

Servlet 3

Cookie

Set on response to client
Read on request from client

Cookie Setting

```
Cookie cookie = new Cookie(name-str, value-str);
cookie.setName(name-str);
cookie.setValue(value-str);
cookie.setMaxAge(seconds)
    negative = non-persistent (session) lifetime (this is the default)
    0 = delete the cookie
    1000000000 = long time
response.addCookie(c)
```

Characters

The cookie name and value should not contain the following chars...

[] () = , " / ? @ ; ;

I may be simplest to just stick to a-z0-9

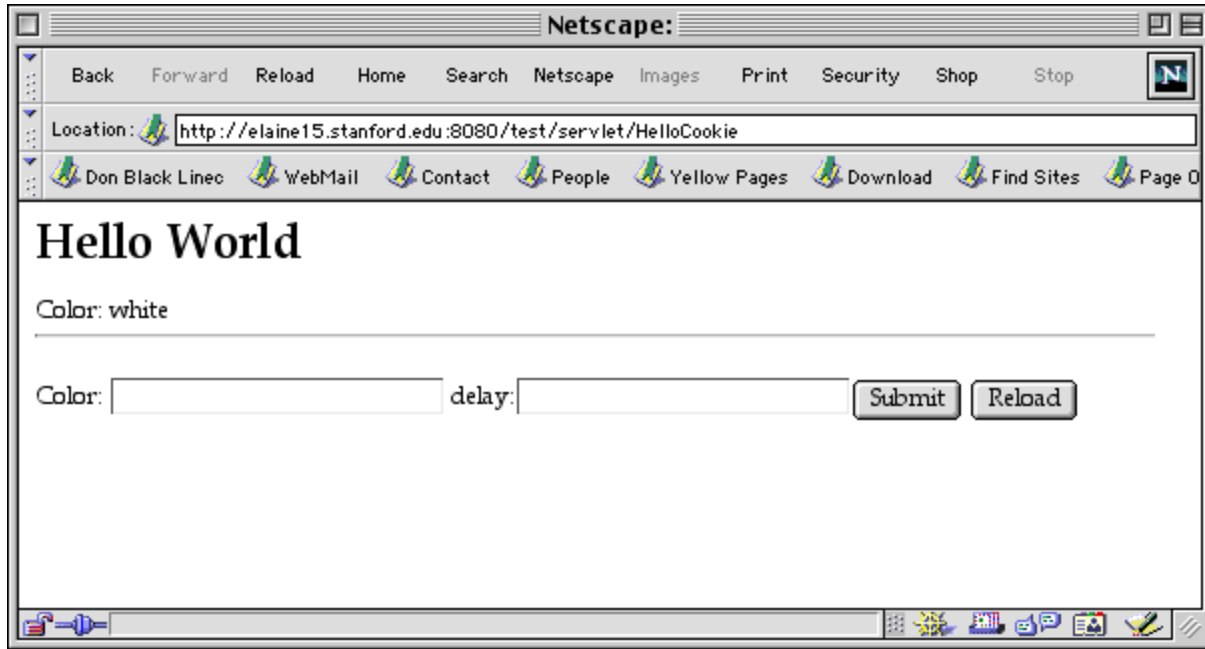
Ordering problem

For sending, the cookie must be defined and added to the response before the servlet starts using the PrintWriter to send the HTTP body to the client.

Cookie Reading

```
cookie.getValue()
cookie.getName()
request.getCookies() --> Cookie[] array of all the cookies
```

HelloCookie Example



```
// HelloCookie.java
import java.io.*;
import java.util.*;
import javax.servlet.*;
import javax.servlet.http.*;

public class HelloCookie extends HttpServlet
{
    public void doGet(HttpServletRequest request,
                      HttpServletResponse response)
        throws IOException, ServletException
    {
        String param = null;
        String color = "white";
        Cookie cookie = null;

        // Do cookie operations BEFORE anything else

        // Check for color form param --> make cookie
        param = request.getParameter("newcolor");
        if (param!=null && !param.equals("")) {
            color = param;
            cookie = new Cookie("color", color);

            String delay = request.getParameter("delay");
            if (delay!=null && !delay.equals("")) {
                cookie.setMaxAge(Integer.parseInt(delay));
            }
        }
    }
}
```

```

        // Store the cookie back to client on the response
        response.addCookie(cookie);
    }
else { // see if there's a cookie on the client request

    cookie = findCookie(request, "color");
    if (cookie != null) color = cookie.getValue();
}

response.setContentType("text/html");
PrintWriter out = response.getWriter();

//System.out.println("Hello world is leaving the building...");

out.println("<html><body>");
out.println(" bgcolor=\"\" + color + "\"");
out.println(">");
out.println("<h1>Hello World</h1>");

if (color!=null) out.println("Color: " + color);

out.println("<hr><form>Color: <input type=text name=newcolor>");
out.println("delay:<input type=text name=delay><input type=submit
value=Submit>");
out.println("<input type=submit value=Reload></form>");

out.println("</body></html>");
}

// Finds the cookie with the given name, or returns null.
public Cookie findCookie(HttpServletRequest request, String name) {
    Cookie[] cookies = request.getCookies();

    for (int i=0; i<cookies.length; i++) {
        if (cookies[i].getName().equals(name)) return(cookies[i]);
    }

    return(null);
}
}

```