

TEAM MEMBERS :

- *HEMANT KUMAR SINGH (IT) - B.Tech, 3rd year
VIT, Vellore*
- *SHUBHAM GUPTA (CSE) - B.Tech, 2nd year
VIT, Vellore*
- *AYUSH PATEL (CSE) - B.Tech, 3rd year,
MMMUT*

Certificate Of Training

This is to certify that *HEMANT KUMAR SINGH (IT Branch, B.Tech), SHUBHAM GUPTA (CSE Branch, B.Tech), AYUSH PATEL (CSE Branch, B.Tech)* have successfully completed 4 weeks of industrial training from May 2, 2019 to May 29, 2019. During this training we worked on project named **“File Transfer Using Servlet”** in EDP under the guidance of **“Er. Kamlesh Kumar Verma”**

Project Incharge

ACKNOWLEDGEMENT

I express our humble gratitude to the entire members of D.L.W., Varanasi who has provided us the facility for developing this project.

I wish to give extreme thankful to our project in charge **Mr. Kamlesh Kumar Verma** who gave me direction to choose this topic for project and also gave me valuable suggestion in preparation of this project as well as boosting our moral when needed.

I want to express my deep appreciation to my parents who helped me throughout my project and always looks after better development of my project and also for their specific guidance.

Finally, in doing this project I get the assistance of many colleagues, friends who were extremely generous with their time so I give thanks to all of them.

ABSTRACT

The purpose of the Project “File Transfer using Servlet” is to upload a file from client to server using Tomcat Server using Servlet in Java. Uploading File to the server using Servlet and JSP is a common task in Java web application. Before coding your Servlet or JSP to handle file upload request, you need to know a little bit about File upload support in HTML and HTTP protocol. The file can be anything like jpeg, jpg, mp4, mp3, txt, pdf or can be any type. Also the file size can be like unlimited. We can upload from 1Kb to unlimited. We have made a user interface by use of software Eclipse. We have provided the browse button to select file and also a button to upload the file. We also have defined the destination directory where we are saving file from client.

CONTENTS

1. Introduction

- 1.1 Purpose**
- 1.2 Scope**
- 1.3 Technologies used**

2. Overall Description

- 2.1 Goals Of Purposed system**
- 2.2 Background**
- 2.3 Project Requirements**
- 2.4 User Characteristics**
- 2.5 Constraints**

3. Feasibility Study

- 3.1 Technical Feasibility**
- 3.2 Operational Feasibility**

4. Data Flow Diagrams

5. Snapshots

6. Entity Relationship Diagram

7. Sample Codes

8. Conclusion

9. Bibliography

1. Introduction

1.1) Purpose

- The project is for uploading of file on a server.
- The limit of size of file can be set.
- Different type of file can be uploaded on sever such as:
 - media
 - text
 - image,etc.

1.2) Scope

Uploading file to a server using java servlet is a common task in java web based application.it is used to upload a file to a server. The file can be either text, media, jpeg etc. The size of file can also be filtered. The server may be local memory or disk.

1.3) Technologies to be used

The following technologies and software have been used:

- 1) Java servlet
- 2) Eclipse EE
- 3) XML
- 4) Dynamic web page
- 5) Tomcat server

2. Overall Description

2.1) Goals of proposed system

1. Planned approach towards working:- The working in the organization will be well planned and organized. The data will be share safe, secure properly in data sharing, which will help in share data faster and proper way.

2. Accuracy :- The level of accuracy in the proposed system will be higher. All operation would be done correctly and it ensures that whatever information is coming from the center is accurate

3. Reliability:- The reliability of the proposed system will be high due to the above stated reasons. The reason for the increased reliability of the system is that now there would be proper data sharing information

4. No Redundancy: -In the proposed system utmost care would be the no information is repeated anywhere, in share or otherwise. This would assure economic use of data sharing space and consistency in the data share

5. Immediate retrieval of information:- The main objective of proposed system is to provide for a quick and efficient retrieval of information . Any type of information would be available whenever the user requires

6. Immediate storage of information: - In manual system there are many problems to store the largest amount of information.

2.2) Background

Simply general businessman have a two workspace in two different cities he has to communicate with her another workspace using file transfer. If he want to share some simple **unlimited storage** file like audio video images text or another.

File transfer in java using servlet is a easiest way to share your unlimited storage of document to another person. You can communicate with other person

This file transfer is used any places like school office, hospital or small all business space etc.

