

A Simple Remember Me Flow

00:00: Welcome to the First Lesson of Module Three, A Simple Remember-Me Flow. In this lesson, we are going to set up the basics of a Remember-Me flow, and we are then going to have a quick look at how that works in the browser. So basically, we're going to understand how the cookies work that are actually driving the Remember-Me functionality. So let's get into it. But before we begin, let's talk about why do we even need Remember-Me? The problem is that every time a user will visit our application, they will basically have to re-log in, and that is just not ideal. Remember-Me solves exactly that problem. Very simply put, Remember-Me is a mechanism that remembers the authentication of the user when they visit our application again. More technically, Remember-Me is a mechanism that remembers the authenticated principal across different sessions.

00:53: Now let's have a look at our options. Spring Security has two options for us. The first and simpler option is to store the Remember-Me token inside the cookie. The second option, which is more secure and which we're going to discuss in lesson three of this module, is going to make use of persistence and is basically going to store the token inside the database. Alright, so the very first thing that we're going to do is we're going to enable this Remember-Me functionality in our security configuration. And given the fact that we've already seen just how simple this configuration API really is, you should not be surprised to find out that Remember-Me is just as simple. So let's do that. And that's really it. That is the basic functionality that enables Remember-Me in our security configuration. There are definitely things that we are going to change, but this simple configuration is more than enough to enable a very simple flow.

01:48: So let's set up that simple flow. And the next step in that process is going to be adding the Remember-Me checkbox into our login page. So let's do that now. We are going to add this Remember-Me checkbox right here between password and the form actions. And that is the checkbox. Notice that we are using an input here of type checkbox, and notice that the name of this input is Remember-Me. So a very, very simple setup, but one that we can actually use right now. So we'll start up the system, and we'll discuss the new Remember-Me functionality, especially when it comes to cookie management. That is what drives Remember-Me by default, so we do need to understand that well. Alright, so let's start up the system and let's get into it.

02:34: Alright. With the system running, the very first thing that we're noticing here is this new Remember-Me checkbox that we just created. The other thing that we're interested in is what are the actual cookies right now? Before we log in, what are the cookies that we're using? So let's have a quick look at that. And notice that right now, before we log in, we don't have any cookie. So let's close this and let's log in without Remember-Me, and then let's then check out the cookies again. Okay. So we are logged in. Let's have a look at the cookies. And of course, as we expected, we are seeing the JSESSIONID cookie that drives our authentication process. So let's close these down and log out.

03:21: And now let's log back in, but of course this time we will use Remember-Me. Okay, so we are now logged in with Remember-Me. So let's have a quick look at the cookies. Alright. So we are now seeing this extra Remember-Me cookie, which is the default way that Remember-Me functionality actually works. Now let's have a closer look at both of these cookies, and let's see what

the major difference between them really is. So first of all, we're gonna look at the JSESSIONID cookie, and this will expire at the end of this session. So when this session will expire, either because of inactivity or because we log out, this cookie will expire as well. Now let's look at the Remember-Me cookie. Okay. So the Remember-Me cookie is obviously different. This no longer expires on the session expiration. This will expire in exactly two weeks. This is of course the default and you can change that, but the main point here is that the Remember-Me cookie will stick around, and will keep identifying this user long after the JSESSIONID cookie will expire and will be removed. So that is the major difference between the two cookies. And in a nutshell, that is how Remember-Me works.

04:36: Let's now wrap up the lesson with a very quick experiment, in order to really drive home how this Remember-Me cookie works. So first of all, we're going to log in without Remember-Me, and we are now going to remove the JSESSIONID cookie. So let's do that, remove, and let's now refresh. And we should of course be redirected to login. And there we go. After removing the session ID cookie, we are of course no longer authenticated, so we are redirected to login in order to authenticate again. But now let's see how this works when we have Remember-Me active. So first, we're going to log in with Remember-Me. Now we are going to remove the session ID cookie again. And now we'll refresh the page. And because we do have the Remember-Me functionality active, and the Remember-Me cookie in the browser, we are going to remain logged in. That is basically the functionality of Remember-Me. Even though we removed the main authentication cookie, we are still authenticated with Remember-Me. So let's refresh and let's see that in action. Here we go. I just refreshed the page and nothing happened. We were not logged out, and if we check the cookies again, we also got back a new JSESSIONID cookie. And there you have it. That is Remember-Me in action. Alright, hope you're excited. See you in the next one.