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Instructions

How is it going ? Do you have problems with practical tasks ? Any concerns with learning materials ?

3 responses

aspect

no problems

good

3

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Today's agenda

- Total Recall
- Spring Framework
- Quiz
- Questions

Total Recall

What do you remember from the previous workshop ?

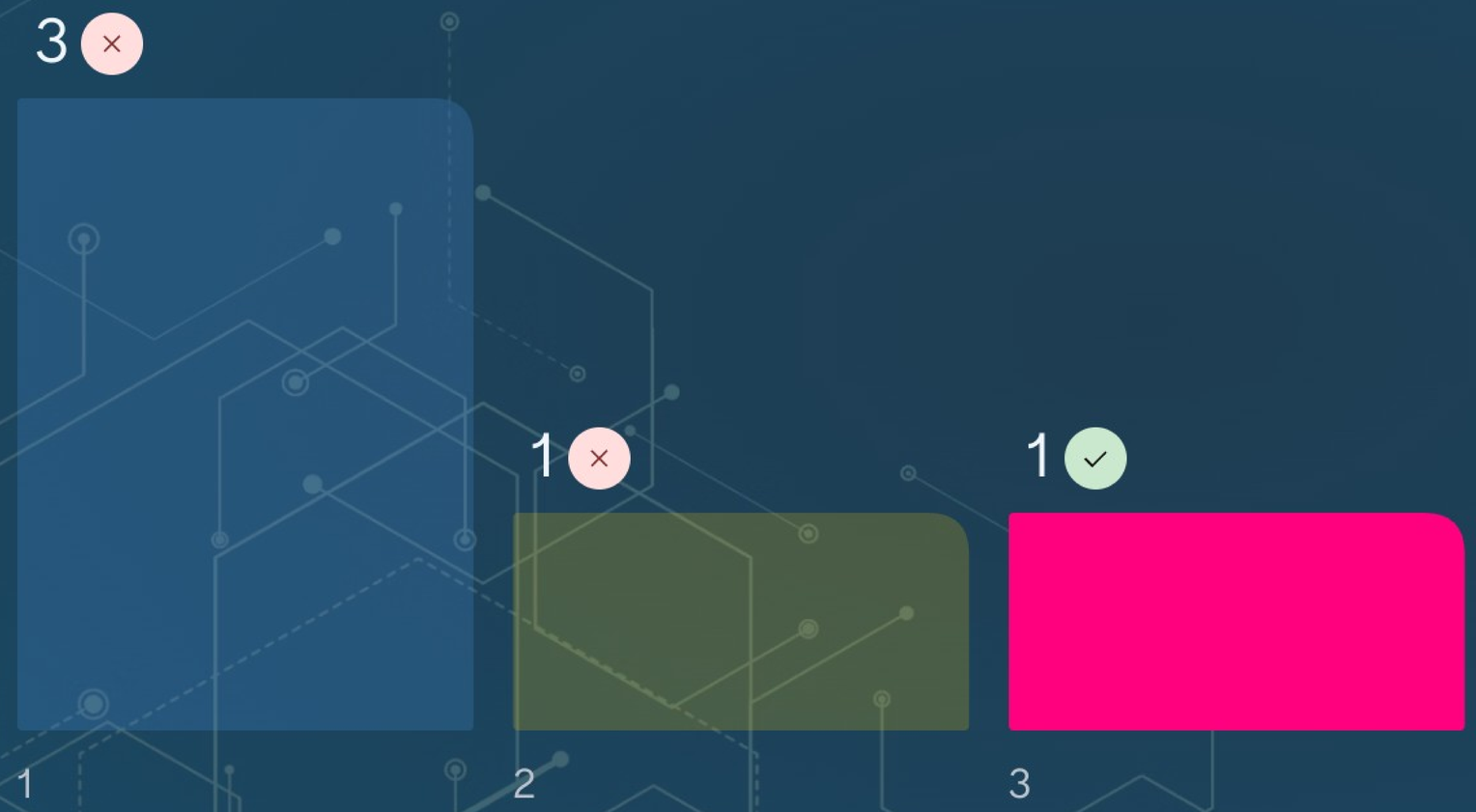
aspect

Around

someone pronounced name Andrei correctly

3

What methods would trigger described Pointcut?




```
@Pointcut("execution(* * get*())")
_____________________________________

1. public void get()

2. public Object getField(String fieldName)

3. WILL NOT WORK
```