Using a file transfer you can save your file from the virus for another thread because you have only two connection **server** and **client**

You can communicate **both side**. You can easily communicate server to client and client to server.

2.3) Project Requirements

1. Hardware Requirements:-

Processor Pentium I, Pentium I, Pentium IV or higher

RAM :- 2GB or higher

2. Software Requirements:-

GUI :- xml.

Database :- servlet

2.4) User Characteristics

Every user should be:

- Comfortable of working with computer.
- He must have knowledge in java .
- He must also have basic knowledge of English too.

2.5) Constraints

- GUI is only in English.
- Login and password is used for identification of user and there is no facility for guest.

3. Feasibility Study

Depending on the results of the initial investigation the survey is now expanded to a more detailed feasibility study. "**FEASIBILITY STUDY**" is a test of system proposal according to its workability, impact of the organization, ability to meet needs and effective use of the resources. It focuses on these major questions:

1. What are the user's demonstrable needs and how does a candidate system meet them?
2. What resources are available for given candidate system?
3. What are the likely impacts of the candidate system on the organization?
4. Whether it is worth to solve the problem?

During feasibility analysis for this project, following primary areas of interest are to be considered. Investigation and generating ideas about a new system does this.

Steps in feasibility analysis:-

- Eight steps involved in the feasibility analysis are:
- Form a project team and appoint a project leader.
- Prepare system flowcharts
- Enumerate potential proposed system.

- Define and identify characteristics of proposed system.
- Determine and evaluate performance and cost effective of each proposed system.
- Weight system performance and cost data.
- Select the best proposed system.
- Prepare and report final project directive to management.

3.1 Technical Feasibility

A study of resource availability that may affect to achieve an acceptable system. This evaluation determines whether the technology needed for the proposed system is available or not.

- ❖ Can the work for the project be done with current equipment existing software technology and available personal?
- ❖ Can the system be upgraded if developed?
- ❖ If new technology is needed then what can be developed?

This is concerned with specifying equipment and software that will successfully satisfy the user requirement. This technical needs of the system may include:

Front-End and Back-End Selection

An important issue for the development of a project is the selection of suitable front-end and back-end. When we decided to develop this project we went through an extensive study to determine the most suitable platform that suits the needs of the organization as well as helps in development of the project.

The aspects of our study included the following factors:

Front-End Selection:

- It must have a graphical user interface that assists employees that are not from IT background.
- Scalability and extensibility.
- Flexibility.
- Robustness.
- According to the organization requirement and the culture.
- Must provide excellent reporting features with good printing support.
- Platform independent.
- Easy to debug and maintain.
- Event driven programming facility.

Back-end Selection:

- Multiple user support.
- Efficient data handling.
- Provide inherent features for security.
- Efficient data retrieval and maintenance.
- Stored procedures.
- Popularity.
- Operating System compatible.
- Easy to Install.
- Various drivers must be available.

The technical feasibility is frequently the most difficult area encountered at this stage.

It is essential that the process of analysis and definition be conducted in parallel with an assessment to technical feasibility. It centers on the existing computer system (hardware, software etc.) and to what extent it can support the proposed system.

