
        public void ReceiveEmail();
        public void DiscardDraft(string Emailid);
    }
}

```

```

        public void DeleteEmail(string EmailId);
        public void ReportEmail(string EmailId);
    };
}

```

Meetings

```

using System;
using System.Collections.Generic;
using MeetAPI;

namespace meetings
{
    class Meetings
    {
        private DateTime dateTime;
        private string Duration;
        private string Receipient;
        private List<string> Participant;
        private static List<Meetings> scheduledMeets = new List<Meetings>();
        private string Topic;
        private string MeetId;

        Meetings();
        public void ScheduleNewMeeting();
        public void AttendMeet(string MeetId);
        public void cancelMeet(string MeetId);
        public void SendInvitation(List<string> Participants, string MeetId);
    };
}

```

Message

```

using System;
using System.Collections.Generic;
using MsgAPI;

namespace message
{
    class Message
    {
        private readonly DateTime dateTime = DateTime.Now;
        private string Content;
        private string Receipient;
        private string MsgId;
        private static list<Message> drafts = new list<Message>();
        private static list<Message> sent = new list<Message>();
        private static list<Message> received = new list<Message>();

        Message();
        public void NewMessage();
        public void MakeDraft();
        public void SendMessage(string Content, string Receipient);
        public void ReceiveMessage(string MsgId);
        public void DiscardDraft(string MsgId);
        public void DeleteMsg(string MsgId);
    }
}

```

```

        public void ReportMsg(string MsgId);
    };
}

```

Pictures

```

using System;
using Admin;
using Validate;
using System.IO;

namespace pictures
{
    class Pictures
    {
        private string Image;
        private string imgId;
        private readonly DateTime dateTime = DateTime.Now;
        private string Status;
        private Admin admin;
        private NewsFeed feed;

        Pictures();
        public void RequestModification();
        public void DeletePicture();
        public void ApproveUpload();
        public void RequestUpload();
    };
}

```

Videos

```

using System;
using Admin;
using Validate;
using System.IO;

namespace Video
{
    class Video
    {
        private string Video;
        private string vidId;
        private readonly DateTime dateTime = DateTime.Now;
        private string Status;
        private Admin admin;
        private NewsFeed feed;

        Video();
        public void DeleteVideo();
        public void ApproveUpload();
        public void RequestModification();
        public void RequestUpload();
    };
}

```

METHOD DEFINATIONS:

BlogPosts

```
using System;
using Admin;
using Validate;
using System.IO;

namespace blogPosts
{
    public class BlogPosts
    {
        private string Video { get; set; }
        private readonly DateTime dateTime = DateTime.Now;
        private string Status { get; set; }
        private string BlogPostid { get; set; }
        private string content { get; set; }
        private string Image { get; set; }
        private Admin admin { get; set; }
        private NewsFeed feed { get; set; }
        DateTime dateTime { get; }

        BlogPosts()
        {
            static int id= 1;
            this.BlogPostid = Convert.ToString(id);
            id++;
            Status = false;
            Console.WriteLine("Enter Video address");
            Video = Console.ReadLine();
            Console.WriteLine("Enter Image address");
            Image = Console.ReadLine();
            Console.WriteLine("Enter post content");
            Content = Console.ReadLine();
            admin = new Admin();
            feed = new NewsFeed();
        }

        public void RequestUpload()
        {
            if (Validate.isvalid(this))
            {
                admin.ApproveBlogPost(this);
                if (Status == true)
                    feed.AddBlogPost(this);
                else
                {
                    Console.WriteLine("Admin Approval denied!");
                    DeletePost(this);
                }
            }
            else
            {
                Console.WriteLine("In appropriate Content! Validation
falid.");
                DeletePost(this);
            }
        }