5

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```
@Pointcut("execution(* com.arohau.MyService.*(..))")
```

1

all methods of all classes in package 'MyService'

5

all methods of class 'MyService'

0

all methods of class 'MyService' that HAS params\args

6

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@Pointcut("execution(* com.arohau.*.*(..))")

3

all methods of all classes in package 'com.arohau'

1

all methods of all classes in package 'com.arohau' and its subpackages

0

all methods in class 'MyService' that HAS PARAMs\ARGs

4

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@Pointcut("within(com.arohau.*Impl)")

0

invalid expression

4

all methods in classes with 'Impl' postfix of 'com.arohau' package

2

all methods of 'com.arohau' package, which have 'Impl' postfix

6

Spring Security (ws-23)

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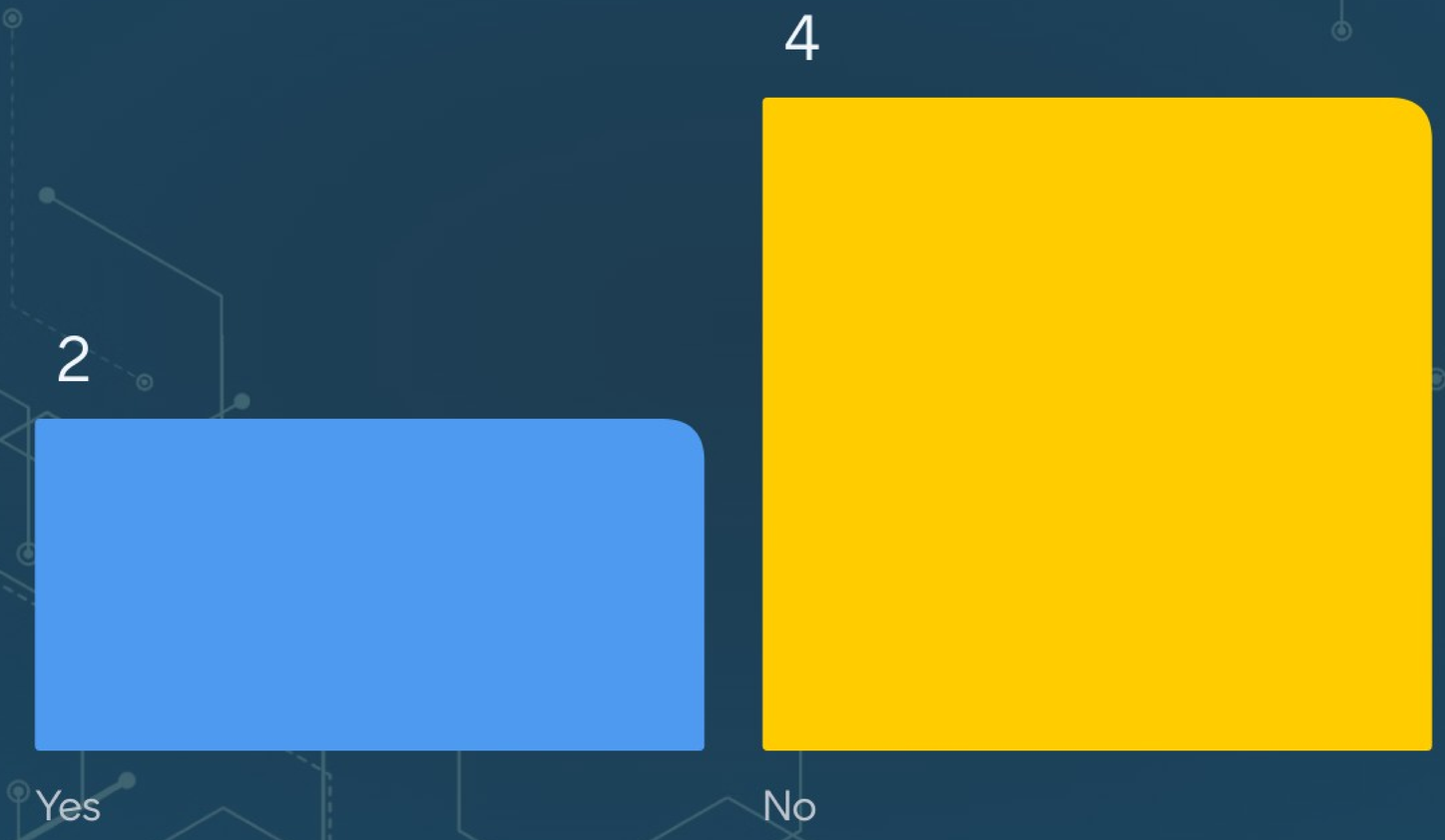
Have you started Spring Security?



6

Do you have questions \ uncertainties \ concerns on materials? (If no - it means all clear for you)

no

has anyone ever broken the spring security?

2

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Practical tasks

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Spring

practice...

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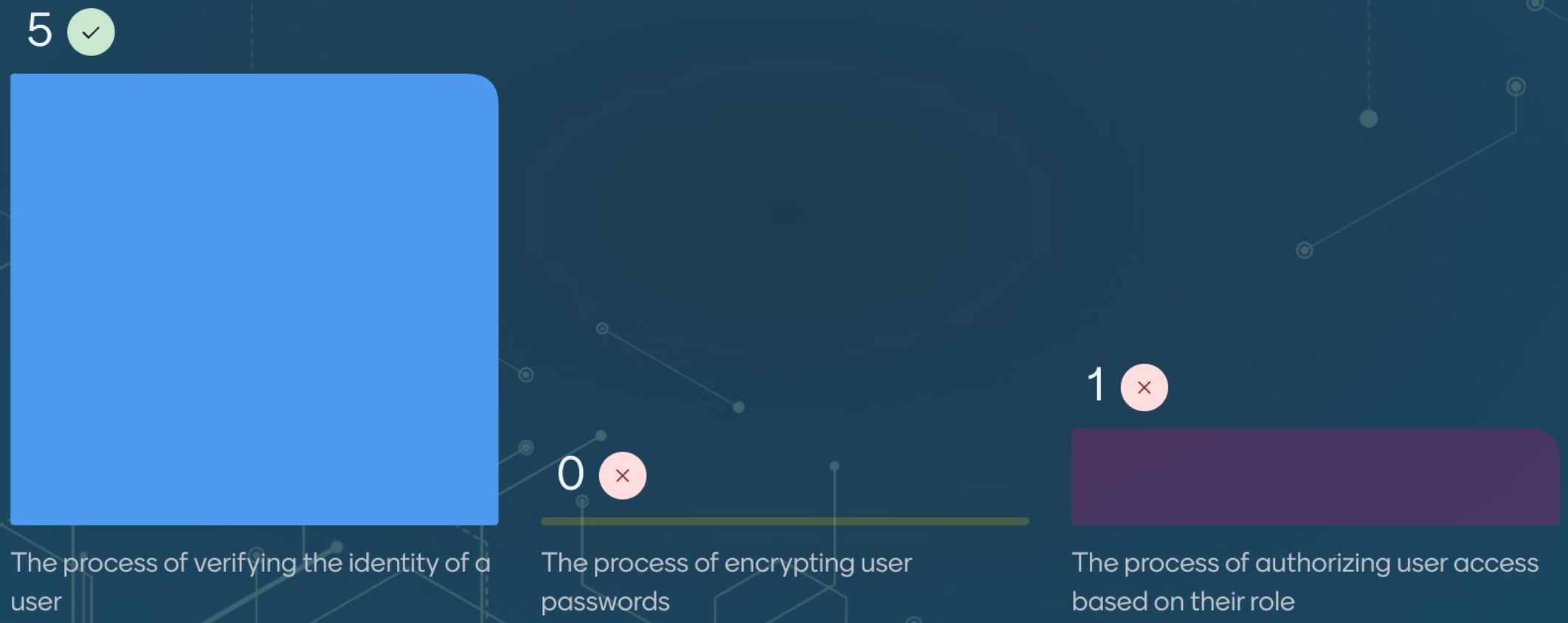
Continuous Quiz

Authentication is ...



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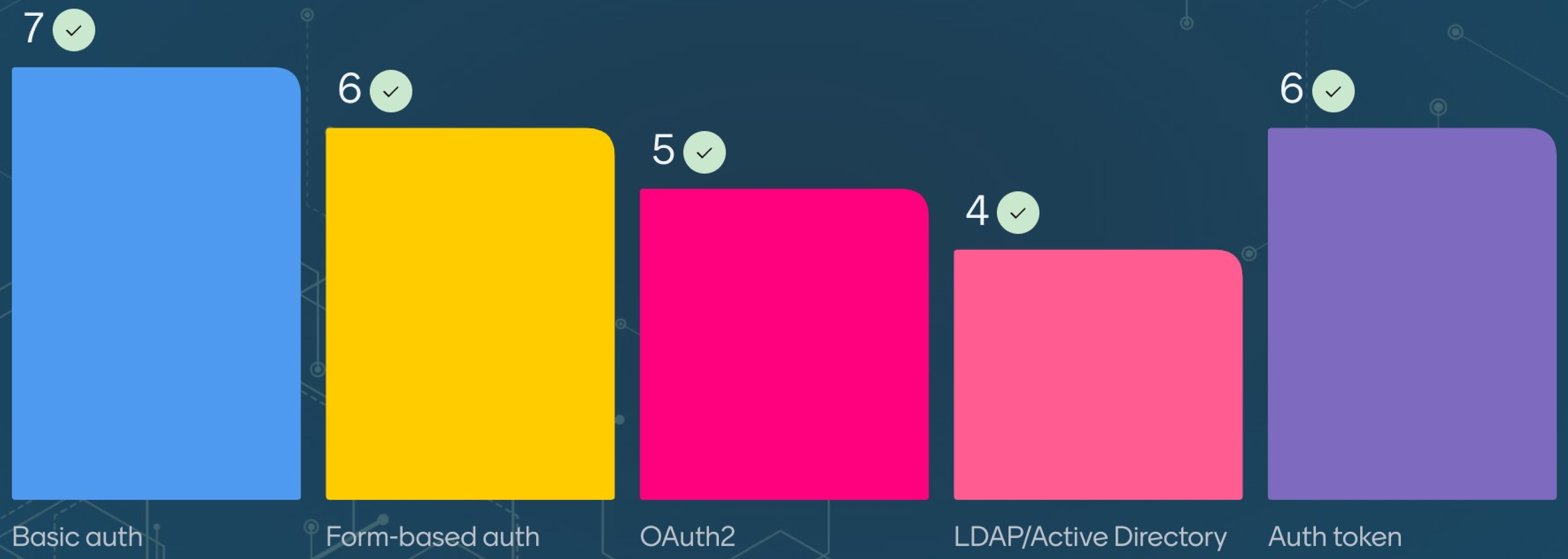
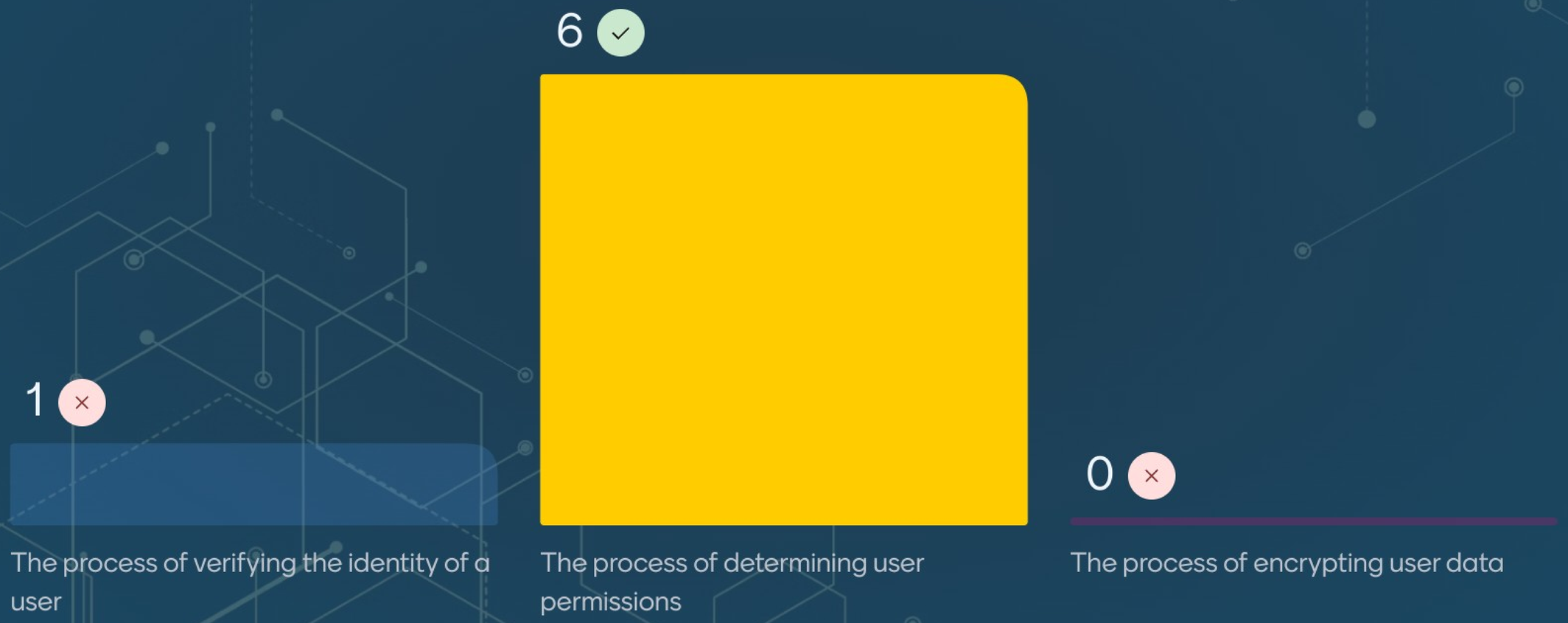
