Session Variables

Request variables vs. request parameters

Request variables are “attributes” of request, manipulated with request.get/setAttribute(...) . Request parameters are “parameters” of a request that come in with the original request, and are not changeable. In a GET, they show up after the path, in the query string that starts with ?.

Parameters bring in the form data from a form, and can come in from decorated links like this:

```
<a href="/?productCode=pf01">pf01 info</a>
```

And also from radio buttons, check boxes, and dropdown lists.

You see that request parameters bring in input from the user to the servlet or Spring Controller handler, which in turn directs what the app should do. Request variables are created in the servlet/handler for communication to the forwarded-to JSP (or servlet/handler).

Examples of longer-lived variables

In our client-server programs, we could keep longer-lived variables going in our presentation code.

In pizza3, TakeOrder asks for the room number for each action, but it could ask for it once and then hold it in a field, and use it for orders and status requests.

In music1, UserApp has a field cart that holds the user’s cart, which changes over actions of the user. Also a field user that remembers info on the current user. Finally, there is a local variable that holds the Product that the user is interested in, across some actions.

In a web app, we want to use session variables for these variables.
Next: MVC webapps with session variables.

- Start reading Chap 7 on Session Variables.
- So far, we have been using "request variables" like the "user" attribute in ch05email and "allSizes" for pizza3's show-order-form page.
- In many cases, we need to remember information in the server for longer, from one request cycle to another. That's when we use session variables, or of course the database.
- The session variables belong to a certain user, like the variables in presentation in client-server apps.
- We'll see how tomcat sets up and maintains them across multiple requests.

Accessing session variables

- The session variables hang off the "session" object just like the request variables hang off the request object. The session object is obtainable from the request object, so everything (among request and session variables) is accessible from the request object.

Chapter 7: How to work with sessions

Look at Chapter7 slides [here](#).