        public void RequestModification()
        {

```

```

        BlogPosts temp = new BlogPosts();
        Console.WriteLine("Enter new video address");
        temp.Video = Console.ReadLine();
        Console.WriteLine("Enter new image address");
        temp.Image = Console.ReadLine();
        Console.WriteLine("Enter new post content");
        temp.Content = Console.ReadLine();
        if (Validate.isvalid(temp))
        {
            admin.ApproveBlogPost(temp);
            if (Status == true)
            {
                feed.AddBlogPost(temp);
                feed.DeleteBlogPost(this);
            }
            else
            {
                Console.WriteLine("Admin Approval denied!");
                DeletePost(temp);
            }
        }
        else
        {
            Console.WriteLine("In appropriate Content! Validation
falid.");
            DeletePost(temp);
        }
    }
    public void DeletePost()
    {
        feed.DeleteBlogPost(this);
    }
    public void ApproveUpload()
    {
        this.Status = true;
    }
}
};

```

Calls

```

using System;
using System.Collections.Generic;
using CallingAPI;

namespace Calls
{
    class Calls
    {
        private readonly DateTime dateTime = DateTime.Now;
        private string Duration { get; set; }
        private string SNumber { get; set; }
        private string Receipent { get; set; }
        private string Callid { get; set; }
        private static List<Calls> Log = new List<Calls>();
        private static List<string> blocked = new List<string>();
        DateTime dateTime { get; }
    }
}

```

```

Calls()
{
    Duration = "";
    SNumber = "03xx xxxxxxxx";
    Receipt = "";
    Callid = "";
    static int id = 1;
    this.Callid = Convert.ToString(id);
    id++;
}
public void NewCall()
{
    Console.WriteLine("enter Contact Number");
    Receipt = Console.ReadLine();
    foreach (string s in blocked)
    {
        if (Receipt == s)
        {
            Console.WriteLine("Can't make call to blocked contact");
            return;
        }
    }
    this.AddNewCallToLog();
    CallingAPI.intiateNew(SNumber, Receipt);
}
public void ReceiveCall(string caller)
{
    foreach (string s in blocked)
    {
        if (caller == s)
        {
            return;
        }
    }
    this.AddNewCallToLog();
    callingAPI.initiateNew(caller, SNumber);
}
public void AddNewCallToLog()
{
    Log.Add(this);
}
public void DeleteCallFromLog(string CallId)
{
    foreach (Calls call in Log)
    {
        if (Log[call].Callid == CallId)
        {
            Log.Remove(Log[call]);
        }
    }
}
public void ClearLog()
{
    Log.Clear();
}
public void BlockCaller(string Callid)
{

```

```

        foreach (Calls call in Log)
        {
            if (Log[call].Callid == CallId)
            {
                string receient = Log[call].Receipient;
                blocked.Add(receient);
            }
        }
    }
};
}

```

Communication

```

using System;
using Email;
using Calls;
using BlogPosts;
using Meetings;

namespace communication
{
    public class Communication
    {
        private string SenderId { get; set; }
        private string ReceiverId { get; set; }
        private string Type { get; set; }

        public void CommunicateViaEmail(string TouristId, string ServiceProviderId,
            Email emailInstance, int direction)
        {
            Type = "Email";
            if (direction == 1)
            {
                SenderId = TouristId;
                ReceiverId = ServiceProviderId;
                emailInstance.Receipient = Tourist.getEmail(TouristId);
                emailInstance.myEmail =
                ServiceProvider.getEmail(ServiceProviderId);
                emailInstance.SendEmail()
            }
            else
            {
                SenderId = ServiceProviderId;
                ReceiverId = TouristId;
                emailInstance.Receipient =
                ServiceProvider.getEmail(ServiceProviderId);
                emailInstance.myEmail = Tourist.getEmail(TouristId);
                emailInstance.SendEmail()
            }
        }

        public void CommunicateViaMessages(string TouristId, string
            ServiceProviderId, Message MessagesInstance, int direction)
        {
            Type = "Message";
            if (direction == 1)
            {

```