What are the authentication types offered by Spring Security?

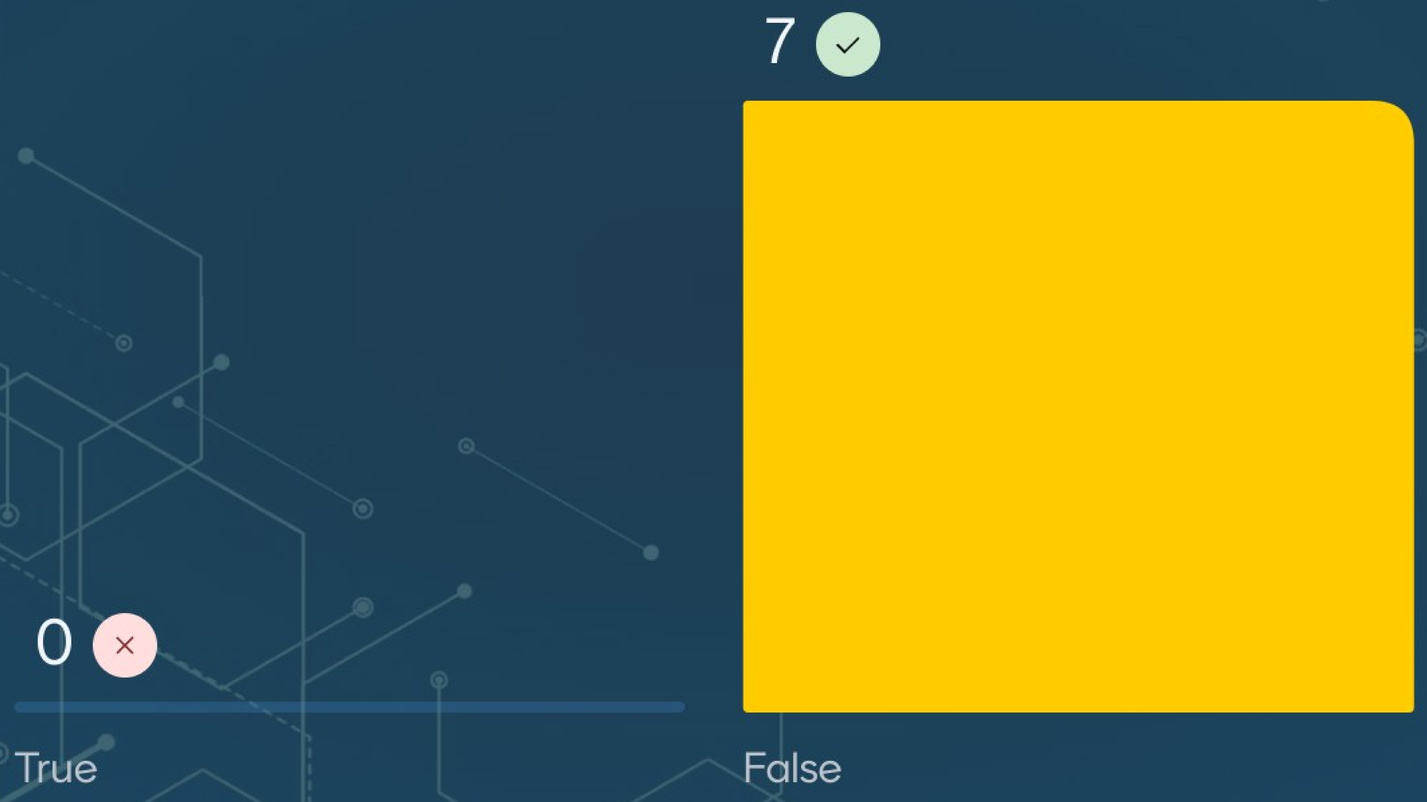


7

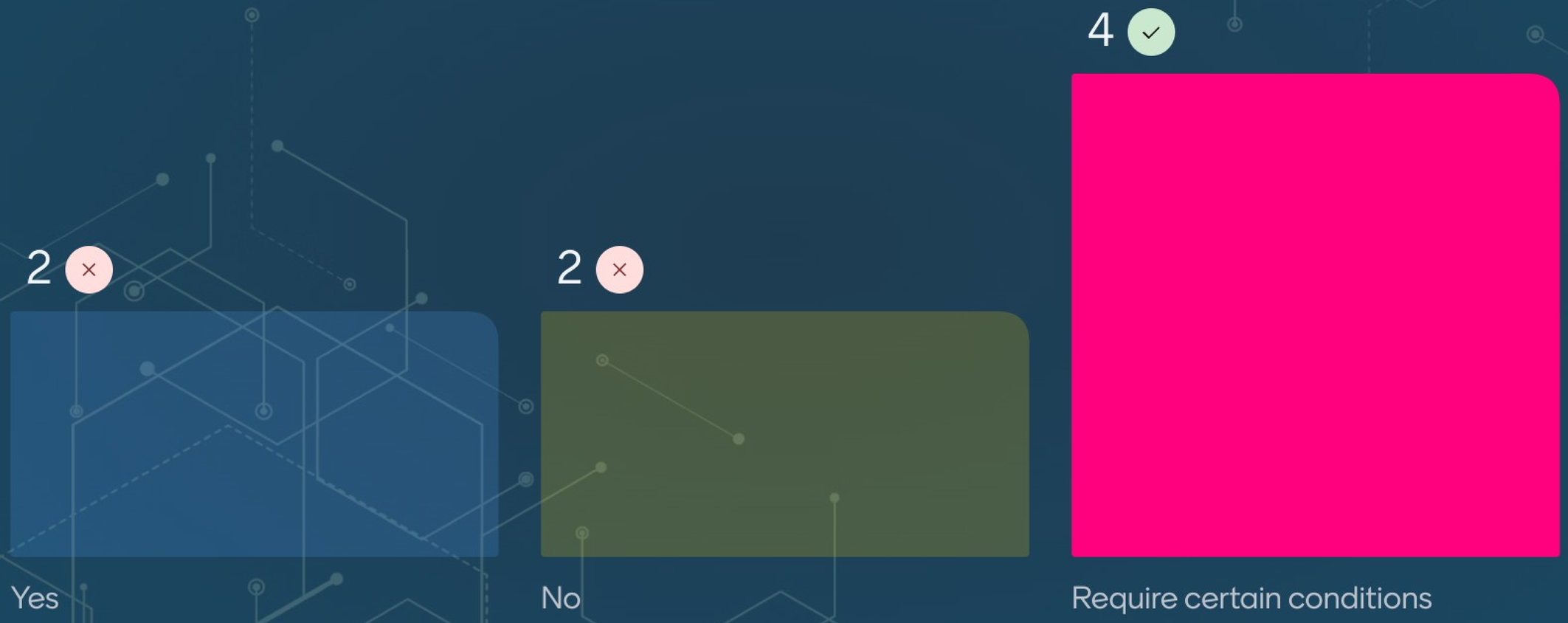
Authorization is ...



Authorization is before authentication



Is basic authentication safe?



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Basic Authentication

Always use HTTPS: Encrypting the communication channel with HTTPS ensures that the credentials are transmitted securely over the network.

Use strong passwords: Encourage users to choose strong, unique passwords to mitigate the risk of password guessing or brute-force attacks.

Implement additional security measures: Consider adding additional security measures such as rate limiting, account lockout mechanisms, and multi-factor authentication to enhance security.