3.2 Operational feasibility

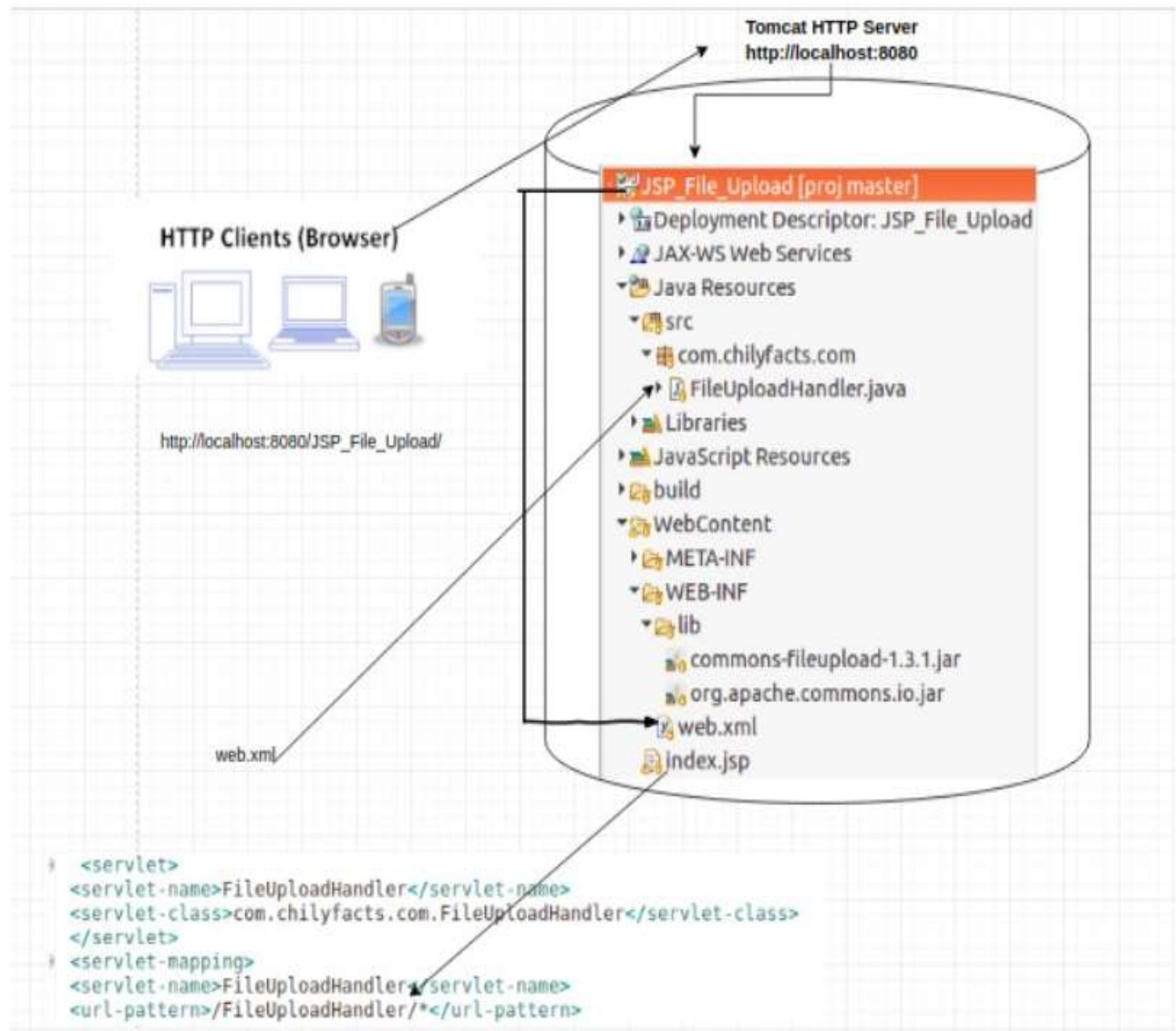
It is mainly related to human organizations and political aspects. The points to be considered are:

- ❖ What changes will be brought with the system?
- ❖ What organization structures are disturbed?
- ❖ What new skills will be required?
- ❖ Do the existing staff members have these skills? If not, can they be trained in due course of time?

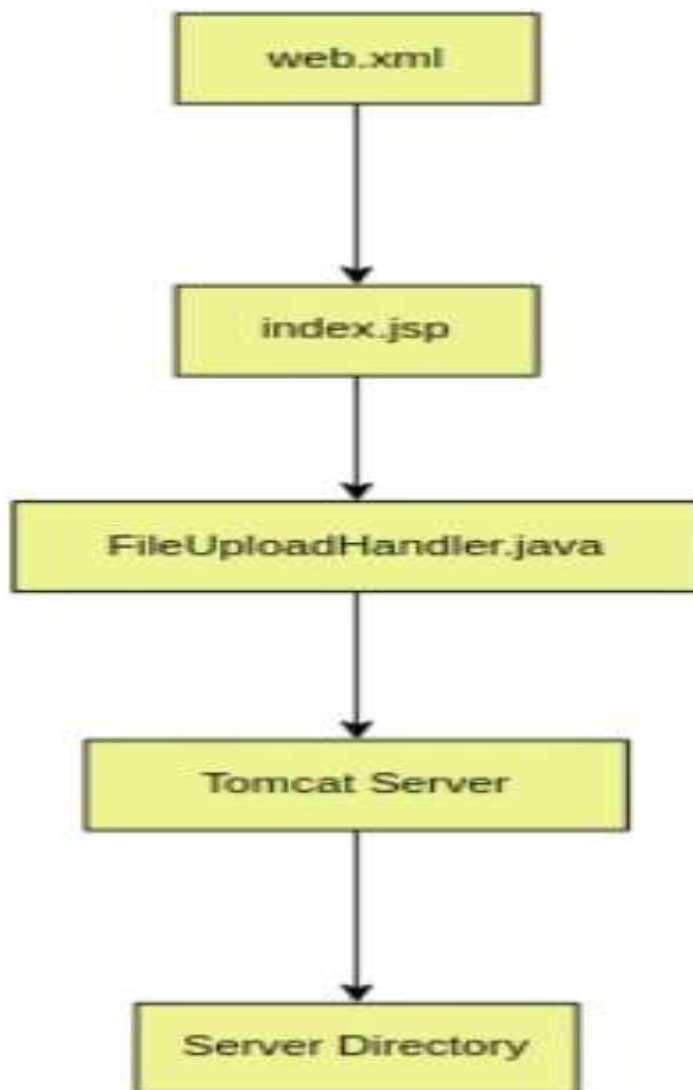
The system is operationally feasible as it is very for the End Users to operate it. It only needs basic information about the Windows platform.

