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# Screenshots

## MySQL Workbench

MySQL workbench screenshot shows the table used and extracts and has the query to show all the records stored in the table.

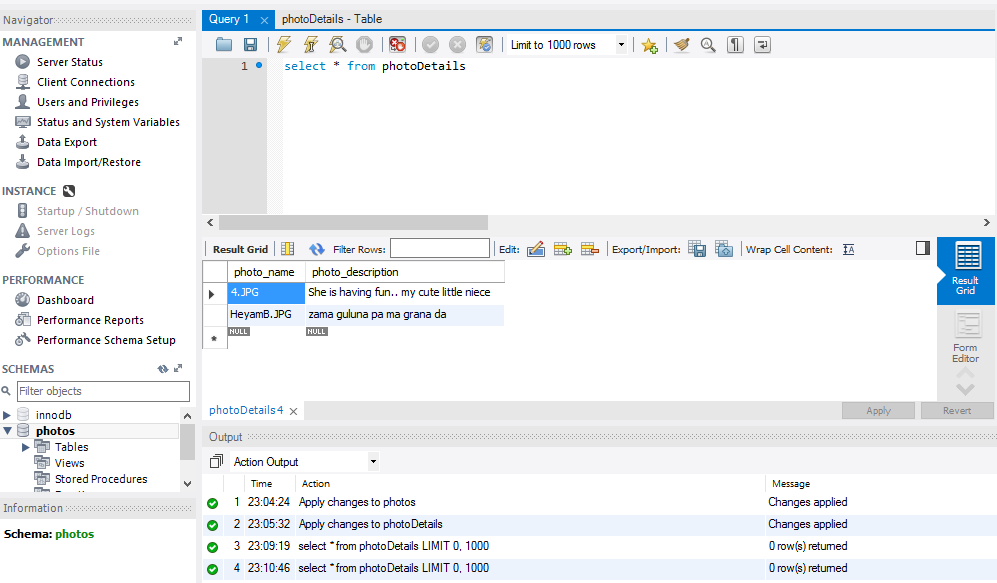


Figure 1: MySQL Workbench

## Index Page

Following is the screenshot of index page to show the form where I ask the user for image and image description.

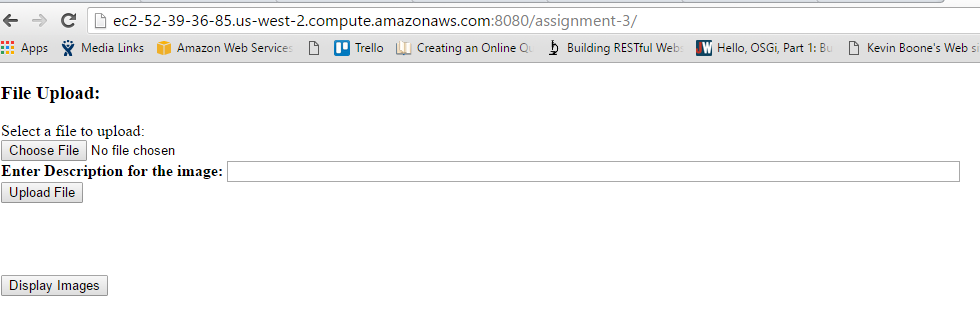


Figure 2: Index page

## Display Page

Following is the page to show the saved images with their corresponding descriptions.