Protect sensitive endpoints: Limit the use of Basic Authentication to endpoints that require it and ensure that sensitive operations are protected by appropriate authorization mechanisms.

Keep dependencies updated: Regularly update Spring Security and other dependencies to patch any security vulnerabilities.

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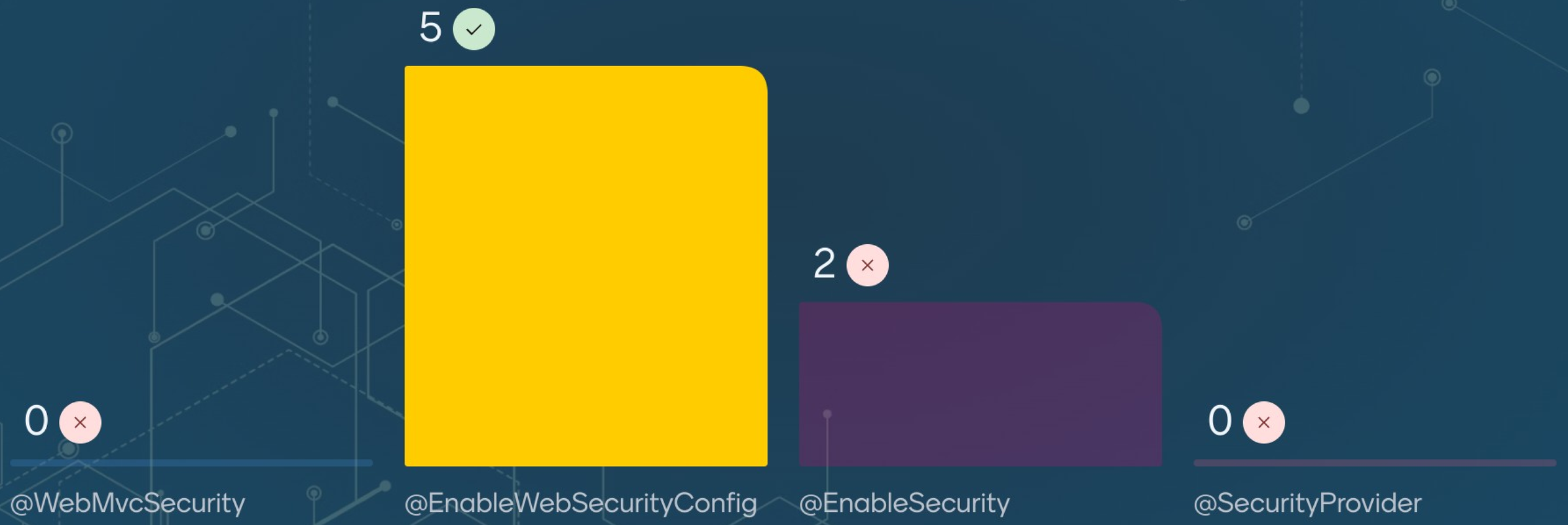
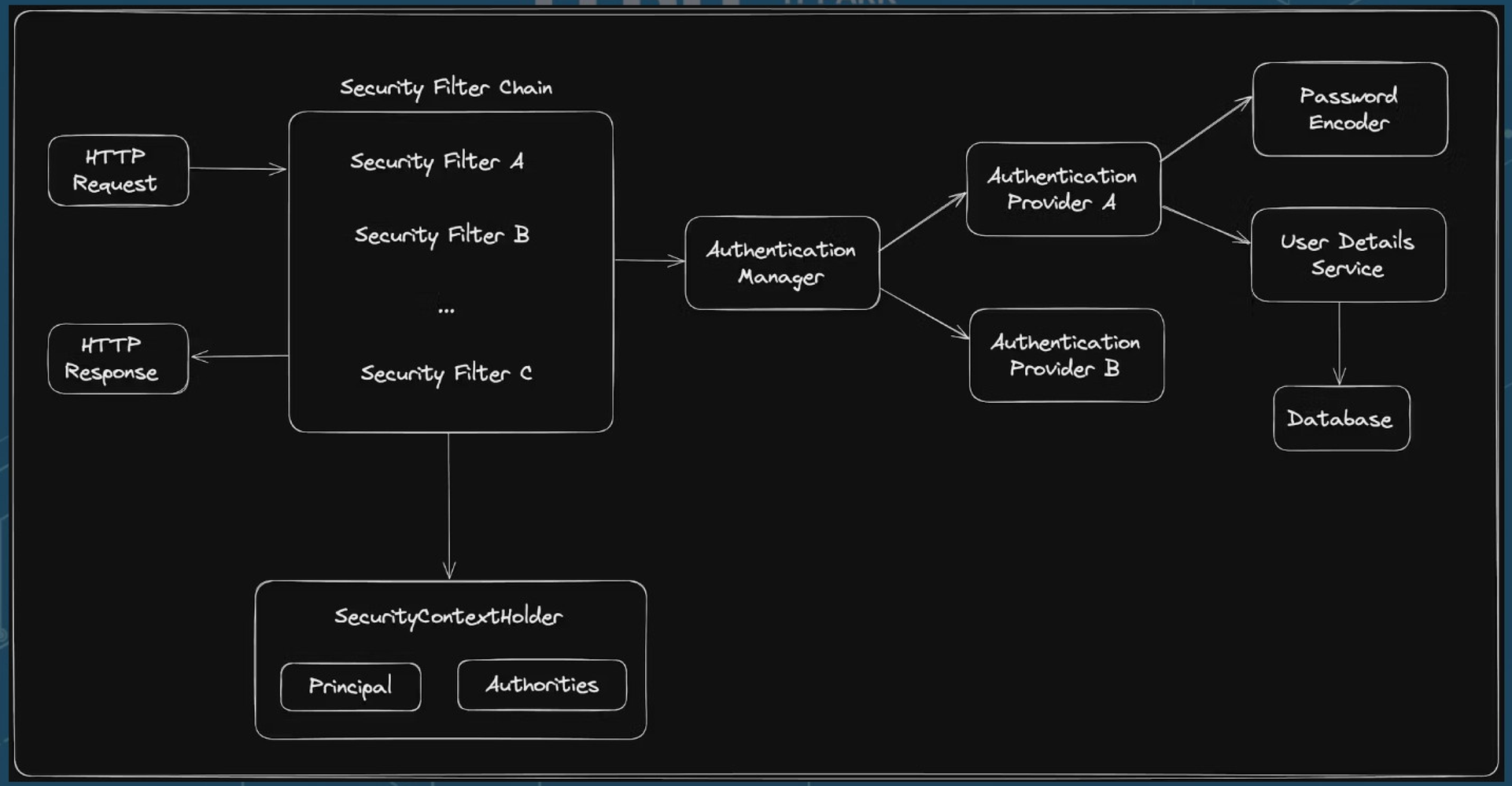
Which annotation configures security?




Security Filter Chain
HTTP Request
Security Filter A
Security Filter B
...
Security Filter C
HTTP Response
Authentication Manager
Authentication Provider A
Authentication Provider B
Password Encoder
User Details Service
Database
SecurityContextHolder
Principal
