**Kuliah7**

**Index.jsp**

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

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

<!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>

<h1>Cloud Computing</h1>

<form>

<p> Name : <input type=*"text"* name = *"tName"*/> </p>

<p> City : <input type=*"text"* name = *"tCity"*/> </p>

<p><input type=*"submit"* name = *"btSubmit"* value=*"Input"*/> </p>

<input type=*"submit"* name = *"btRedirect"* />

</form>

<%

**if**(request.getParameter("btSubmit") != **null**)

{

String name = request.getParameter("tName");

String city = request.getParameter("tCity");

session.setAttribute("sName", name);

session.setAttribute("sCity", city);

%>

<p> Name: <%= name %> </p>

<p> City: <%= city %> </p>

<%

}

**if**(request.getParameter("btRedirect") != **null**)

{

response.sendRedirect("page1.jsp");

}

%>

<p> <a href=*"/hello"*>servlet</a> </p>

<%

**for**(**int** i = 1; i <= 10; i++ )

{

out.println("Row ke " + i +"<br>");

}

%>

</body>

</html>

**Page1.jsp**

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

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

<!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>

<h1> page 1</h1>

<%

String name = session.getAttribute("sName")+"";

String city = session.getAttribute("sCity")+"";

%>

<p>Name : <%= name %></p>

<p>City : <%= city %></p>

</body>

</html>

**Page2.jsp**

<%@page import=*"java.util.ArrayList"*%>

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

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

<!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>

<form>

<h1>page 2</h1>

<p> Name : <input type=*"text"* name=*"tName"*> </p>

<p> <input type=*"submit"* name=*"bSubmit"*> </p>

<%! ArrayList<String> nameList = **new** ArrayList<String>(); %>

<%

**if**(request.getParameter("bSubmit") != **null**){

String name = request.getParameter("tName");

nameList.add(name);

}

**for**(String name:nameList){

out.println(name+"<br/>");

}

/\*

for(int i = 0; i<nameList.size(); i++)

{

String name = nameList.get(i);

out.println(name + "<br/>");

}

\*/ %>

</form>

</body>

</html>

**Page3.jsp**

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

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

<%@ page import = *"java.util.\*"* %>

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

<html>i

<head>

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

<title>Insert title here</title>

</head>

<body>

<h1>page 3</h1>

<form>

<p> A : <input type=*"text"* name=*"tA"*> </p>

<p> B : <input type=*"text"* name=*"tB"*> </p>

<p> <input type=*"submit"* name=*"bOperation"* value=*"add"*> </p>

<p> <input type=*"submit"* name=*"bOperation"* value=*"subtract"*> </p>

</form>

<jsp:useBean id=*"calc"* class=*"edu.stts.Calculator"*></jsp:useBean>

<%

**if**(request.getParameter("bOperation") != **null**){

**int** a = Integer.parseInt(request.getParameter("tA"));

**int** b = Integer.parseInt(request.getParameter("tB"));

**int** c = 0;

String op = request.getParameter("bOperation").toString();

**if**(op.equals("add")){

//c = a + b;

c = calc.Add(a, b);

}**else** **if**(op.equals("subtract")){

c = calc.Substract(a, b);

}

out.println("<p>nilai : " + c + "</p><br/>");

}

// Bean bukan Servlet'

//POJO PLain o Java Object

%>

</body>

</html>

**Calculator.java**

**package** edu.stts;

**public** **class** Calculator {

**public** **int** Add(**int** a, **int** b)

{

**return** a+b;

}

**public** **int** Substract(**int** a, **int** b)

{

**return** a-b;

}

}

**Kuliah7b**

**Bean1.java**

**package** kuliah7b;

**public** **class** bean1 {

**public** **int** add(**int** a,**int** b)

{

**return** a+b;

}

**public** **int** substract(**int** a, **int** b)

{

**return** a-b;

}

}

**Index.jsp**

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

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

<!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>JSP</title>

</head>

<body>

<h1>halo ini jsp</h1>

<jsp:useBean id=*"b1"* class=*"kuliah7b.bean1"*>

int a = 9 ; int b= 1;

int c = b1.add(a,b);

int d - b1.substract(a,b);