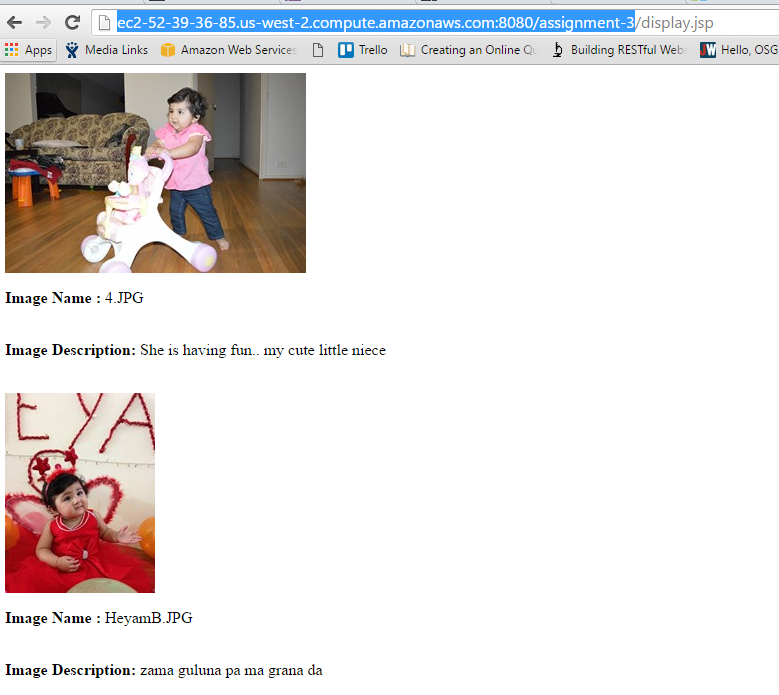


Figure 3: Display Page

# Code

## Index.html

<!DOCTYPE html>

<html>

<head>

<title>File Uploading Form</title>

</head>

<body>

<h3>File Upload:</h3>

Select a file to upload:

<br />

<form action=*"UploadFile.jsp"* method=*"post"* enctype=*"multipart/form-data"*>

<input type=*"file"* name=*"file"* /> <br /> <label for=*"description"*> <b>Enter Description for the image:</b>

</label> <input id=*"description"* size=*"100"* name=*"description"* type=*"text"*></input> <br /> <input type=*"submit"* value=*"Upload File"* />

</form>

<br></br>

<br></br>

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

<input type=*"submit"* value=*"Display Images"* />

</form>

</body>

</html>

## UploadFile.jsp

<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN" "http://www.w3.org/TR/html4/loose.dtd">

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

<%@ page import=*"java.io.\*,java.util.\*, javax.servlet.\*"*%>

<%@ page import=*"javax.servlet.http.\*"*%>

<%@ page import=*"org.apache.commons.fileupload.\*"*%>

<%@ page import=*"org.apache.commons.fileupload.disk.\*"*%>

<%@ page import=*"org.apache.commons.fileupload.servlet.\*"*%>

<%@ page import=*"org.apache.commons.io.output.\*"*%>

<%@ page import=*"com.amazonaws.auth.AWSCredentials"*%>

<%@ page import=*"com.amazonaws.auth.BasicAWSCredentials"*%>

<%@ page import=*"com.amazonaws.services.s3.AmazonS3"*%>

<%@ page import=*"com.amazonaws.services.s3.AmazonS3Client"*%>

<%@ page import=*"com.amazonaws.services.s3.model.ObjectMetadata"*%>

<%@ page import=*"com.amazonaws.services.s3.model.PutObjectRequest"*%>

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

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

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

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

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

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

<html>

<head>

<meta http-equiv=*"Content-Type"* content=*"text/html; charset=ISO-8859-1"*>

<title>Insert title here</title>

</head>

<body>

<%

String contentType = request.getContentType();

String imageName = "";

String desc = "";

**if** ((contentType.indexOf("multipart/form-data") >= 0)) {

DiskFileItemFactory factory = **new** DiskFileItemFactory();

ServletFileUpload uploadHandler = **new** ServletFileUpload(factory);

uploadHandler.setSizeMax(1024 \* 1024 \* 1); //1MB

List<FileItem> fileItems = uploadHandler.parseRequest(request);

Iterator<FileItem> iterator = fileItems.iterator();

**try** {

BasicAWSCredentials awsCredentials = **new** BasicAWSCredentials("AKIAJBITMRRBRIMPOKXQ",

"B810lz/HigDZ5J9ByUlNhUc4XynLX7oRv6c+ZNDg");

AmazonS3 s3client = **new** AmazonS3Client(awsCredentials);

**while** (iterator.hasNext()) {

FileItem fileItem = (FileItem) iterator.next();

**if** (fileItem.isFormField()) {

String name = fileItem.getFieldName();//description

desc = fileItem.getString(); //value of description

}

**if** (!fileItem.isFormField()) {

String fileName = fileItem.getName();

imageName = fileName;

**boolean** isInMemory = fileItem.isInMemory();

ObjectMetadata objectMetadata = **new** ObjectMetadata();

objectMetadata.setContentLength(fileItem.getSize());

s3client.putObject(**new** PutObjectRequest("mkhan9", fileName, fileItem.getInputStream(),

objectMetadata));

out.println("<h1>" + fileName + " uploaded </h1>");