```

        SenderId = TouristId;
        ReceiverId = ServiceProviderId;
        MessagesInstance.Receipient = Tourist.getEmail(TouristId);
        MessagesInstance.SendMessage();
    }
    else
    {
        SenderId = ServiceProviderId;
        ReceiverId = TouristId;
        MessagesInstance.Receipient =
ServiceProvider.getEmail(ServiceProviderId);
        MessagesInstance.SendMessage();
    }
}
public void CommunicateViaCalls(string TouristId, string ServiceProviderId,
Calls CallsInstance, int direction)
{
    Type = "Call";
    if (direction == 1)
    {
        SenderId = TouristId;
        ReceiverId = ServiceProviderId;
        CallsInstance.Receipient = Tourist.getNumber(TouristId);
        CallsInstance.SNumber =
ServiceProvider.getNumber(ServiceProviderId);
        CallsInstance.NewCall();
    }
    else
    {
        SenderId = ServiceProviderId;
        ReceiverId = TouristId;
        CallsInstance.Receipient =
ServiceProvider.getNumber(ServiceProviderId);
        CallsInstance.SNumber = Tourist.getNumber(TouristId);
        CallsInstance.NewCall();
    }
}
public void CommunicateViaMeetings(string TouristId, string
ServiceProviderId, Meetings MeetingsInstance, int direction)
{
    Type = "Meet";
    if (direction == 1)
    {
        SenderId = TouristId;
        ReceiverId = ServiceProviderId;
        MeetInstance.Receipient = Tourist.getEmail(TouristId);
        MeetInstance.ScheduleNewMeeting()
    }
    else
    {
        SenderId = ServiceProviderId;
        ReceiverId = TouristId;
        MeetInstance.Receipient =
ServiceProvider.getEmail(ServiceProviderId);
        MeetInstance.ScheduleNewMeeting()
    }
}
};

```

```
}
```

Email

```
using System;
using System.Collections.Generic;
using EmailAPI;

namespace email
{
    class Email
    {
        private readonly DateTime dateTime = DateTime.Now;
        private string Content { get; set; }
        private string Receipt { get; set; }
        private readonly string myEmail = "mymail@gmail.com";
        private string EmailId { get; set; }
        private static List<Email> drafts = new List<Email>();
        private static List<Email> received= new List<Email>();
        private static List<Email> sent = new List<Email>();
        DateTime dateTime { get; }
        string myEmail { get; }

        Email()
        {
            static int id = 1;
            this.EmailId = Convert.ToString(id);
            id++;
            Content = "";
            Receipt = "";
        }
        public void NewEmail()
        {
            Console.WriteLine("Enter email content");
            this.Content = Console.ReadLine();
            Console.WriteLine("Enter receipient email");
            this.Receipt = Console.ReadLine();
        }
        public void MakeDraft()
        {
            Email temp;
            Console.WriteLine("Enter email content");
            temp.Content = Console.ReadLine();
            Console.WriteLine("Enter receipient email");
            temp.Receipt = Console.ReadLine();
            drafts.Add(temp);
        }
        public void SendEmail(string Content, string Receipt)
        {
            NewEmail();
            EmailAPI.initiateNew(this.myEmail, Receipt, Content);
            sent.Add(this);
        }
        public void ReceiveEmail()
        {
            NewEmail();
            EmailAPI.initiateNew(Receipt, this.myEmail, Content);
            received.Add(this);
        }
    }
}
```

```

        public void DiscardDraft(string EmailId)
        {
            foreach (Email e in drafts)
            {
                if (drafts[e].EmailId == EmailId)
                {
                    drafts.Remove(drafts[e]);
                }
            }
        }
        public void DeleteEmail(string EmailId)
        {
            foreach (Email e in received)
            {
                if (received[e].EmailId == EmailId)
                {
                    drafts.Remove(received[e]);
                }
            }
            foreach (Email e in sent)
            {
                if (sent[e].EmailId == EmailId)
                {
                    drafts.Remove(sent[e]);
                }
            }
        }
        public void ReportEmail(string EmailId)
        {
            Console.WriteLine("Enter Complain");
            string complain = Console.ReadLine();
            EmailAPI.initiatReport(EmailId, complain);
        }
    };
}

```

Meetings