</jsp:useBean>

</body>

</html>

**KULIAH9**

package edu.stts;

import java.io.FileInputStream;

import java.io.IOException;

import java.io.PrintWriter;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;

import com.google.auth.oauth2.ServiceAccountCredentials;

import com.google.cloud.Timestamp;

import com.google.cloud.datastore.\*;

public class HelloAppEngine extends HttpServlet {

public void doGet(HttpServletRequest request, HttpServletResponse response)

throws IOException {

response.setContentType("text/html");

PrintWriter out = response.getWriter();

out.print("<h1>Datastore Servlet</h1>");

// Datastore datastore = DatastoreOptions.getDefaultInstance().getService();

Datastore datastore = DatastoreOptions.newBuilder().setProjectId("kuliah-181701").setCredentials(ServiceAccountCredentials.fromStream(new FileInputStream("Kuliah-61a876516fb5.json"))).build().getService();

// Insert

// KeyFactory keyFactory = datastore.newKeyFactory().setKind("Task");

// IncompleteKey key = keyFactory.newKey();

// FullEntity<IncompleteKey> newTask = FullEntity.newBuilder(key)

// .set("created", Timestamp.now()).set("description", "Fourth entity").set("done", true).build();

// datastore.add(newTask);

Query<Entity> query = Query.newEntityQueryBuilder().setKind("Task").build();

QueryResults<Entity> results = datastore.run(query);

// Update

// if (results.hasNext()) {

// Entity entity2 = results.next();

// Entity updatedEntity = Entity.newBuilder(entity2).set("description", "Updated entity").build();

// datastore.update(updatedEntity);

// out.println("Update done!");

// }

// Delete

// Entity entity2 = results.next();

// datastore.delete(entity2.getKey());

// out.println("Delete done!");

while (results.hasNext()) {

Entity entity = results.next();

out.println(entity.getKey().getId() + " - " + entity.getString("description") + " - " + (entity.getTimestamp("created").toSqlTimestamp().getYear() + 1900) + "<br/>");

}

}

}

**KULIAH10**

package edu.stts;

import java.io.\*;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;

import com.google.auth.oauth2.ServiceAccountCredentials;

import com.google.cloud.datastore.\*;

import com.google.cloud.datastore.StructuredQuery.OrderBy;

import com.google.cloud.datastore.StructuredQuery.PropertyFilter;

public class HelloAppEngine extends HttpServlet {

private Datastore datastore;

public void doGet(HttpServletRequest request, HttpServletResponse response)

throws IOException {

response.setContentType("text/html");

PrintWriter out = response.getWriter();

out.print("<h1>Datastore Servlet</h1>");

datastore = DatastoreOptions.newBuilder().setProjectId("kuliah-181701").setCredentials(ServiceAccountCredentials.fromStream(new FileInputStream("Kuliah-61a876516fb5.json"))).build().getService();

Query<Entity> query = Query.newEntityQueryBuilder().setKind("Students").build();

QueryResults<Entity> results = datastore.run(query);

while (results.hasNext()) {

Entity entity = results.next();

out.println(entity.getString("StudentID") + " - " + entity.getString("StudentName") + "<br/>");

}

out.println("<br/>");

query = Query.newEntityQueryBuilder().setKind("Courses").build();

results = datastore.run(query);

while (results.hasNext()) {

Entity entity = results.next();

out.println(entity.getString("CourseID") + " - " + entity.getString("CourseName") +

" - " + entity.getLong("Credit") + "<br/>");

