Data Paging, HTTP Headers, and CSRF

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Module Overview

Add a paging header to a RESTful service response

Access headers in an Angular service

Add paging support to a component

Adding a paging component

CSRF Overview

Add CSRF functionality with csurf

Using a csurf token in an Angular service

Adding a Paging Header to a RESTful Service Response

Accessing Headers and Data in an Angular Service

Adding Paging Support to a Component

Adding a Paging Component

CSRF Overview

CSRF

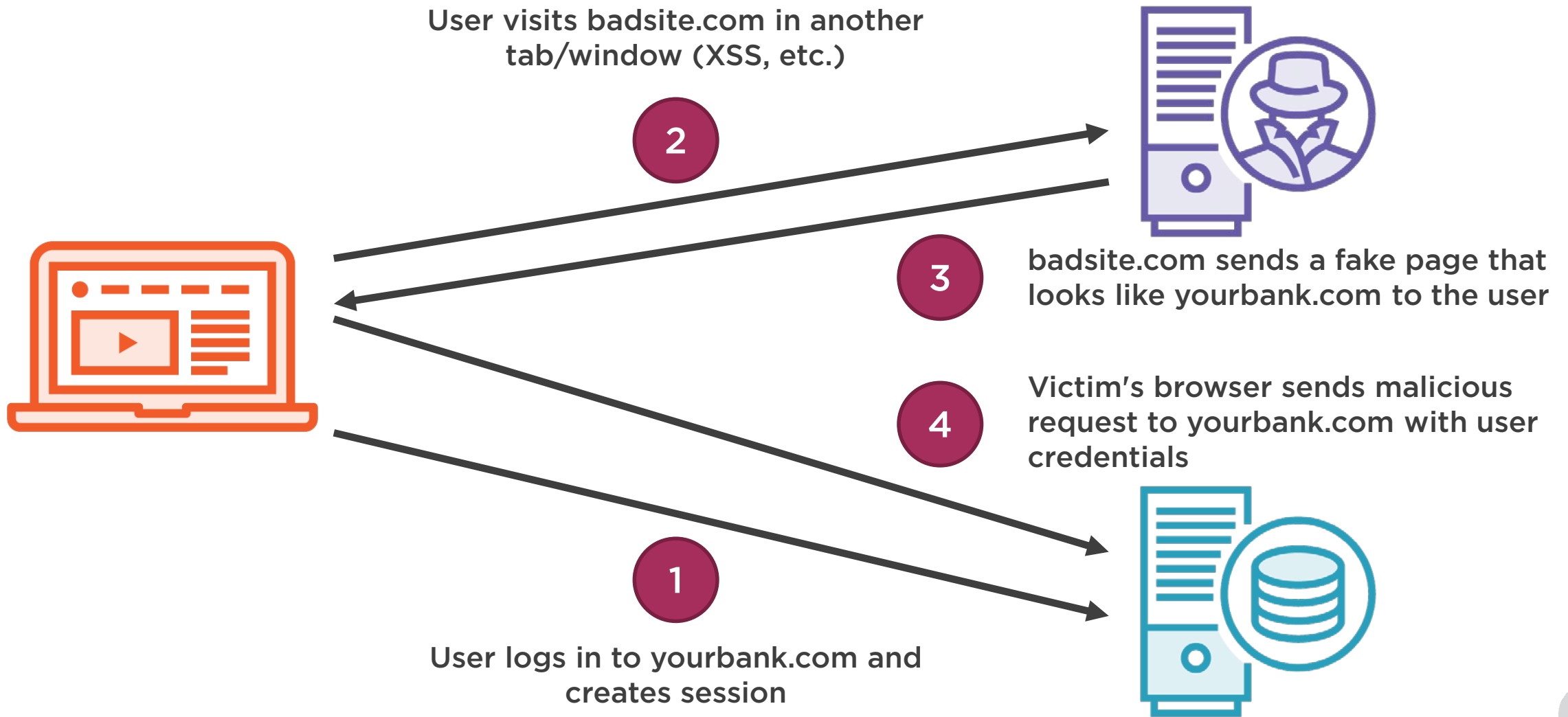Cross-Site Request Forgery

What Is CSRF?

User visits badsite.com in another tab/window (XSS, etc.)

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3 badsite.com sends a fake page that looks like yourbank.com to the user

4 Victim's browser sends malicious request to yourbank.com with user credentials

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User logs in to yourbank.com and creates session

How CSRF Works

Form Post from badsite.com

```html
<form action="https://yourbank.com/someOperation" method="POST">
    <button type="submit">Click here for free money!</button>
</form>
<script>
  document.forms[0].submit();
</script>
```

Http/Ajax request from badsite.com

```html
<script>
  http.post('http://yourbank.com/api/someOperation', data);
</script>
```
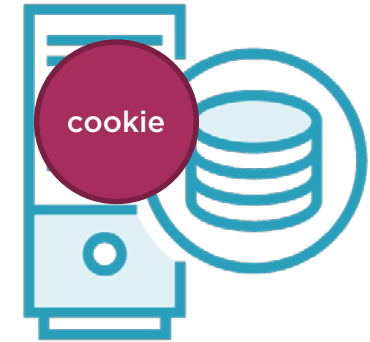
Adding CSRF Functionality with csurf

yourbank.com passes a cookie to the client that contains a CSRF token value

Client sends the cookie back to yourbank.com AND sets a header with the cookie value in it

Server compares cookie value to header value

Using a csurf Token in an Angular Service

Summary

Headers can be used to send and receive data for paging and more

Components provide a reusable way to add paging functionality

CSRF attacks can be shutdown using modules such as csurf

Angular provides built-in CSRF functionality