

API Access Management

How to Secure Restful APIs

Agenda

- ✓ API Security Fundamentals
- ✓ Authentication Methods
- ✓ Live Demo
- ✓ Outlook: OAuth2

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API Security Fundamentals

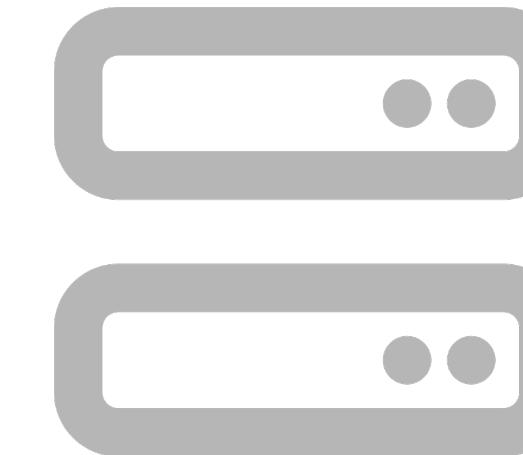
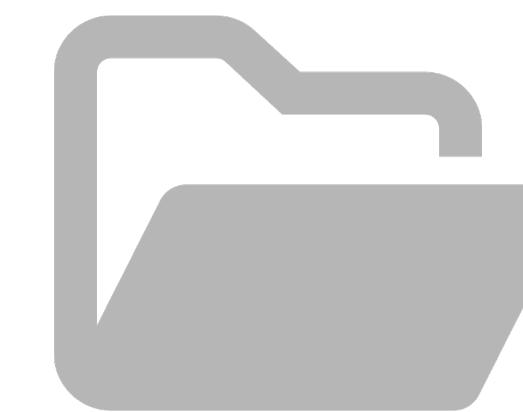
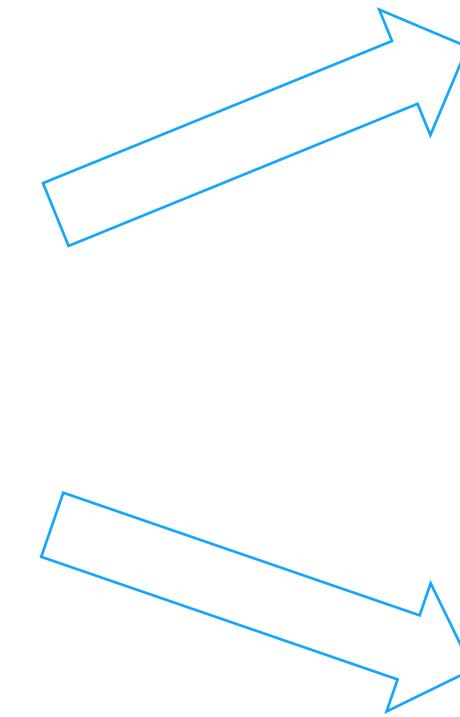
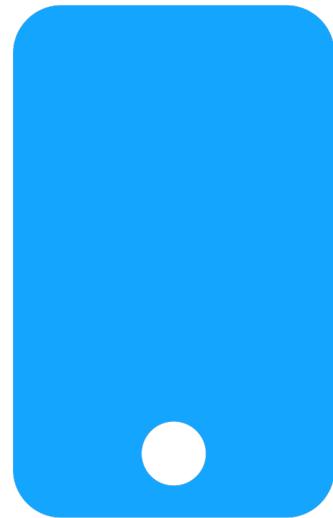
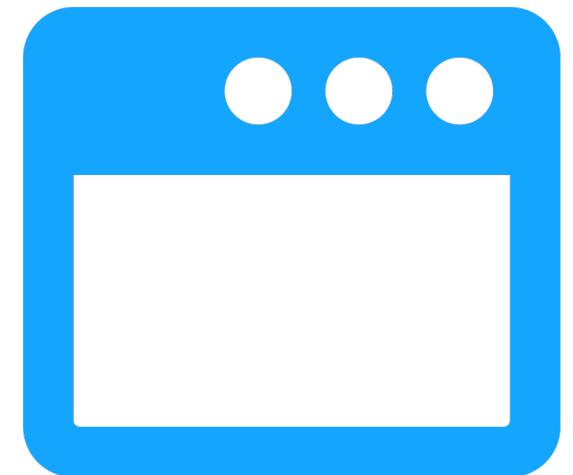
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**API access is the process
of ensuring that calls
with authenticated
logins can enter APIs.**