```

using System;
using System.Collections.Generic;
using MeetAPI;

namespace meetings
{
    class Meetings
    {
        private DateTime dateTime { get; set; }
        private string Duration { get; set; }
        private string Receipent { get; set; }
        private List<string> Participant { get; set; }
        private static List<Meetings> scheduledMeets = new List<Meetings>();
        private string Topic { get; set; }
        private string MeetId { get; set; }

        Meetings()
        {
            static int id = 1;
            this.MeetId = Convert.ToString(id);
            id++;
        }
    }
}

```

```

        Topic = "";
        Receipent = "";
        Participant = new List<string>();
        Duration = "";
    }
    public void ScheduleNewMeeting()
    {
        Meetings meet;
        Console.WriteLine("Enter meeting time");
        dateTime = Convert.ToDateTime(Console.ReadLine());
        Console.WriteLine("enter the participants or 0 to exist");
        int end = 1;
        while(end != 0)
        {
            end = Console.ReadLine();
            if (end != "0")
                Participant.Add();
            else
                break;
        }

        Console.WriteLine("Enter meeting topic");
        Topic = Console.ReadLine();
        Console.WriteLine("Enter expected duration");
        Duration = Console.ReadLine();
        Console.WriteLine("Enter meet guest email");
        Receipent = Console.ReadLine();
        scheduledMeets.Add(meet);
    }
    public void AttendMeet(string MeetId)
    {
        foreach(Meetings m in scheduledMeets)
        {
            if (scheduledMeets[m].MeetId == MeetId)
            {
                if (scheduledMeets[m].dateTime == DateTime.now)
                {
                    MeetAPI.intiateNew(scheduledMeets[m]);
                }
                else
                {
                    Console.WriteLine("Meet isn't scheduled for this
time");
                }
            }
        }
    }
    public void cancelMeet(string MeetId)
    {
        foreach (Meetings m in scheduledMeets)
        {
            if (scheduledMeets[m].MeetId == MeetId)
            {
                scheduledMeets.Remove(scheduledMeets[m]);
            }
        }
    }
    public void SendInvitation(List<string> Participants, string MeetId)
    {

```

```

        this.ScheduleNewMeeting();
        MeetAPI.initateInvites(this);
    }
};
}

```

Message

```

using System;
using System.Collections.Generic;
using MsgAPI;

namespace message
{
    class Message
    {
        private readonly DateTime dateTime = DateTime.Now;
        private string Content { get; set; }
        private string Receipent { get; set; }
        private string MsgId { get; set; }
        private static list<Message> drafts = new list<Message>();
        private static list<Message> sent = new list<Message>();
        private static list<Message> received = new list<Message>();
        DateTime dateTime { get; }

        Message()
        {
            static int id = 1;
            this.MsgId = Convert.ToString(id);
            id++;
            Content = "";
            Receipent = "";
        }

        public void NewMessage()
        {
            Console.WriteLine("Enter message content");
            this.Content = Console.ReadLine();
            Console.WriteLine("Enter receipient username");
            this.Receipent = Console.ReadLine();
        }

        public void MakeDraft()
        {
            Message temp;
            Console.WriteLine("Enter message content");
            temp.Content = Console.ReadLine();
            Console.WriteLine("Enter receipient message");
            temp.Receipent = Console.ReadLine();
            drafts.Add(temp);
        }

        public void SendMessage(string Content, string Receipent)
        {
            NewMessage();
            MsgAPI.initiateNew(Receipent, Content);
            sent.Add(this);
        }

        public void ReceiveMessage(string MsgId)
        {
            NewMessage();
            MsgAPI.initiateNew(this.MsgId, Content);
        }
    }
}

```