}

out.println("<br/>");

query = Query.newEntityQueryBuilder().setKind("Grades").setOrderBy(OrderBy.asc("StudentID"),OrderBy.asc("CourseID")).build();

results = datastore.run(query);

while (results.hasNext()) {

Entity entity = results.next();

String studentID = entity.getString("StudentID");

String courseID = entity.getString("CourseID");

String studentName = getForeignKeyFor("Students", "StudentID", studentID, "StudentName");

String courseName = getForeignKeyFor("Courses", "CourseID", courseID, "CourseName");

// Query<Entity> query2 =

// Query.newEntityQueryBuilder().setKind("Students")

// .setFilter(PropertyFilter.eq("StudentID", studentID))

// .build();

// QueryResults<Entity> results2 = datastore.run(query2);

// String studentName = "";

// if (results2.hasNext()) {

// Entity entity2 = results2.next();

// studentName = entity2.getString("StudentName");

// }

// query2 =

// Query.newEntityQueryBuilder().setKind("Courses")

// .setFilter(PropertyFilter.eq("CourseID", courseID))

// .build();

// results2 = datastore.run(query2);

// String courseName = "";

// if (results2.hasNext()) {

// Entity entity2 = results2.next();

// courseName = entity2.getString("CourseName");

// }

out.println(studentID + " - " + studentName + " - " + courseID +

" - " + courseName + " - " + entity.getLong("Score") + "<br/>");

}

}

private String getForeignKeyFor(String kindName, String propertyName, String propertyValue, String targetPropertyName) {

Query<Entity> query2 =

Query.newEntityQueryBuilder().setKind(kindName)

.setFilter(PropertyFilter.eq(propertyName, propertyValue))

.build();

QueryResults<Entity> results2 = datastore.run(query2);

String returnValue = "";

if (results2.hasNext()) {

Entity entity2 = results2.next();

returnValue = entity2.getString(targetPropertyName);

}

return returnValue;

}

}

**KULIAH12**

package edu.stts;

import java.io.\*;

import java.nio.charset.Charset;

import java.nio.charset.StandardCharsets;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;

import com.google.api.gax.paging.Page;

import com.google.auth.oauth2.ServiceAccountCredentials;

import com.google.cloud.storage.\*;

public class HelloAppEngine extends HttpServlet {

public void doGet(HttpServletRequest request, HttpServletResponse response)

throws IOException {

response.setContentType("text/html");

PrintWriter out = response.getWriter();

out.print("<h1>Cloud Storage</h1>");

Storage storage = StorageOptions.newBuilder().setProjectId("kuliah-181701").setCredentials(ServiceAccountCredentials.fromStream(new FileInputStream("Kuliah-61a876516fb5.json"))).build().getService();

String bucketName = "kuliah-181701.appspot.com";

Page<Bucket> buckets = storage.list();

Iterable<Bucket> bucketIterator = buckets.iterateAll();

for (Bucket b : bucketIterator) {

out.println(b.getName() + "<br/>");

}

Page<Blob> blobs = storage.list(bucketName);

Iterable<Blob> blobIterator = blobs.iterateAll();

for (Blob b : blobIterator) {

out.println(b.getName() + "<br/>");

}

out.println("<p/>");

Blob blob = storage.get(bucketName, "test.txt");

String content = new String(blob.getContent());

String[] lines = content.split("\n");

for (String s : lines) {

out.println(s + "<br/>");

}

out.println("<p/>");

BlobId blobId = BlobId.of(bucketName, "test3.txt");

BlobInfo blobInfo = BlobInfo.newBuilder(blobId).setContentType("text/plain").build();

String fileContent = "Test 8\nTest 9\nTest 10 ";

Blob blob2 = storage.create(blobInfo, fileContent.getBytes(Charset.defaultCharset()), Storage.BlobTargetOption.doesNotExist());

// Blob blob2 = storage.create(blobInfo, fileContent.getBytes(StandardCharsets.UTF\_8));

out.println("<p>File created!</p>");

}

}