<https://apigee.com/about/cp/what-api-access>

Google Cloud Platform



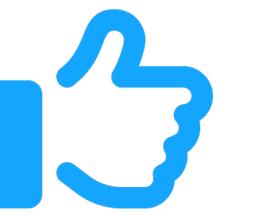






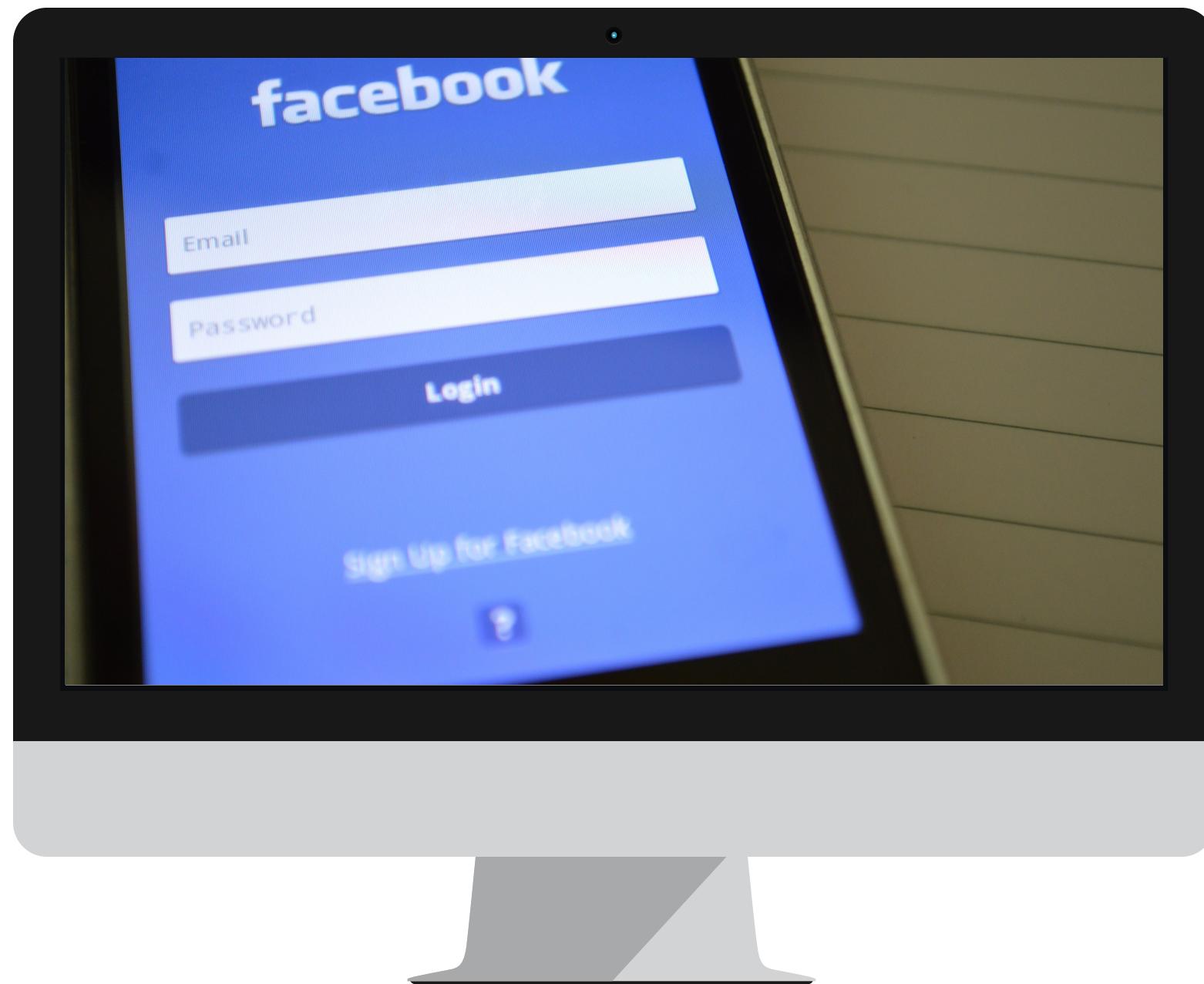
Authentication