```

        received.Add(this);
    }
    public void DiscardDraft(string MsgId)
    {
        foreach (Message m in drafts)
        {
            if (drafts[m].MsgId == MsgId)
            {
                drafts.Remove(drafts[m]);
            }
        }
    }
    public void DeleteMsg(string MsgId)
    {
        foreach (Message e in received)
        {
            if (received[e].MsgId == MsgId)
            {
                drafts.Remove(received[e]);
            }
        }
        foreach (Message e in sent)
        {
            if (sent[e].MsgId == MsgId)
            {
                drafts.Remove(sent[e]);
            }
        }
    }
    public void ReportMsg(string MsgId)
    {
        Console.WriteLine("Enter Complain");
        string complain = Console.ReadLine();
        MsgAPI.initiatReport(MsgId, complain);
    }
};
}

```

Pictures

```

using System;
using Admin;
using Validate;
using System.IO;

namespace pictures
{
    class Pictures
    {
        private string Image { get; set; }
        private string imgId { get; set; }
        private readonly DateTime dateTime = DateTime.Now;
        private string Status { get; set; }
        private Admin admin { get; set; }
        private NewsFeed feed { get; set; }
        DateTime dateTime { get; }

        Pictures()
        {

```

```

        static int id = 1;
        this.imgId = Convert.ToString(id);
        id++;
        Status = false;
        Console.WriteLine("Enter Image address");
        Image = Console.ReadLine();
        admin = new Admin();
        feed = new NewsFeed();
    }
    public void RequestModification(string imgId)
    {
        Pictures temp = new Pictures();
        Console.WriteLine("Enter new image address");
        temp.Image = Console.ReadLine();
        if (Validate.isvalid(temp))
        {
            admin.ApprovePicture(temp);
            if (Status == true)
            {
                feed.AddPicture(temp);
                feed.DeletePicture(this);
            }
            else
            {
                Console.WriteLine("Admin Approval denied!");
                DeletePicture(temp);
            }
        }
        else
        {
            Console.WriteLine("In appropriate Content! Validation
falid.");
            DeletePicture(temp);
        }
    }
    public void DeletePicture(string imgId)
    {
        feed.DeletePicture(this);
    }
    public void ApproveUpload(string imgId)
    {
        this.Status = true;
    }
    public void RequestUpload(string imgId)
    {
        if (Validate.isvalid(this))
        {
            admin.ApprovePicture(this);
            if (Status == true)
                feed.AddPicture(this);
            else
            {
                Console.WriteLine("Admin Approval denied!");
                DeletePicture(this);
            }
        }
        else
        {

```

```

        Console.WriteLine("In appropriate Content! Validation
falid.");
        DeletePicture(this);
    }
};
}

```

Videos

```

using System;
using Admin;
using Validate;
using System.IO;

namespace Video
{
    class Video
    {
        private string Video { get; set; }
        private string vidId { get; set; }
        private readonly DateTime dateTime = DateTime.Now;
        private string Status { get; set; }
        private Admin admin { get; set; }
        private NewsFeed feed { get; set; }
        DateTime dateTime { get; }

        Video()
        {
            static int id = 1;
            this.vidId = Convert.ToString(id);
            id++;
            Status = false;
            Console.WriteLine("Enter video address");
            Image = Console.ReadLine();
            admin = new Admin();
            feed = new NewsFeed();
        }

        public void DeleteVideo(string vidId)
        {
            feed.DeleteVideo(this);
        }

        public void ApproveUpload(string vidId)
        {
            this.Status = true;
        }

        public void RequestModification(string vidId)
        {
            Video temp = new Video();
            Console.WriteLine("Enter new video address");
            temp.Video = Console.ReadLine();
            if (Validate.isvalid(temp))
            {
                admin.ApproveVideo(temp);
                if (Status == true)
                {
                    feed.AddVideo(temp);
                    feed.DeleteVideo(this);
                }
            }
        }
    }
}

```