Authorities

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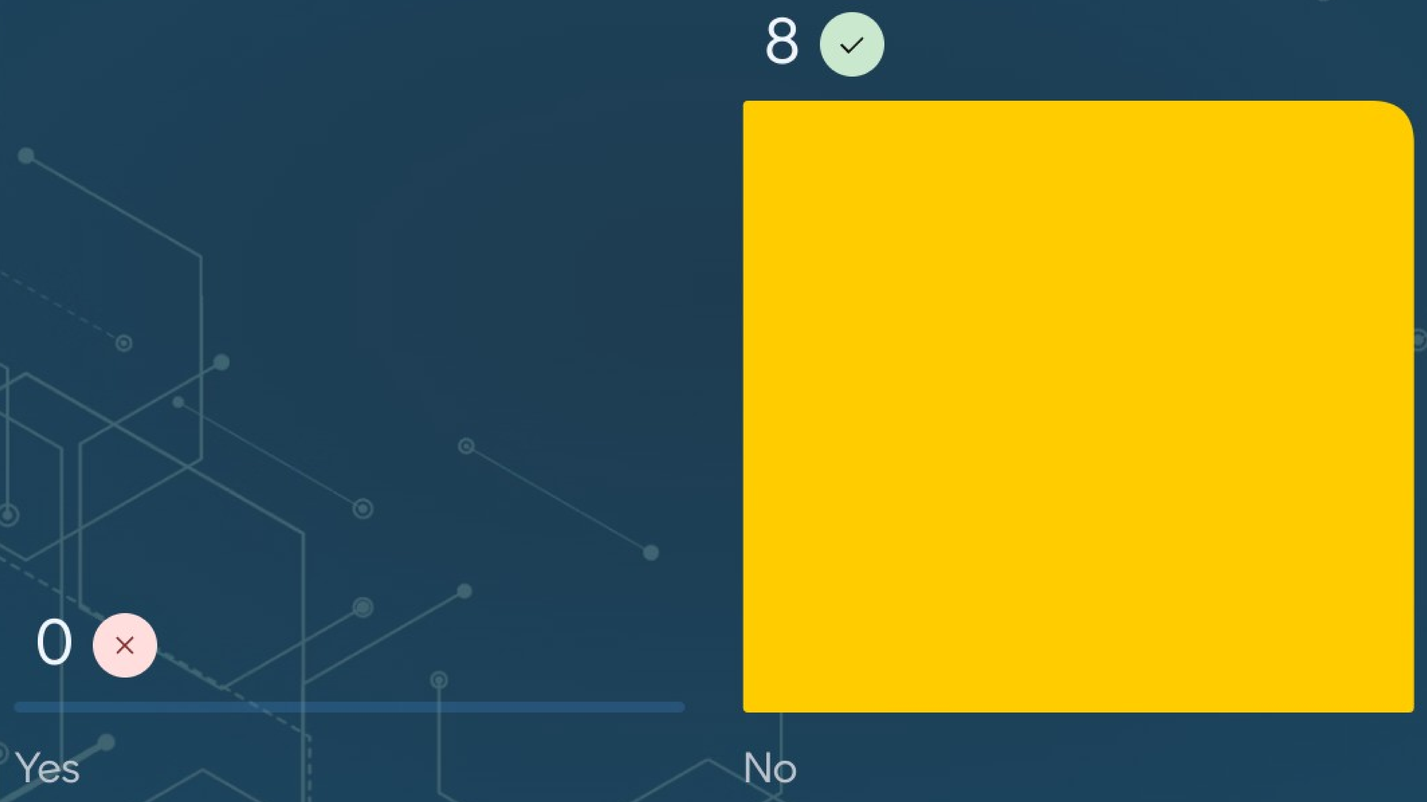
Should we save passwords as plain text in DB?



What is hashing?

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1

Hashing ensures passwords are stored in plaintext format in the database

2

Hashing is a reversible process, allowing passwords to be retrieved from the hash

5

Hashing irreversibly transforms passwords into fixed-length representations

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Form-based authentication is ...

0

Users provide credentials through HTTP headers

0

Authentication is performed via encoded Base64 strings

8

Users input credentials through a web-based login form

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Handling form-based authentication - ?