4.DATA FLOW DIAGRAM

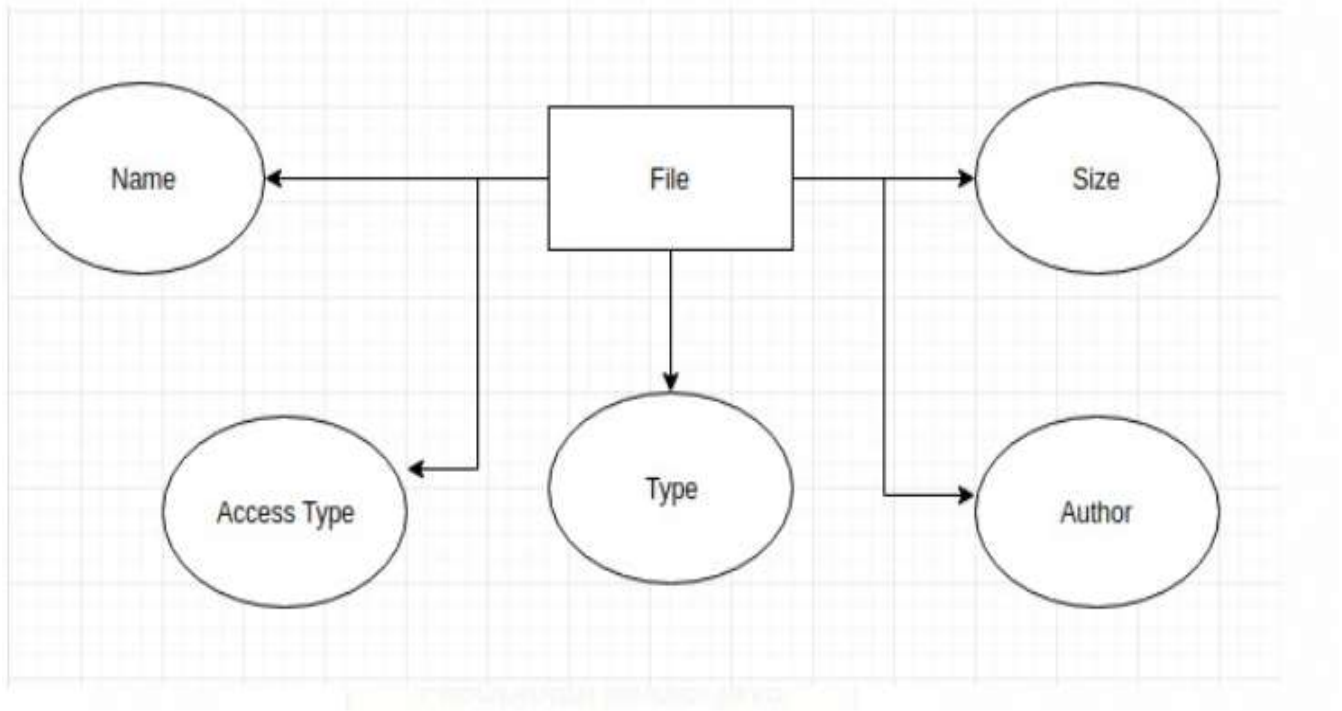
1)



2)