```

        }
        else
        {
            Console.WriteLine("Admin Approval denied!");
            Deletevideo(temp);
        }
    }
    else
    {
        Console.WriteLine("In appropriate Content! Validation
falid.");
        DeleteVideo(temp);
    }
}
public void RequestUpload(string vidId)
{
    if (Validate.isvalid(this))
    {
        admin.ApproveVideo(this);
        if (Status == true)
            feed.AddVideo(this);
        else
        {
            Console.WriteLine("Admin Approval denied!");
            DeleteVideo(this);
        }
    }
    else
    {
        Console.WriteLine("In appropriate Content! Validation
falid.");
        DeleteVideo(this);
    }
}
};
}

```

CLASS EXCEPTIONS:

BlogPosts

```

using System;
using Admin;
using Validate;
using System.IO;

namespace blogPosts
{
    public class BlogPosts
    {
        //possible exceptions that can occur in the following methods. Refer to
        their code to see how they can occur.

        BlogPosts()
        {
            System.IO.IOException;
            System.BadImageFormatException;
            System.InvalidCastException;

```

```

    }
    public void RequestUpload()
    {
        System.IO.IOException;
        System.FieldAccessException;
        System.AccessViolationException;
        System.MethodAccessException;
        System.ObjectDisposedException;
        System.UnauthorizedAccessException;
    }

    public void RequestModification()
    {
        System.IO.IOException;
        System.FieldAccessException;
        System.AccessViolationException;
        System.MethodAccessException;
        System.ObjectDisposedException;
        System.UnauthorizedAccessException;
    }
    public void DeletePost()
    {
        System.AccessViolationException;
        System.MethodAccessException;
        System.ObjectDisposedException;
    }
    public void ApproveUpload()
    {
        System.AccessViolationException;
        System.MethodAccessException;
        System.ObjectDisposedException;
        System.MemberAccessException;
        System.MissingFieldException;
    }
}
};

```

Calls

```

using System;
using System.Collections.Generic;

namespace Calls
{
    class Calls
    {
        //possible exceptions that can occur in the following methods. Refer to
        their code to see how they can occur.

        Calls()
        {
            System.InvalidCastException;
            System.ArithmeticException;
        }
        public void NewCall()
        {
            System.IndexOutOfRangeException;
        }
    }
}

```

```

        System.IO.IOException;
        System.MethodAccessException;
        System.AccessViolationException;
        System.UnauthorizedAccessException;
    }
    public void ReceiveCall(string caller)
    {
        System.ArgumentException;
        System.ArgumentNullException;
        System.ArgumentOutOfRangeException;
        System.IndexOutOfRangeException;
        System.IO.IOException;
        System.AccessViolationException;
        System.MethodAccessException;
        System.UnauthorizedAccessException;
    }
    public void AddNewCallToLog()
    {
        //No Exception Thrown
    }
    public void DeleteCallFromLog(string CallId)
    {
        System.IndexOutOfRangeException;
        System.ArgumentException;
        System.ArgumentNullException;
        System.ArgumentOutOfRangeException;
    }
    public void ClearLog()
    {
        //No Exception Thrown
    }
    public void BlockCaller(string Callid)
    {
        System.IndexOutOfRangeException;
        System.ArgumentException;
        System.ArgumentNullException;
        System.ArgumentOutOfRangeException;
    }
};
}

```

Communication

```

using System;
using Email;
using Calls;
using BlogPosts;
using Meetings;

namespace communication
{
    public class Communication
    {
        //possible exceptions that can occur in the following methods. Refer to
        their code to see how they can occur.

        private void CommunicateViaEmail(string TouristId, string
        ServiceProviderId, Email emailInstance)
        {

```

