OBJECT ORIENTED PROGRAMMING (ADVANCED JAVA)

420-P33-SU

Servlet and Forms

Objectives

- Review of HTML forms
- POST / GET methods and Servlet
- Recover data from a form
- Transfer data via a request
- Call a Servlet from an HTML link

HTML Forms

```
<form action = "ServletName" method = "get" >
   <p> Connection Form </p>
   <label> Login <input type="text" name="login"> </label>
   <label> Password <input type="text" name="pwd"> </label>
   <button type="submit" > Convert </button>
</form>
```

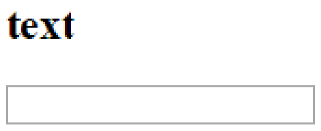
- action : name of the page or Servlet that the form will use to process the data.

- method: command used to send the data.

Review of HTML elements

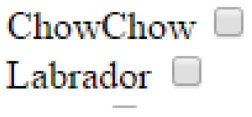
Text Box :

```
<input type="text" name="Name" value="" />
```



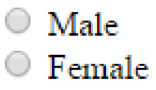
Check Box :

```
ChowChow <input type="checkbox" name="ChowChow" /><br />
Labrador <input type="checkbox" name="Labrador" /><br />
```



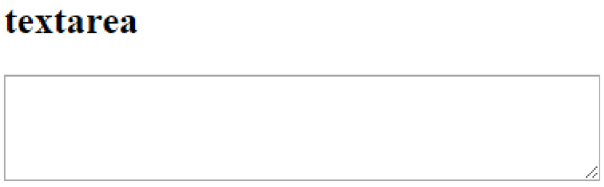
Radio Button :

```
<br /> <input type="radio" name="gender" value="male"> Male<br>
<input type="radio" name="gender" value="female"> Female
```



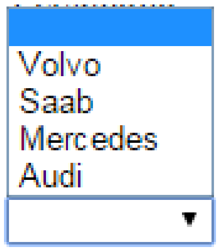
Text Area :

```
<textarea rows="4" cols="50" name="TextArea">
```



List Box

```
<select name="cars">
<option value="volvo">Volvo</option>
<option value="saab">Saab</option>
</select>
```



GET / POST and Servlet

To intercept a GET request, use the doGet() method as follows:

```
protected void doGet(HttpServletRequest request,
      HttpServletResponse response) throws ServletException,
      IOException {
// TODO Auto-generated method stub
}
```

Recall HTTP requests : POST/index.html HTTP/1.1

To intercept a POST request, use the doPost() method as follows:

```
protected void doPost(HttpServletRequest request,
      HttpServletResponse response) throws ServletException,
      OException {
// TODO Auto-generated method stub
}
```

Recall HTTP requests : POST/index.html HTTP/1.1

Retrieving Data

Retrieving data from a URL extension:

```
http://localhost:8080/TestForm/FormProcessing?
Name=dsdsd&Usky=on&Poodle=on&gender=female&TextArea=
sdsdsd&cars=saabb
```

```
request.getParameter("nameParam");
```

nameParam corresponds to the attribute of that name in the form

EX:

In a form:

```
<input type="text" name="Name" value="" />
```

In Servlet:

```
String name = request.getParameter("Name");
```

Syntax to retrieve an Int, rather than a String:

```
int myValue = Integer.parseInt(request.getParameter("MyInt"));
```

Retrieving Data

- text, textarea, password fields are always sent, even when they are empty.

- list, checkbox and radio button are only present if they are selected or “ticked”.

- If radio button or check box are selected and the value attribute is not present, the 'on' value will be passed, otherwise it will be the value of the attribute.

Transferring Data

- The **setAttribute** method takes as parameters a Key and and Object

- Add data to the request :

```
String toTransfer = "I am a string in transit.";
request.setAttribute("myMessage", toTransfer);
```

- Retrieve data from the request :

```
String toRetrieve = (String)request.getAttribute("myMessage");
```