0

By validating credentials through URL parameters

6

By intercepting HTTP POST requests to a designated login endpoint

0

By directly embedding credentials in the HTML code of web pages

6

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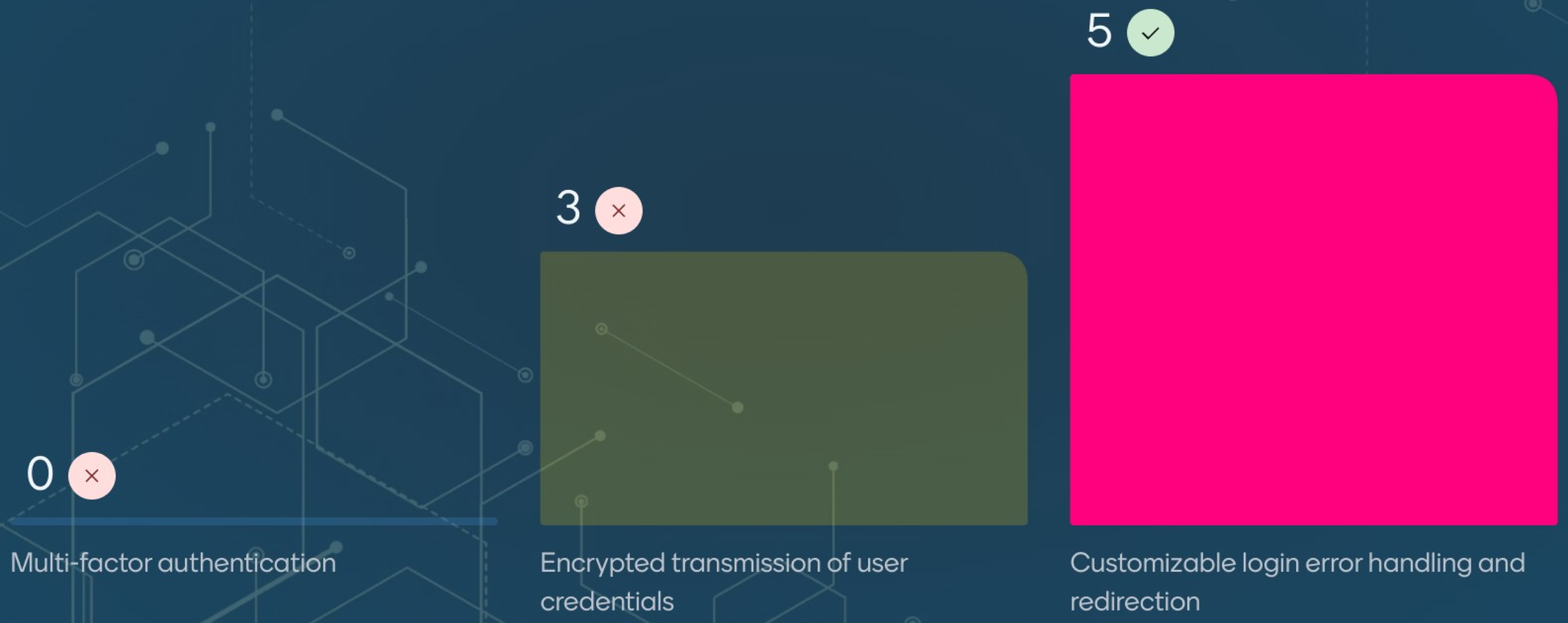
Security feature of form-based authentication is ...



Difference between basic and form-based

The main difference lies in how credentials are provided and transmitted: form-based authentication involves a login form and typically operates over HTTP POST requests, while Basic authentication relies on credentials being included with each HTTP request in Base64 format. Additionally, form-based authentication provides a more customizable user experience, whereas Basic authentication is simpler but less secure, especially without HTTPS