```

        System.MethodAccessException;
        System.AccessViolationException;
        System.UnauthorizedAccessException;
        System.MissingMethodException;
        System.NotImplementedException;
        System.ArgumentException;
        System.ArgumentNullException;
        System.ArgumentOutOfRangeException;
    }
    private void CommunicateViaMessages(string TouristId, string
ServiceProviderId, Message MessagesInstance)
    {
        System.MethodAccessException;
        System.AccessViolationException;
        System.UnauthorizedAccessException;
        System.MissingMethodException;
        System.NotImplementedException;
        System.ArgumentException;
        System.ArgumentNullException;
        System.ArgumentOutOfRangeException;
    }
    private void CommunicateViaCalls(string TouristId, string
ServiceProviderId, , Calls CallsInstance)
    {
        System.ArgumentException;
        System.ArgumentNullException;
        System.ArgumentOutOfRangeException;
        System.MethodAccessException;
        System.AccessViolationException;
        System.UnauthorizedAccessException;
        System.MissingMethodException;
        System.NotImplementedException;
    }
    private void CommunicateViaMeetings(string TouristId, string
ServiceProviderId, Meetings MeetingsInstance)
    {
        System.ArgumentException;
        System.ArgumentNullException;
        System.ArgumentOutOfRangeException;
        System.MethodAccessException;
        System.AccessViolationException;
        System.UnauthorizedAccessException;
        System.MissingMethodException;
        System.NotImplementedException;
    }
};
}

```

Email

```

using System;
using System.Collections.Generic;
using EmailAPI;

namespace email
{
    class Email
    {

```

//possible exceptions that can occur in the following methods. Refer to their code to see how they can occur.

```
Email()
{
    System.InvalidCastException;
    System.ArithmeticException;
}
public void NewEmail()
{
    System.IO.IOException;
}
public void MakeDraft()
{
    System.IO.IOException;
}
public void SendEmail(string Content, string Receipt)
{
    System.ArgumentException;
    System.ArgumentNullException;
    System.ArgumentOutOfRangeException;
    System.MethodAccessException;
    System.AccessViolationException;
    System.UnauthorizedAccessException;
}
public void ReceiveEmail()
{
    System.MethodAccessException;
    System.AccessViolationException;
    System.UnauthorizedAccessException;
}
public void DiscardDraft(string Emailid)
{
    System.ArgumentException;
    System.ArgumentNullException;
    System.ArgumentOutOfRangeException;
    System.IndexOutOfRangeException;
}
public void DeleteEmail(string EmailId)
{
    System.ArgumentException;
    System.ArgumentNullException;
    System.ArgumentOutOfRangeException;
    System.IndexOutOfRangeException;
}
public void ReportEmail(string EmailId)
{
    System.ArgumentException;
    System.ArgumentNullException;
    System.ArgumentOutOfRangeException;
    System.IO.IOException;
    System.MethodAccessException;
    System.AccessViolationException;
    System.UnauthorizedAccessException;
}
};
}
```

Meetings

```
using System;
using System.Collections.Generic;
using MeetAPI;

namespace meetings
{
    class Meetings
    {
        //possible exceptions that can occur in the following methods. Refer to
        //their code to see how they can occur.

        Meetings()
        {
            System.InvalidCastException;
            System.ArithmeticException;
        }
        public void ScheduleNewMeeting()
        {
            System.IO.IOException;
        }
        public void AttendMeet(string MeetId)
        {
            System.ArgumentException;
            System.ArgumentNullException;
            System.ArgumentOutOfRangeException;
            System.IO.IOException;
            System.IndexOutOfRangeException;
        }
        public void cancelMeet(string MeetId)
        {
            System.ArgumentException;
            System.ArgumentNullException;
            System.ArgumentOutOfRangeException;
            System.IndexOutOfRangeException;
        }
        public void SendInvitation(List<string> Participants, string MeetId)
        {
            System.ArgumentException;
            System.ArgumentNullException;
            System.ArgumentOutOfRangeException;
            System.IndexOutOfRangeException;
            System.MethodAccessException;
            System.AccessViolationException;
            System.UnauthorizedAccessException;
        }
    }
};
}
```

Message

```
using System;
using System.Collections.Generic;
using MsgAPI;

namespace message
{
    class Message
```

```
{  
    //possible exceptions that can occur in the following methods. Refer to  
    their code to see how they can occur.
```

