File download:

To perform file download and to fetch the image from SQL Database, first you should upload some files.

So first, We will do upload.

<html>

<head>

<title>Upload Image</title>

</head>

<body>

<b>Upload | <a href=*"view.jsp"*>View</a></b><br/><br/>

<form action=*"uploadImage"* method=*"post"* enctype=*"multipart/form-data"*>

<input type=*"file"* name=*"image"* required=*"required"*/><br/><br/>

<input type=*"submit"*/>

</form>

</body>

</html>

Table Creation:

use demo;

create table imagedata(id int primary key auto\_increment,imgname mediumblob not null);

uploadImage.java

package Uploadndownload;

import java.io.IOException;

import java.io.InputStream;

import java.sql.Connection;

import java.sql.DriverManager;

import java.sql.PreparedStatement;

import javax.servlet.ServletException;

import javax.servlet.annotation.MultipartConfig;

import javax.servlet.annotation.WebServlet;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;

import javax.servlet.http.Part;

@WebServlet("/uploadImage")

@MultipartConfig(maxFileSize = 16177216)

public class UploadImage extends HttpServlet{

/\*\*

\*

\*/

private static final long serialVersionUID = 1L;

@Override

protected void doPost(HttpServletRequest req, HttpServletResponse resp)

throws ServletException, IOException {

String connectionURL = "jdbc:mysql://localhost:3306/demo";

String user = "root";

String pass = "Root@123";

int result = 0;

Connection con = null;

Part part = req.getPart("image");

if(part != null){

try{

Class.forName("com.mysql.cj.jdbc.Driver");

con = DriverManager.getConnection(connectionURL, user, pass);

PreparedStatement ps = con.prepareStatement("insert into imagedata(imgname) values(?)");

InputStream is = part.getInputStream();

ps.setBlob(1, is);

result = ps.executeUpdate();

}

catch(Exception e){

e.printStackTrace();

}

finally{

if(con != null){

try{

con.close();

}

catch(Exception e){

e.printStackTrace();

}

}

}

}

if(result > 0){

resp.sendRedirect("result.jsp?message=Image+Uploaded");

}

else{

resp.sendRedirect("result.jsp?message=Some+Error+Occurred");

}

}

}

Result.jsp

<%@ page language=*"java"* contentType=*"text/html; charset=ISO-8859-1"*

pageEncoding=*"ISO-8859-1"*%>

<!DOCTYPE html>

<html>

<head>

<meta charset=*"ISO-8859-1"*>

<title>Insert title here</title>

</head>

<body>

<%

String message = request.getParameter("message");

**if**(message != **null**){

out.print(message);

}

%>

</body>

</html>

View.jsp

<%@ page language=*"java"* contentType=*"text/html; charset=ISO-8859-1"*

pageEncoding=*"ISO-8859-1"*%>

<!DOCTYPE html>

<html>

<head>

<meta charset=*"ISO-8859-1"*>

<title>Insert title here</title>

</head>

<body>

<b>View | <a href=*"index.jsp"*>Upload</a></b><br/><br/>

<form action=*"viewImage.jsp"* method=*"post"*>

<input type=*"text"* name=*"id"* required=*"required"* placeholder=*"enter image id.."*/><br/><br/>

<input type=*"submit"*/>

</form>

</body>

</html>

viewImage.jsp

<html>

<head>

<title>View Image</title>

</head>

<body>

<b>View | <a href=*"index.jsp"*>Upload</a></b><br/><br/>

<%

String id = request.getParameter("id");

%>

<img src=*"getImage.jsp?id=*<%=id%>*"* width=*"400px"*/>

</body>

</html>

getImage.jsp

<%@ page language=*"java"* contentType=*"text/html; charset=ISO-8859-1"*

pageEncoding=*"ISO-8859-1"*%>

<!DOCTYPE html>

<html>

<head>

<meta charset=*"ISO-8859-1"*>

<title>Insert title here</title>

</head>

<body>

<%@page import=*"java.sql.Blob"*%>

<%@page import=*"java.io.OutputStream"*%>

<%@page import=*"java.sql.ResultSet"*%>

<%@page import=*"java.sql.PreparedStatement"*%>

<%@page import=*"java.sql.DriverManager"*%>

<%@page import=*"java.sql.Connection"*%>

<%

String id = request.getParameter("id");

String connectionURL = "jdbc:mysql://localhost:3306/demo";

String user = "root";

String pass = "Root@123";

Connection con = **null**;

**try**{

Class.forName("com.mysql.cj.jdbc.Driver");

con = DriverManager.getConnection(connectionURL, user, pass);

PreparedStatement ps = con.prepareStatement("select \* from imagedata where id=?");

ps.setString(1, id);

ResultSet rs = ps.executeQuery();

**if**(rs.next()){

Blob blob = rs.getBlob("imgname");

**byte** byteArray[] = blob.getBytes(1, (**int**)blob.length());

response.setContentType("image/jpg");

OutputStream os = response.getOutputStream();

os.write(byteArray);

os.flush();

os.close();

}

}

**catch**(Exception e){

e.printStackTrace();

}

**finally**{

**if**(con != **null**){

**try**{

con.close();

}

**catch**(Exception e){

e.printStackTrace();

}

}

}

%>

</body>

</html>