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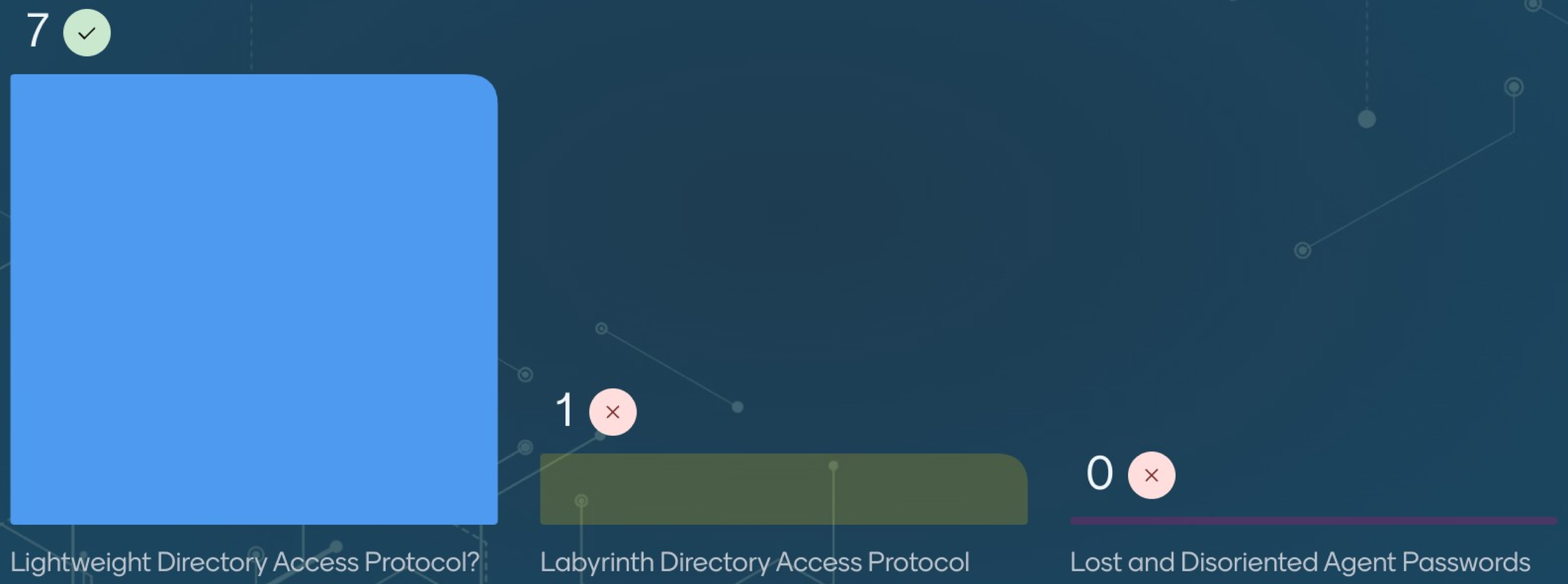
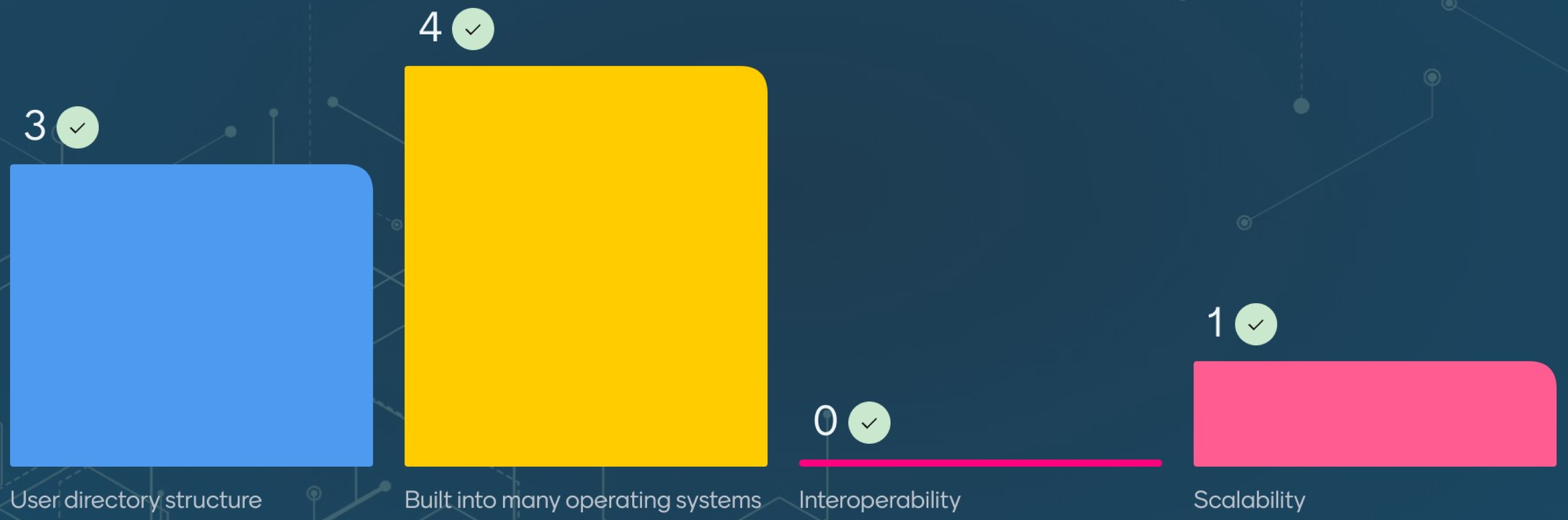
What does LDAP stand for?



Select features of LDAP



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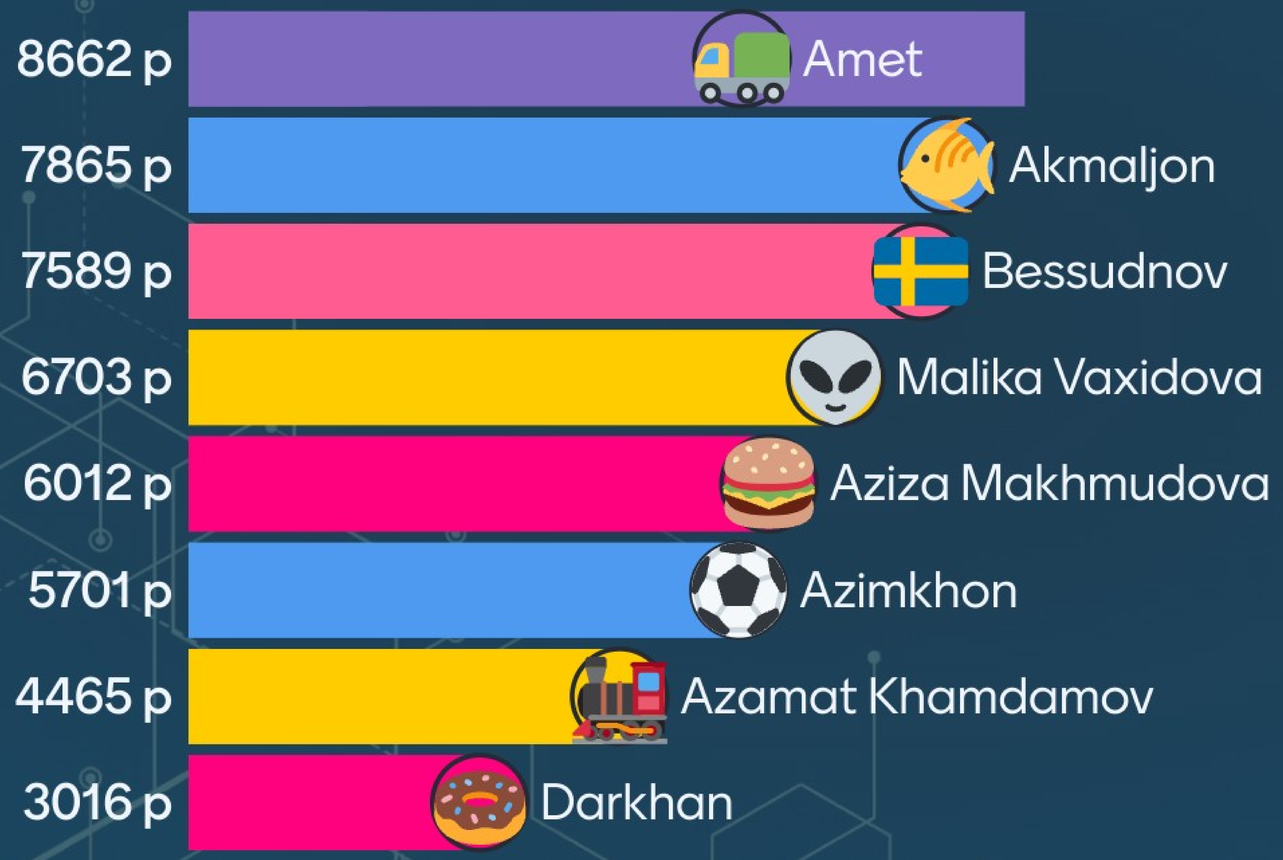
Difference between LDAP and form-based auth

1. Authentication Mechanism: LDAP - protocol, form-based - user input
2. User experience: LDAP - auth behind scenes
3. Deployment and config: LDAP needs separate server
4. Use case: LDAP - enterprise, form-based any web application

Quiz leaderboard



Next time: Spring Security

Questions?

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