```
    Message()  
{  
    System.IO.IOException;  
    System.InvalidCastException;  
}  
    public void NewMessage()  
{  
    System.IO.IOException;  
}  
    public void MakeDraft()  
{  
    System.IO.IOException;  
}  
    public void SendMessage(string Content, string Receipt)  
{  
    System.ArgumentException;  
    System.ArgumentNullException;  
    System.ArgumentOutOfRangeException;  
    System.MethodAccessException;  
    System.AccessViolationException;  
    System.UnauthorizedAccessException;  
}  
    public void ReceiveMessage(string MsgId)  
{  
    System.ArgumentException;  
    System.ArgumentNullException;  
    System.ArgumentOutOfRangeException;  
    System.MethodAccessException;  
    System.AccessViolationException;  
    System.UnauthorizedAccessException;  
}  
    public void DiscardDraft(string MsgId)  
{  
    System.ArgumentException;  
    System.ArgumentNullException;  
    System.ArgumentOutOfRangeException;  
    System.IndexOutOfRangeException;  
}  
    public void DeleteMsg(string MsgId)  
{  
    System.ArgumentException;  
    System.ArgumentNullException;  
    System.ArgumentOutOfRangeException;  
    System.IndexOutOfRangeException;  
}  
    public void ReportMsg(string MsgId)  
{  
    System.ArgumentException;  
    System.ArgumentNullException;  
    System.ArgumentOutOfRangeException;  
    System.IO.IOException;  
    System.MethodAccessException;  
    System.AccessViolationException;  
    System.UnauthorizedAccessException;
```

```

    }
};
}

```

Pictures

```

using System;
using Admin;
using Validate;
using System.IO;

namespace pictures
{
    class Pictures
    {
        //possible exceptions that can occur in the following methods. Refer to
        their code to see how they can occur.

        Pictures()
        {
            System.IO.IOException;
            System.BadImageFormatException;
            System.InvalidCastException;
        }
        public void RequestModification()
        {
            System.IO.IOException;
            System.FieldAccessException;
            System.AccessViolationException;
            System.MethodAccessException;
            System.ObjectDisposedException;
            System.UnauthorizedAccessException;
        }
        public void DeletePicture()
        {
            System.AccessViolationException;
            System.MethodAccessException;
            System.ObjectDisposedException;
        }
        public void ApproveUpload()
        {
            System.AccessViolationException;
            System.MethodAccessException;
            System.ObjectDisposedException;
            System.MemberAccessException;
            System.MissingFieldException;
        }
        public void RequestUpload()
        {
            System.IO.IOException;
            System.FieldAccessException;
            System.AccessViolationException;
            System.MethodAccessException;
            System.ObjectDisposedException;
            System.UnauthorizedAccessException;
        }
    }
}

```



```
};  
}
```

Videos

```
using System;  
using Admin;  
using Validate;  
using System.IO;
```

```
namespace Video  
{  
    class Video  
    {
```

//possible exceptions that can occur in the following methods. Refer to their code to see how they can occur.

```
        Video()  
    {  
        System.IO.IOException;  
        System.BadImageFormatException;  
        System.InvalidCastException;  
    }  
    public void DeleteVideo()  
    {  
        System.AccessViolationException;  
        System.MethodAccessException;  
        System.ObjectDisposedException;  
    }  
    public void ApproveUpload()  
    {  
        System.AccessViolationException;  
        System.MethodAccessException;  
        System.ObjectDisposedException;  
        System.MemberAccessException;  
        System.MissingFieldException;  
    }  
    public void RequestModification()  
    {  
        System.IO.IOException;  
        System.FieldAccessException;  
        System.AccessViolationException;  
        System.MethodAccessException;  
        System.ObjectDisposedException;  
        System.UnauthorizedAccessException;  
    }  
    public void RequestUpload()  
    {  
        System.IO.IOException;  
        System.FieldAccessException;  
        System.AccessViolationException;  
        System.MethodAccessException;  
        System.ObjectDisposedException;  
        System.UnauthorizedAccessException;  
    }  
};  
}
```