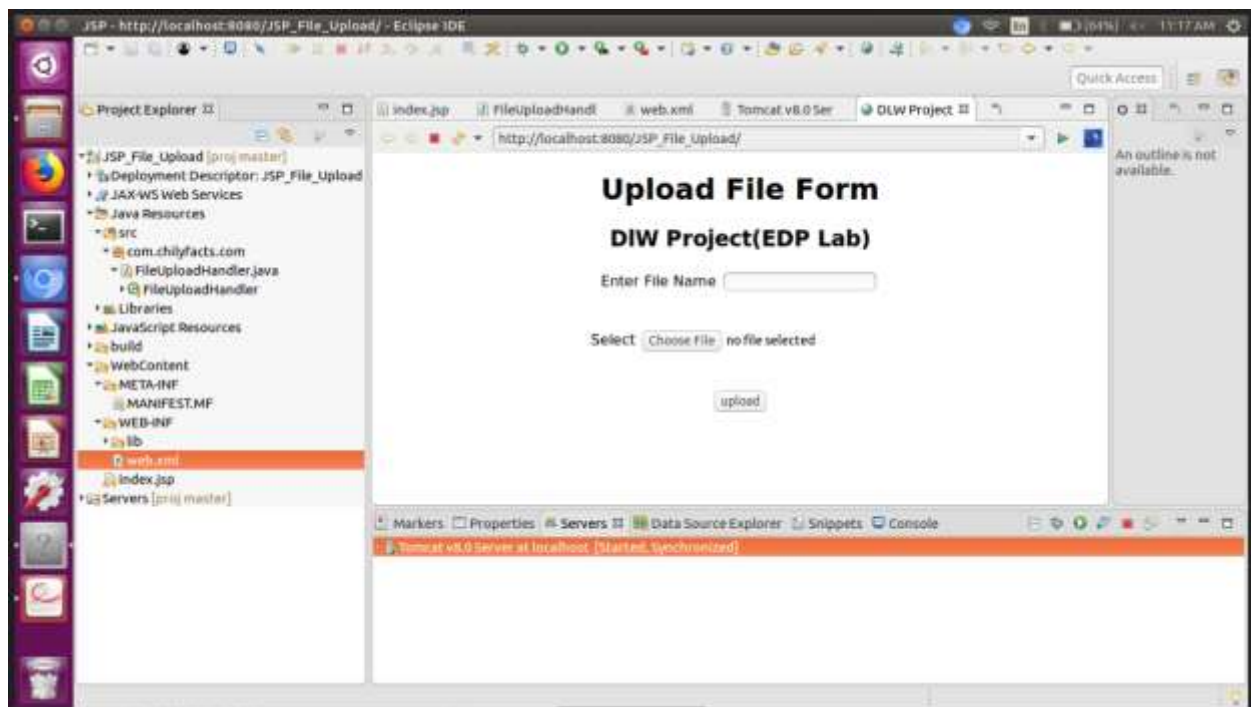


5.ENTITY RELATIONSHIP DIAGRAM

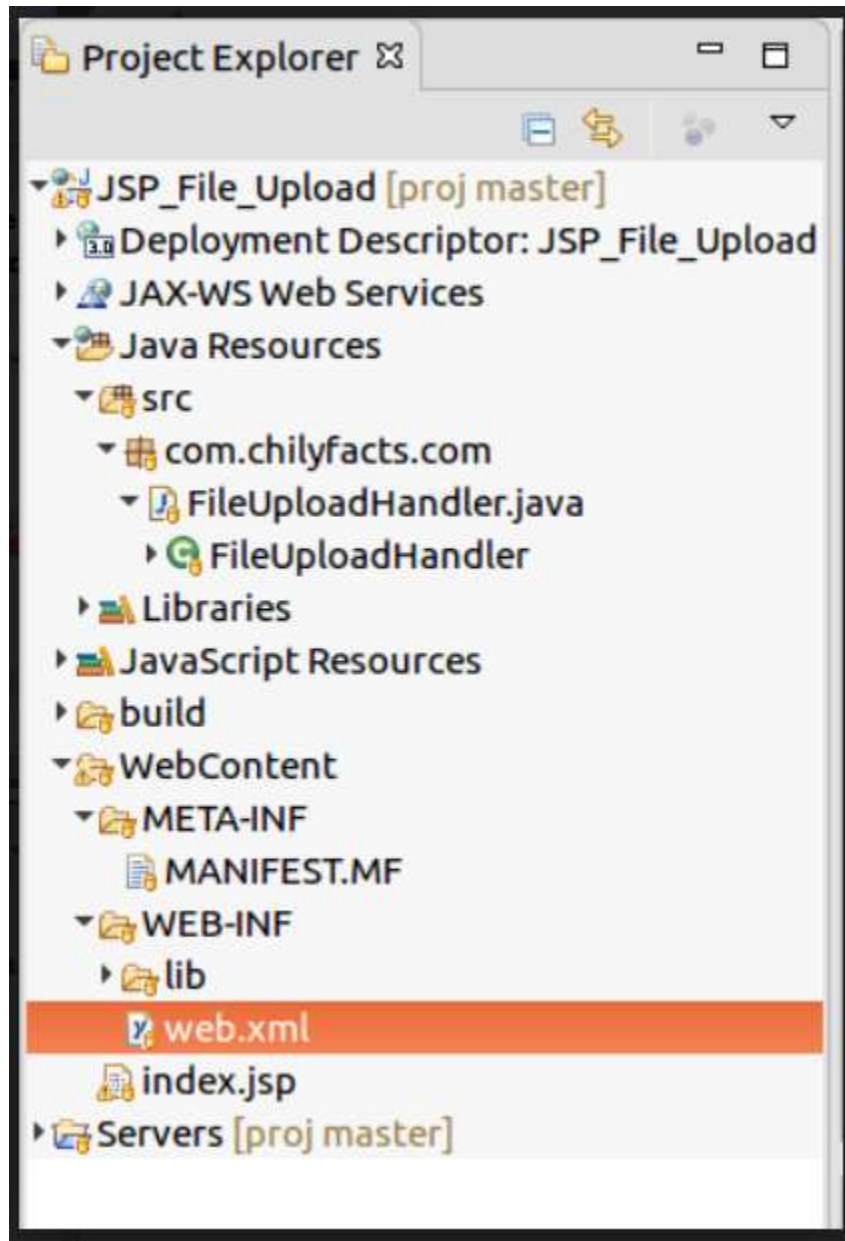


6.SNAPSHOTS

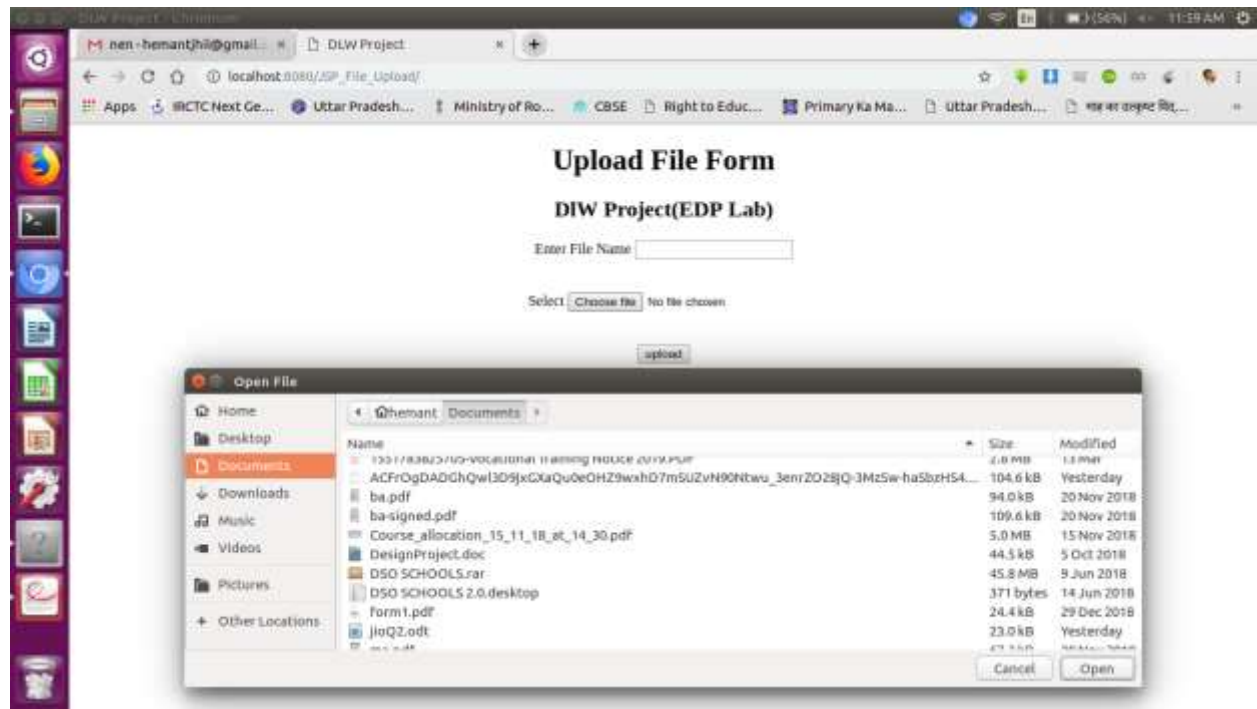
a) User Interface



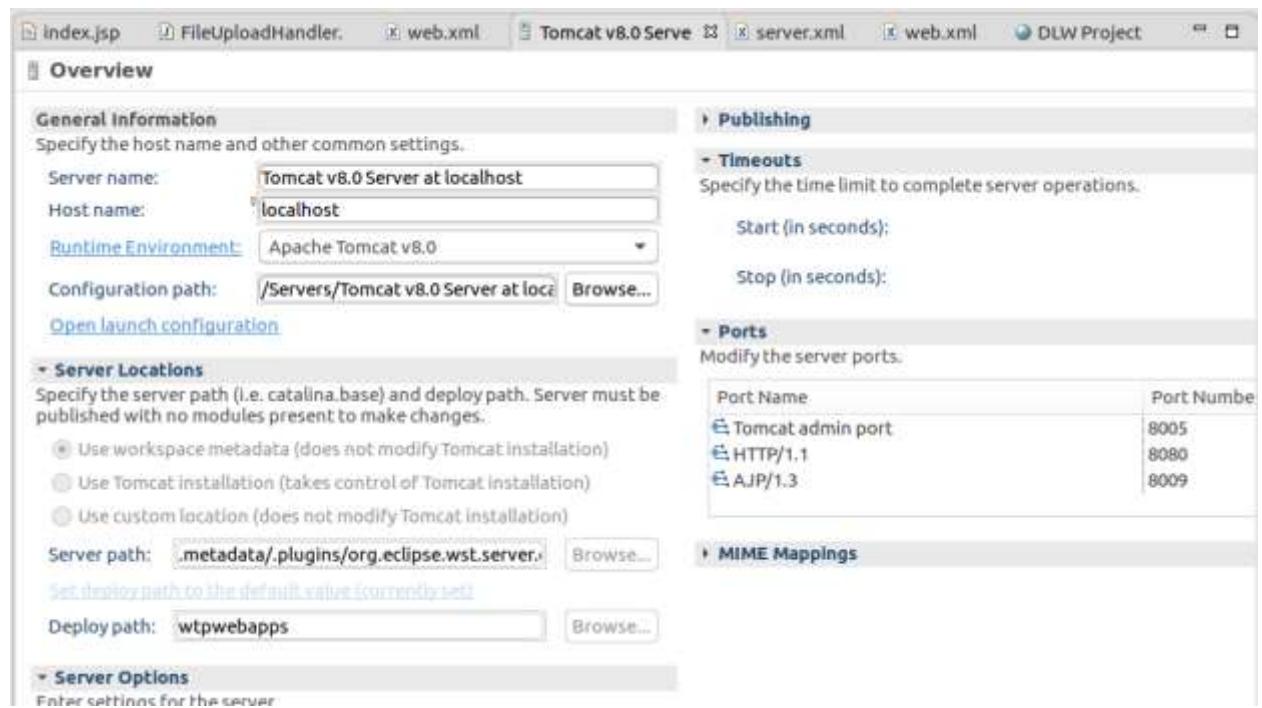
b) Project Structure



c. Browse File



d. Tomcat Server



7. SAMPLE CODES

1. FileUploadHandler.java

Code:

```
package com.chilyfacts.com;

import java.io.File;
import java.io.IOException;
import java.io.PrintWriter;
import java.util.Iterator;
import java.util.List;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import org.apache.commons.fileupload.FileItem;
import org.apache.commons.fileupload.FileItemFactory;
import
org.apache.commons.fileupload.disk.DiskFileItemFactory;
import
org.apache.commons.fileupload.servlet.ServletFileUpload;
public class FileUploadHandler extends HttpServlet {
    private static final long serialVersionUID = 1 ;
```

```
public void doGet(HttpServletRequest request,
HttpServletRequest response) throws IOException {
    doPost(request, response);
}

public void doPost(HttpServletRequest request,
HttpServletRequest response) throws IOException {
    String file_name = null;
    response.setContentType("text/html");
    PrintWriter out = response.getWriter();
    boolean isMultipartContent =
