

There are various types of attacks:

- CSRS (Cross-Site Request Forgery)
- CORS (Cross-Origin Resource Sharing)
- SQL Injection
- XSS (Cross-Site Scripting)

And we need to protect our resources from these attacks, and for that we need proper:

- **Authentication** : Verify who you are
- **Authorization** : Checks what you are allowed to do

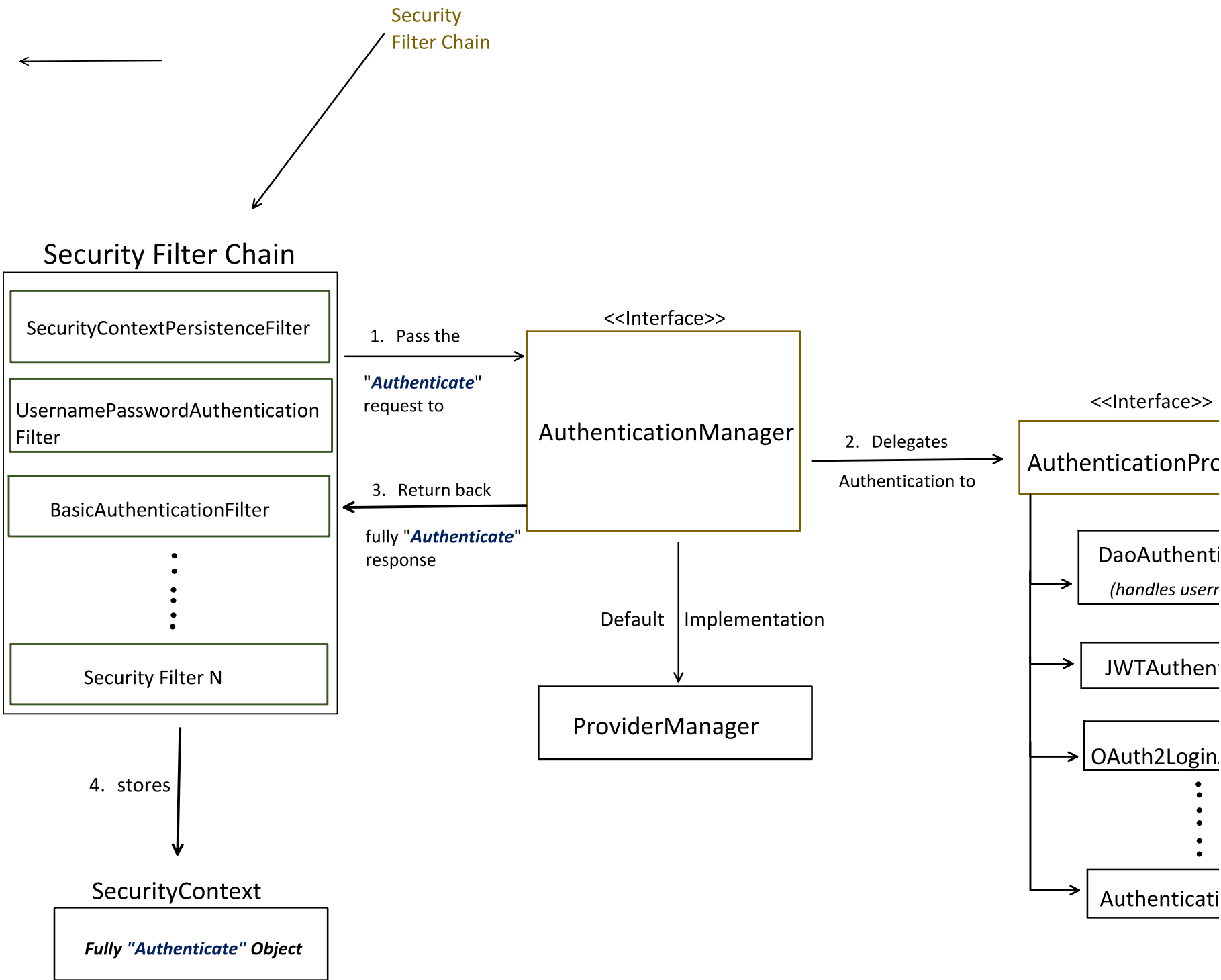
That’s where Spring boot Security comes into the picture.

Architecture of Spring Boot Security.

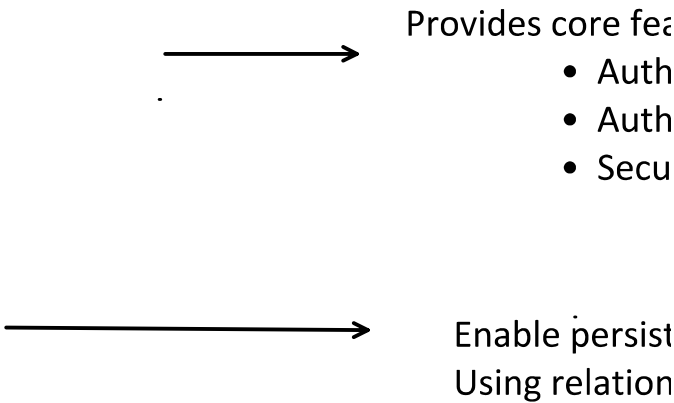
In video no **#18**, we have already seen, what are filters and where exactly they fit.



Now, lets enhance it for understanding spring security



If spring boot project is already present, add below dependencies:



If setting up new Spring boot project:

Go to spring initializer i.e. "start.spring.io"

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**Spring Security** SECURITY  
Highly customizable authentication and access-control framework for Spring application

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And if we want to persist the session in relational DB, then we need to add below dependency in pom.xml

```
<dependency>
  <groupId>org.springframework.session</groupId>
  <artifactId>spring-session-jdbc</artifactId>
</dependency>
```

Now, lets understand the end to end flow with an example for each individual Auth and Authorization mechanism:

1. Form Login (Stateful)
2. Basic Authentication (Stateless)

### 3. JWT (Stateless)

### 4. OAuth2

- i. Authorization Code (Stateful or Stateless)

- ii. Client Credentials (Stateless)

- iii. Password Grant ( Stateless)

### 5. API Key Authentication (Stateless)

Etc..