

Practical - 6

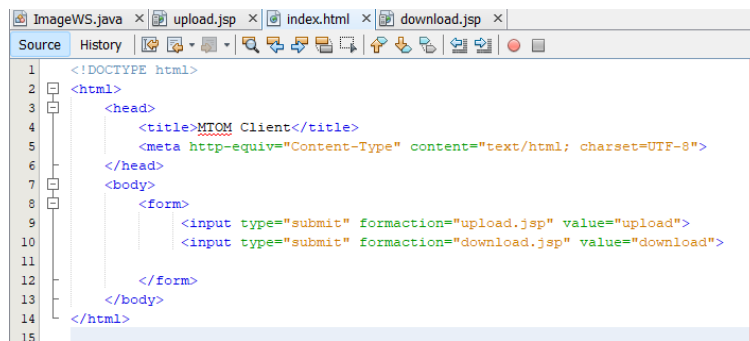
Aim : Develop application to download image/video from server or upload image/video to server using MTOM techniques

Step 1:

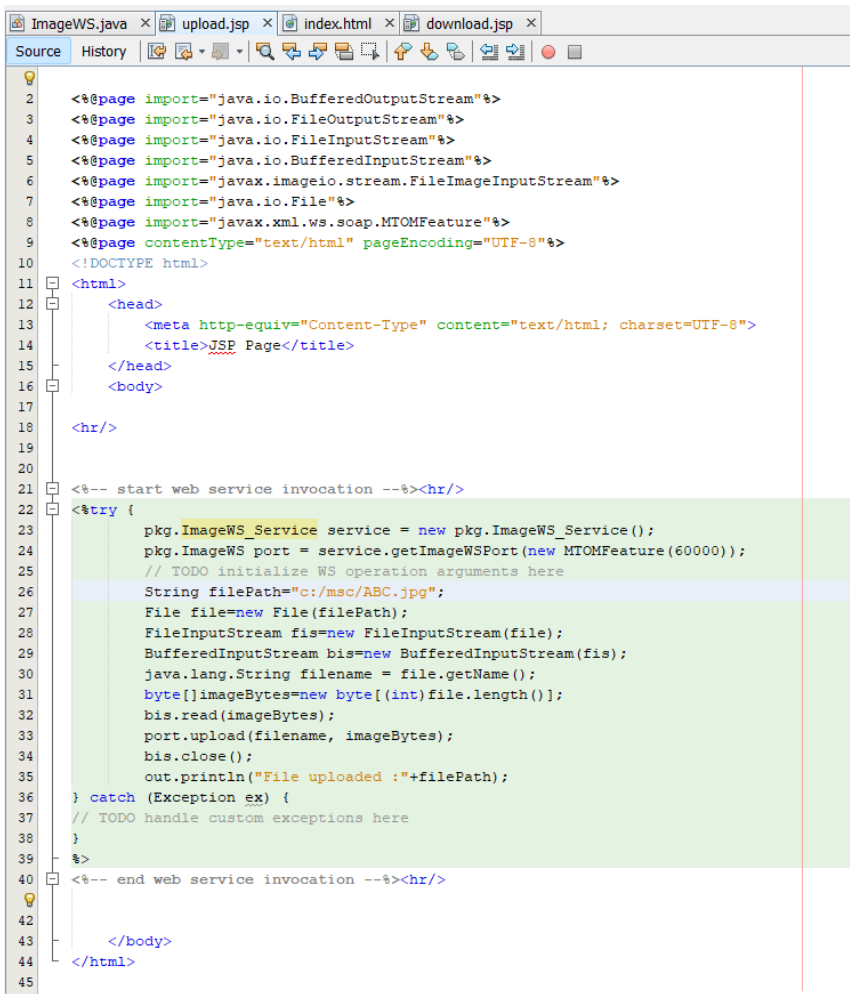
MTOMClient

Index.html

```
<!DOCTYPE html>
<html>
  <head>
    <title>MTOM Client</title>
    <meta http-equiv="Content-Type" content="text/html; charset="UTF-8">
  </head>
  <body>
    <form>
      <input type="submit" formaction="upload.jsp" value="upload">
      <input type="submit" formaction="download.jsp" value="download">
    </form>
  </body>
</html>
```



upload.jsp



```
<%@page import="java.io.BufferedOutputStream">
<%@page import="java.io.FileOutputStream">
<%@page import="java.io.FileInputStream">
<%@page import="java.io.BufferedInputStream">
<%@page import="javax.imageio.stream.FileImageInputStream">
<%@page import="java.io.File">
<%@page import="javax.xml.ws.soap.MTOMFeature">
<%@page contentType="text/html" pageEncoding="UTF-8">
<!DOCTYPE html>
<html>
<head>
    <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
<title>JSP Page</title>
</head>
<body>
<!-- start web service invocation --%><hr/>
<%
try {
    pkg.ImageWS_Service service = new pkg.ImageWS_Service();
    pkg.ImageWS port = service.getImageWSPort(new MTOMFeature(60000));
    // TODO initialize WS operation arguments here
    String filePath="c:/msc/ABC.jpg";
    File file=new File(filePath);
    FileInputStream fis=new FileInputStream(file);
    BufferedInputStream bis=new BufferedInputStream(fis);
    java.lang.String filename = file.getName();
    byte[] imageBytes=new byte[(int)file.length()];
    bis.read(imageBytes);
    port.upload(filename, imageBytes);
    bis.close();
    out.println("File uploaded :"+filePath);
} catch (Exception ex) {
    // TODO handle custom exceptions here
}
%>
<!-- end web service invocation --%><hr/>
</body>
</html>
```

```
// TODO initialize WS operation arguments here
String filePath="c:/msc/ABC.jpg";
File file=new File(filePath);
FileInputStream fis=new FileInputStream(file);
BufferedInputStream bis=new BufferedInputStream(fis);
java.lang.String filename = file.getName();
byte[]imageBytes=new byte[(int)file.length()];
bis.read(imageBytes);
port.upload(filename, imageBytes);
bis.close();
out.println("File uploaded :"+filePath);
} catch (Exception ex) {
    // TODO handle custom exceptions here
}
> <%-- end web service invocation --><hr/>
```

