# Servlet

## Create Dynamic-web-application

Eclipse, navigate tomcat, new project => Dynamic Web project (with web.xml)

New Html (index.html)

(automatically placed within WebContent)

<form action=*"add"*>

First Num: <input type=*"text"* name=*"num1"*/><br>

Secound Num:<input type=*"text"* name=*"num2"*/><br>

<input type=*"submit"*/>

</form>

Start tomcat

When opens index.html

Browser starts with index.html url

http://localhost:8080/firstDinamicWeb/index.html

First num :

Secound num :

My project Name

submit

After submit url changes

http://localhost:8080/firstDinamicWeb/add?num1=2&num2=3

form action=”add”, input name=”num1”, “num2”

so page not fount 404

New class (AddServlet.java)

(automatically placed within javaResource/src/package/)

**public** **class** AddServlet **extends** HttpServlet{

@Override

**public** **void** service(HttpServletRequest req, HttpServletResponse resp){

**int** i = Integer.*parseInt*(req.getParameter("num1"));

**int** j = Integer.*parseInt*(req.getParameter("num2"));

**int** k = i + j;

System.***out***.println("the sum is "+k);

Now we need to map that url with this servlet

Use web.xml (deployment descriptor)

<servlet>

<servlet-name>add</servlet-name>

<servlet-class>com.firstDinamicWeb.servlet.AddServlet</servlet-class>

</servlet> just linker can be any same name

<servlet-mapping>

<servlet-name>add</servlet-name>

<url-pattern>/add</url-pattern>

</servlet-mapping>

http://localhost:8080/firstDinamicWeb/add?num1=2&num2=3

HttpServletRequest req

req.getParameter("num1")

To display result at browser (Making page for that /add link)

Alt+Shift+L => create variable in eclipse

PrintWriter writer = resp.getWriter();

writer.println("output is :"+k);

#### All type Http methods can Reach servlet service() method

**public** **void** service(HttpServletRequest req, HttpServletResponse resp){

<form action=*"add" by default it is Get: /add*>

First Num: <input type=*"text"* name=*"num1"*/><br>

#### In order to Specific accessible http method

**public** **class** AddServlet **extends** HttpServlet{

**public** **void** doGet(HttpServletRequest req, HttpServletResponse resp){

**public** **void** doPost(HttpServletRequest req, HttpServletResponse resp){

**public** **void** doDelete(HttpServletRequest req, HttpServletResponse resp){

**public** **void** doPut(HttpServletRequest req, HttpServletResponse resp){

web.xml

<form action=*"add"* method=*"post"*>

First Num: <input type=*"text"* name=*"num1"*/><br>

In above post case url will be

http://localhost:8080/firstDinamicWeb/add

number potion won’t be there

#### Calling one Servlet form another Servlet

There is two way

Request Dispatcher

Redirect

**public** **class** AddServlet **extends** HttpServlet{

@Override

**public** **void** doPost(HttpServletRequest req, HttpServletResponse resp)**{**

RequestDispatcher rd = req.getRequestDispatcher("sqr");

rd.forward(req, resp);

**public** **class** SqrtServlet **extends** HttpServlet{ (web.xml /sqr is there)

@Override

**public** **void** doGet(HttpServletRequest req, HttpServletResponse resp){

@Override

**public** **void** doPost(HttpServletRequest req, HttpServletResponse resp){

But doPost() calls doPost()

If there is no matching no methods will be called (no display)

#### Parsing data one Servlet to another Servlet

Session management

Request dispatcher going to forward my req

Before that we setAttribute

**public** **class** AddServlet **extends** HttpServlet{

@Override

**public** **void** doPost(HttpServletRequest req, HttpServletResponse resp)**{**

req.setAttribute("key", k);

RequestDispatcher rd = req.getRequestDispatcher("sqr");

rd.forward(req, resp);

GetAttribute from other Servlet

**public** **class** SqrtServlet **extends** HttpServlet{

@Override

**public** **void** doPost(HttpServletRequest req, HttpServletResponse resp){

**int** k = (**int**) req.getAttribute("key");

#### Req, Resp Objects

http://localhost:8080/firstDinamicWeb/index.html

First num :

Secound num :

submit

<form action=*"add"* method=*"get"*>

Web Container

http://localhost:8080/firstDinamicWeb/add?num1=2&num2=3

<form action=*"add"* method=*"post"*>

http://localhost:8080/firstDinamicWeb/add num1=2&num2=3

Creates **req, resp** objects

web.xml

com.firstDinamicWeb.servlet.AddServlet /add

**public** **class** AddServlet **extends** HttpServlet{

@Override

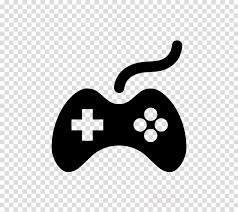
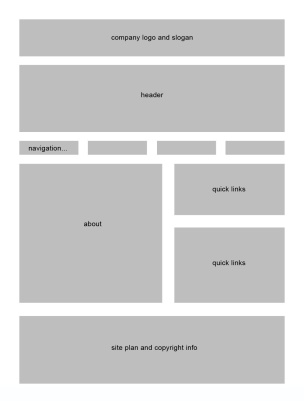
**public** **void** doPost(HttpServletRequest req, HttpServletResponse resp)**{**

**int** i = Integer.*parseInt*(req.getParameter("num1"));

## MVC



DAO



**pojo**

1.req

3.

2.resp