ServletFileUpload.isMultipartContent(request);
    if (!isMultipartContent) {
        return;
    }
    FileItemFactory factory = new DiskFileItemFactory();
    ServletFileUpload upload = new ServletFileUpload(factory);
    try {
        List < FileItem > fields = upload.parseRequest(request);
        Iterator < FileItem > it = fields.iterator();
        if (!it.hasNext()) {
            return;
        }
    }
```

```
}  
while (it.hasNext()) {  
    FileItem fileItem = it.next();  
    boolean isFormField = fileItem.isFormField();  
    if (isFormField) {  
        if (file_name == null) {  
            if (fileItem.getFieldName().equals("file_name")) {  
                file_name = fileItem.getString();  
            }  
        }  
    } else {  
        if (fileItem.getSize() > 0) {  
            fileItem.write(new  
File("/home/hemant/Documents/profile/dlw/proj/upload/up"  
+ fileItem.getName()));  
        }  
    }  
}  
} catch (Exception e) {  
    e.printStackTrace();  
}  
} finally {
```

```
out.println("<script type='text/javascript'>");
```

```
out.println("window.location.href='index.jsp?filename="+file_n  
ame+"'");
```

```
out.println("</script>");
```

```
out.close();
```

```
}
```

```
}
```

```
}
```


2. web.xml

code:

```
<?xml version="1.0" encoding="UTF-8"?>