download.jsp

```
2 <%@page import="java.io.BufferedOutputStream"%>
3 <%@page import="java.io.FileOutputStream"%>
4 <%@page import="java.io.FileInputStream"%>
5 <%@page import="java.io.BufferedInputStream"%>
6 <%@page import="javax.imageio.stream.FileImageInputStream"%>
7 <%@page import="java.io.File"%>
8 <%@page import="javax.xml.ws.soap.MTOMFeature"%>
9 <%@page contentType="text/html" pageEncoding="UTF-8"%>
10 <!DOCTYPE html>
11 <html>
12 <head>
13 <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
14 <title>JSP Page</title>
15 </head>
16 <body>
17
18 <hr/>
19
20
21
22 <!-- start web service invocation --%><hr/>
23 <%
24 try {
25     pkg.ImageWS_Service service = new pkg.ImageWS_Service();
26     pkg.ImageWS port = service.getImageWSPort();
27     // TODO initialize WS operation arguments here
28     java.lang.String filename = "ABC.jpg";
29     String filePath="c:/msc/download/"+filename;
30     // TODO process result here
31     byte[] fileBytes = port.download(filename);
32     FileOutputStream fos=new FileOutputStream(filePath);
33     BufferedOutputStream bos=new BufferedOutputStream(fos);
34     bos.write(fileBytes);
35     bos.close();
36     out.println("File downloaded"+filePath);
37 } catch (Exception ex) {
38     // TODO handle custom exceptions here
39 }
40 %> <!-- end web service invocation --%><hr/>
41
42 </body>
43 </html>
44
```

```
<%@page import="java.io.BufferedOutputStream">
<%@page import="java.io.FileOutputStream">
<%@page import="java.io.FileInputStream">
<%@page import="java.io.BufferedInputStream">
<%@page import="javax.imageio.stream.FileImageInputStream">
<%@page import="java.io.File">
<%@page import="javax.xml.ws.soap.MTOMFeature">
<%@page contentType="text/html" pageEncoding="UTF-8">
<!DOCTYPE html>
<html>
```

```

<head>
    <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
</head>
<body>

<%-- start web service invocation --><hr/>
<%
try {
    pkg.ImageWS_Service service = new pkg.ImageWS_Service();
    pkg.ImageWS port = service.getImageWSPort();
    // TODO initialize WS operation arguments here
    java.lang.String filename = "ABC.jpg";
    String filePath="c:/msc/download/"+filename;
    // TODO process result here
    byte[] fileBytes = port.download(filename); FileOutputStream
    fos=new FileOutputStream(filePath); BufferedOutputStream
    bos=new BufferedOutputStream(fos); bos.write(fileBytes);
    bos.close();
    out.println("File downloaded"+filePath);
} catch (Exception ex) {
    // TODO handle custom exceptions here
}
> <%-- end web service invocation --><hr/>
</body>
</html>

```

Step 2 :

MTOMServer

ImageWS.java

```

package mypkg;
import java.io.*;
import javax.jws.Oneway;
import javax.jws.WebService;
import javax.jws.WebMethod;
import javax.jws.WebParam;
import javax.xml.ws.soap.MTOM;

@MTOM(enabled=true,threshold=60000)
@WebService(serviceName = "ImageWS")
public class ImageWS {
    @WebMethod(operationName = "upload")
    @Oneway
    public void upload(@WebParam(name = "Filename") String Filename, @WebParam(name =

```

```

        "ImageBytes") byte[] ImageBytes)
    {
        String filePath="C:/MSC/upload/"+Filename;

        try
        {
            FileOutputStream
            fos=new
            FileOutputStream(filePat
            h);
            BufferedOutputStream
            bos=new
            BufferedOutputStream(f
            os);
            bos.write(ImageBytes);
            bos.close();
            System.out.println("Recieved file :"+filePath);

        catch(Exception ex)
        {
            System.out.println(ex);
        }

    }

    @WebMethod(operationName = "download")
    public byte[] download(@WebParam(name = "Filename") String Filename)
    { String filePath="C:/MSC/upload/"+Filename;
      System.out.println("Sending file :"+filePath);
      try
      {
          File file=new File(filePath);
          FileInputStream fis=new FileInputStream(file);
          BufferedInputStream bis=new BufferedInputStream(fis);
          byte[] fileBytes=new byte[(int)file.length()];
          bis.read(fileBytes);
          bis.close();
          return fileBytes;
      }
      catch(Exception ex)
      {
          System.out.println(ex);
      }
      return null;
    }
}

```

Output:

