



# Outline

- Servlet to Servlet Calling
- Forward vs Send Redirect
- Session Management
- Session vs Cookie

# Servlet to Servlet Calling

- `RequestDispatcher rd = request.getRequestDispatcher("Servlet");`
- `rd.forward(request,response);`
- `response.sendRedirect("Servlet");`

# Forward vs Send Redirect

forward() method	sendRedirect() method
The forward() method works at server side.	The sendRedirect() method works at client side.
It sends the same request and response objects to another servlet.	It always sends a new request.
It can work within the server only.	It can be used within and outside the server.
Example: <code>request.getRequestDispatcher("servlet2").forward(request,response);</code>	Example: <code>response.sendRedirect("servlet2");</code>

# Session Management

- is a way to maintain state (data) of an user.
- Each time user requests to the server, server treats the request as the new request. So we need to maintain the state of an user to recognize to particular user.
- **HttpSession**
- **Cookies**
- **Hidden Form Field**
- **URL Rewriting**

# HttpSession

Session Set:

- `HttpSession session = request.getSession();`
- `session.setAttribute("t1",value);`

Session get:

- `HttpSession session = request.getSession();`
- `String str = session.getAttribute("t1").toString();`

# Cookies

## Cookies Set:

- `Cookie cookie = new Cookie("t1",str);`
- `response.addCookie(cookie);`

## Cookies get:

- `Cookie cookies[] = request.getCookies();`
- `String str = null;`
- `for(Cookie c:cookies)`
- `{`
- `if(c.getName().equals("t1"))`
- `{`
- `str = c.getValue();`
- `}`
- `}`

# Cookies

- Advantage of Cookies
  - Simplest technique of maintaining the state.
  - Cookies are maintained at client side.
- Disadvantage of Cookies
  - It will not work if cookie is disabled from the browser.
  - Only textual information can be set in Cookie object.

# Hidden Form Field

- In case of Hidden Form Field a **hidden (invisible) textfield** is used for maintaining the state of an user.
- In such case, we store the information in the hidden field and get it from another servlet. This approach is better if we have to submit form in all the pages and we don't want to depend on the browser.
- `<input type="hidden" name="uname" value="Imran Ahsan">`
- Advantage of Hidden Form Field
  - It will always work whether cookie is disabled or not.
- Disadvantage of Hidden Form Field:
  - It is maintained at server side.
  - Extra form submission is required on each pages.
  - Only textual information can be used.



# URL Rewriting/Query String

- In URL rewriting, we append a token or identifier to the URL of the next Servlet or the next resource. We can send parameter name/value pairs using the following format:
- `url?name1=value1`
- Advantage of URL Rewriting
  - It will always work whether cookie is disabled or not (browser independent).
  - Extra form submission is not required on each pages.
- Disadvantage of URL Rewriting
  - It will work only with links.
  - It can send Only textual information.



End.