Required Jars for WebServices:

JAXB-RI-X.Zip used for converting xml data to object

And java object to xml

Apache AXIS-2 for implementing soap web services

REST IMPLEMENTATION : jax-rs is a api to develop rest services .JERSY used to develop rest services.

Jersey jar

Commons-codec JAR (encode,decode)

**1)SOAP**

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**|**

**|**

**|**

**Rest :**

**Provider class:**

**package** com.app;

**import** javax.ws.rs.GET;

**import** javax.ws.rs.Path;

@Path("home")

**public** **class** WelcomeService {

@Path("message")

@GET

**public** String sayHello(){

**return** "Hello";

}

}

**URL :http://localhost:1992/Rest1/rest/home/message**

**Service consumer class:**

**package** com.one;

**import** com.sun.jersey.api.client.Client;

**import** com.sun.jersey.api.client.WebResource;

**public** **class** Consumer {

**public** **static** **void** main(String[] args) {

String path="http://localhost:2009/Rest1/rest/home/message";

Client client=**new** Client();

WebResource resource=client.resource(path);

String str=resource.get(String.**class**);

System.*out*.println(str);

}

}

**REST**

**2) Using @PathParameter**

**Service Provider class :**

**package** com.app;

**import** javax.ws.rs.GET;

**import** javax.ws.rs.Path;

**import** javax.ws.rs.PathParam;

@Path("home")

**public** **class** WelcomeService {

@Path("message")

@GET

**public** String m1(){

**return** "Hello";

}

@Path("message/{id}")

@GET

**public** String m2(@PathParam("id")**int** locId){

**return** "dnamic"+locId;

}

}

**URL :http://localhost:1992/Rest1/rest/home/message/10**

**Service consumer class:**

**package** com.one;

**import** com.sun.jersey.api.client.Client;

**import** com.sun.jersey.api.client.WebResource;

**public** **class** Consumer {

**public** **static** **void** main(String[] args) {

String path="http://localhost:2009/Rest1/rest/home/message/10";

Client client=**new** Client();

WebResource resource=client.resource(path);

String str=resource.get(String.**class**);

System.*out*.println(str);

}

}

**3) MATRIX PARAMETER:**

**Service Provider class :**

**package** com.app;

**import** javax.ws.rs.GET;

**import** javax.ws.rs.MatrixParam;

**import** javax.ws.rs.Path;

**import** javax.ws.rs.PathParam;

@Path("home")

**public** **class** WelcomeService {

@Path("message")

@GET

**public** String m2(@MatrixParam("id")**int** id,

@MatrixParam("name")String name,

@MatrixParam("age")**int** age){

**return** "dynamic Hello:"+id+","+name+","+age;

}

}

url :

[**http://localhost:2009/Rest1/rest/home/message;id=10;name=bhujatha;age=23**](http://localhost:2009/Rest1/rest/home/message;id=10;name=bhujatha;age=23)**;**

**Service consumer:**

**package** com.one;

**import** com.sun.jersey.api.client.Client;

**import** com.sun.jersey.api.client.WebResource;

**public** **class** Consumer {

**public** **static** **void** main(String[] args) {

String path="http://localhost:2009/Rest1/rest/home/message;id=10;name=bhujatha;age=23";

Client client=**new** Client();

WebResource resource=client.resource(path);

String str=resource.get(String.**class**);

System.*out*.println(str);

}

}

**4) Form Parameter:**

**Service provider class:**

**package** com.app;

**import** javax.ws.rs.FormParam;

**import** javax.ws.rs.GET;

**import** javax.ws.rs.POST;

**import** javax.ws.rs.Path;

@Path("home")

**public** **class** WelcomeService {

@Path("message")

@POST

**public** String m2(@FormParam("id")**int** id,

@FormParam("name")String name,

@FormParam("age")**int** age){

**return** "dynamic Hello:"+id+","+name+","+age;

}

}

Incaseof form parameter we need to write html page,those values will be taken as parameters

Index.html

<!DOCTYPE html>

<html>

<head>

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

<title>Insert title here</title>

</head>

<body>

<form action=*"rest/home/message"* method=*"post"*>

Enter Id:<input type=*"text"* name=*"id"*/><br/><br/>

Enter Name:<input type=*"text"* name=*"name"*/><br/><br/>

Enter Age:<input type=*"text"* name=*"age"*/><br/><br/>

<input type=*"submit"* value=*"Add"*/>

</form>

</body>

</html>

url will be: <http://localhost:1992//Rest1/>

will come defaultiy with form action ,when we submit values then url become:

<http://localhost:2009/Rest1/rest/home/message>

**service consumer:**

**package** com.one;

**import** com.sun.jersey.api.client.Client;

**import** com.sun.jersey.api.client.WebResource;

**import** com.sun.jersey.api.representation.Form;

**public** **class** Consumer {

**public** **static** **void** main(String[] args) {

String path="http://localhost:2009/Rest1/rest/home/message";

Client client=**new** Client();

WebResource resource=client.resource(path);

Form form=**new** Form();

form.add("id", 10);

form.add("name", "bhujatha");

form.add("age", 23);

String str=resource.post(String.**class**,form);

System.*out*.println(str);

}

}