}

}

} **catch** (Exception e) {

out.println(e);

}

}

Statement stmt = **null**;

Connection connection = **null**;

PreparedStatement prep = **null**;

ResultSet rs;

**try** {

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

//Creating a connection to the required database

connection = DriverManager.getConnection(

"jdbc:mysql://mkhan9.cxjfdlvd1ypl.us-west-2.rds.amazonaws.com/photos", "mkhan9", "bluebird9");

stmt = connection.createStatement();

prep = connection

.prepareStatement("insert into photos.photoDetails(photo\_name,photo\_description) values(?,?)");

prep.setString(1, imageName.trim());

imageName = "";

prep.setString(2, desc.trim());

prep.executeUpdate();

connection.close();

} **catch** (SQLException ex) {

// handle any errors

out.println("SQLException: " + ex.getMessage());

out.println("SQLState: " + ex.getSQLState());

out.println("VendorError: " + ex.getErrorCode());

}

//After the entire execution this block will execute and the connection with database gets closed

**finally** {

**try** {

connection.close();

} **catch** (Exception e) {

// TODO Auto-generated catch block

e.printStackTrace();

}

}

%>

<h3>

<a href=*"index.html"*> Back to home page</a>

</h3>

</body>

</html>

## Display.jsp

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

<%@ page import=*"com.amazonaws.auth.AWSCredentials"*%>

<%@ page import=*"com.amazonaws.auth.BasicAWSCredentials"*%>

<%@ page import=*"com.amazonaws.util.StringUtils"*%>

<%@ page import=*"com.amazonaws.services.s3.AmazonS3"*%>

<%@ page import=*"com.amazonaws.services.s3.AmazonS3Client"*%>

<%@ page import=*"com.amazonaws.services.s3.model.ObjectListing"*%>

<%@ page import=*"com.amazonaws.services.s3.model.S3ObjectSummary"*%>

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

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

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

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

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

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

<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN" "http://www.w3.org/TR/html4/loose.dtd">

<html>

<head>

<meta http-equiv=*"Content-Type"* content=*"text/html; charset=ISO-8859-1"*>

<title>Insert title here</title>

</head>

<body>

<%

String imageName = "";

BasicAWSCredentials awsCredentials = **new** BasicAWSCredentials("AKIAJBITMRRBRIMPOKXQ",

"B810lz/HigDZ5J9ByUlNhUc4XynLX7oRv6c+ZNDg");

AmazonS3 s3client = **new** AmazonS3Client(awsCredentials);

ObjectListing objects = s3client.listObjects("mkhan9");

**do** {

**for** (S3ObjectSummary objectSummary : objects.getObjectSummaries()) {

imageName = objectSummary.getKey().trim();

out.println("<img src=https://s3-ap-southeast-2.amazonaws.com/mkhan9/" + objectSummary.getKey()

+ " /> <p> <b>Image Name :</b> " + imageName + "<br />");

Statement stmt = **null**;

Connection connection = **null**;

PreparedStatement prep = **null**;

**try** {

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

//Creating a connection to the required database

connection = DriverManager.getConnection(

"jdbc:mysql://mkhan9.cxjfdlvd1ypl.us-west-2.rds.amazonaws.com/photos", "mkhan9",

"bluebird9");

stmt = connection.createStatement();

String sqlQuery = "select photo\_description from photos.photoDetails where photo\_name = ?";

prep = connection.prepareStatement(sqlQuery);

prep.setString(1, imageName.trim());

ResultSet rs = prep.executeQuery();

**while** (rs.next()) {

String imgDes = rs.getString("photo\_description");

out.println("<br/><p><b>Image Description: </b>" + imgDes + "</p><br />");

}

rs.close();

imageName = "";

connection.close();

} **catch** (SQLException ex) {

// handle any errors

out.println("SQLException: " + ex.getMessage());

out.println("SQLState: " + ex.getSQLState());

out.println("VendorError: " + ex.getErrorCode());

}

//After the entire execution this block will execute and the connection with database gets closed

**finally** {

**try** {

connection.close();

} **catch** (Exception e) {

// TODO Auto-generated catch block

e.printStackTrace();

}

}

}

objects = s3client.listNextBatchOfObjects(objects);

} **while** (objects.isTruncated());

%>

<h3>

<a href=*"index.html"*> Back to home page</a>

</h3>

</body>

</html>