<web-app xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance" xmlns="http://java.sun.com/xml/ns/javaee"
xsi:schemaLocation="http://java.sun.com/xml/ns/javaee
http://java.sun.com/xml/ns/javaee/web-app_3_0.xsd"
version="3.0">
  <display-name>JSP_File_Upload</display-name>
  <welcome-file-list>
    <welcome-file>index.html</welcome-file>
    <welcome-file>index.htm</welcome-file>
    <welcome-file>index.jsp</welcome-file>
    <welcome-file>default.html</welcome-file>
    <welcome-file>default.htm</welcome-file>
    <welcome-file>default.jsp</welcome-file>
  </welcome-file-list>
  <servlet>
    <servlet-name>FileUploadHandler</servlet-name>
    <servlet-class>com.chilyfacts.com.FileUploadHandler</servlet-
class>
```

</servlet>

<servlet-mapping>

<servlet-name>FileUploadHandler</servlet-name>

<url-pattern>/FileUploadHandler/*</url-pattern>

</servlet-mapping>

</web-app>

3. index.jsp

Code:

```
<%@ page language="java" contentType="text/html;  
charset=UTF-8"  
    pageEncoding="UTF-8"%>  
<!DOCTYPE html>  
<html>  
<head>  
<meta charset="UTF-8">  
<title>DLW Project</title>  
</head>  
<body>  
<center>  
<h1>Upload File Form</h1>  
<h2><b>DLW Project(EDP Lab)</b></h2>  
    <form action="FileUploadHandler" enctype="multipart/form-  
data" method="post">  
        Enter File Name <input type="text"  
name="file_name"><br></br></br>  
        Select    <input type="file" name="file2" /><br></br></br>  
        <input type="submit" value="upload" />
```

</form>

<%

String file_name=(String)request.getParameter("filename");

if(file_name!=null){

out.println(file_name+" File uploaded successfully");

}

%>

</center>

</body>

</html>

8.CONCLUSION

The Project “File Transfer using Servlet” is to upload a file from client to server using Tomcat Server using Servlet in Java.

Now after doing this project we understand how to send file of any type or any size from client to server. We have used Tomcat to create local host dynamic web page where we defined the button to choose the file and upload it to the server directory. We have also created a directory for server where we store all the files coming from the client. We have also put the directory location in our project so that coming files can be put in a defined directory. Also we have used Java Servlet pages for our project to define various links in the data flow.

9. Bibliography

1. JAVA, The Complete Reference- Herbert Schildt
2. www.w3school.com
3. www.tutorialspoint.com
4. www.wellacademy.com
5. www.youtube.com
6. www.stackoverflow.com
7. www.geekforgeeks.com
8. www.eclipsecommunity.com