# Module 3-8

Session and Flash Scope

# Flash Attributes

- Flash Attributes are pieces of data you only want to hang on to for just 1 redirect.
- Spring provides the **RedirectAttributes class** for this purpose.

# Flash Attributes Syntax

- The RedirectAttributes object is instantiated in the method header as an argument.

```
@RequestMapping(path = "/endpoint", method = RequestMethod.POST)
public String processPersonalInformationInput(RedirectAttributes ra) {
    ra.addAttribute("name", "Andy");
    ...
}
```

# Coding Time!

# Flash Attributes Syntax (on JSP)

Once a flash attribute is set, it can be displayed on your JSP view with the following expression:

<c:out value="${name}" />

# Session Attributes

- A session is a period of time in which two devices (often times a client and a server) conduct a series of related data exchanges.
- We need some kind of way to store the data from these exchanges because **HTTP is a stateless protocol** - it does not remember anything about previous requests.
- Spring provides a **HttpSession class** which allows us to store session related data on the server.
- All session data is stored on a server.

# Session Syntax

- The HttpSession object is instantiated in the method header as an argument.

```java
@RequestMapping(path = "/endpoint", method = RequestMethod.POST)
public String processPersonalInformationInput(HttpSession session) {
    session.setAttribute("name", "Andy");
    ...
}
```

- An object of HttpSession can use the setAttribute method to create a session variable.
- These session variables can be extracted by any JSP, provided the session is still open.

# Session Syntax (Extracting Value)

Suppose we are using the session attribute name that we defined on the previous slide, any other method in the controller can access this value by using the getAttribute() method:

```
String name = session.getAttribute("name");
```

# Session Syntax (on JSP)

- On your JSP view, session data can be extracted with the following expression:

```
<c:out value="${name}" />
```

# JSESSIONID

- A request can be tied to a session through an identifier called the JSESSIONID.
- Have you seen this value pop up before on your requests?

# Coding Time!