Validating that users are whom they claim to be



Authorization

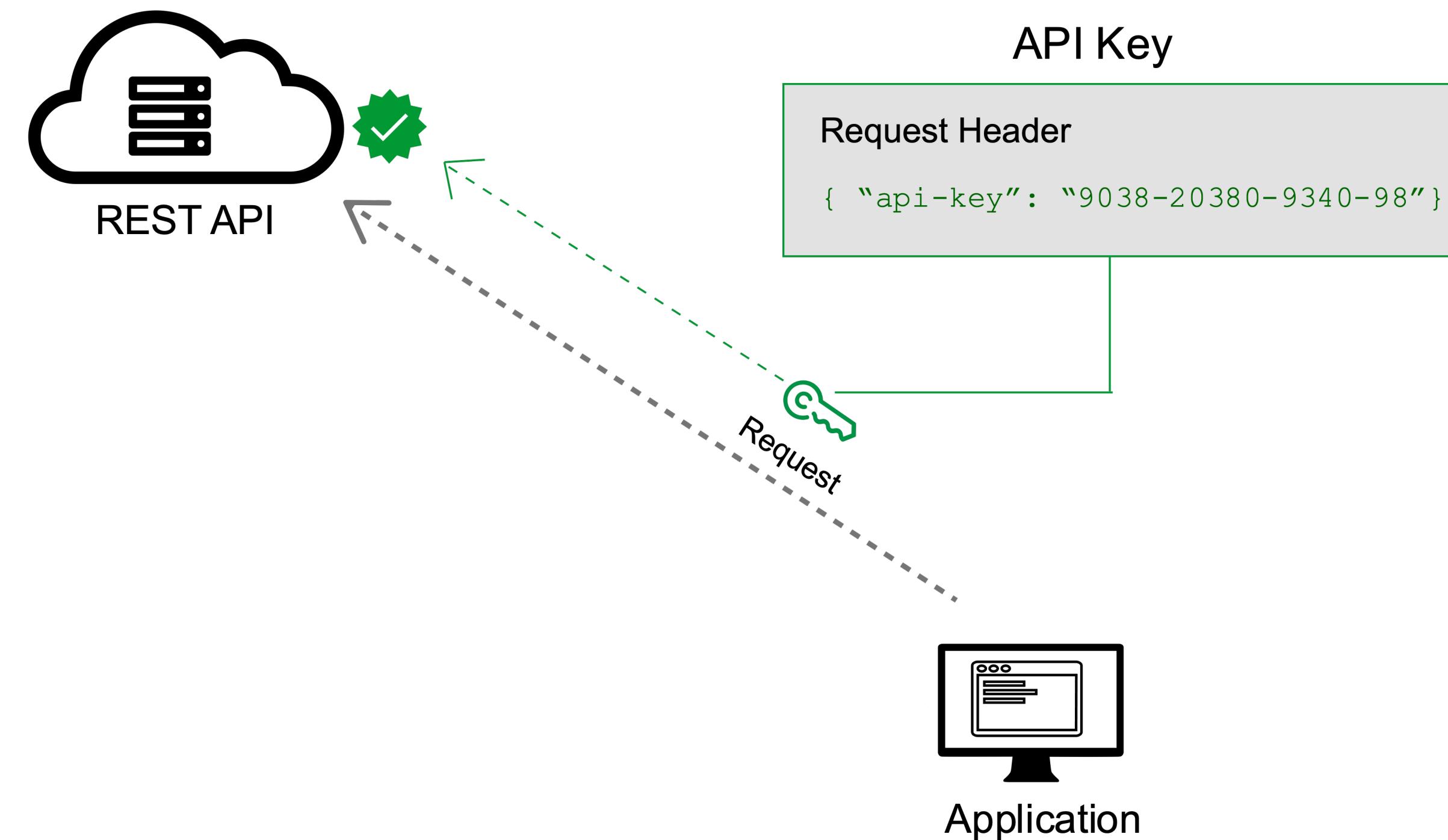
Giving the user permission to access a specific resource or function



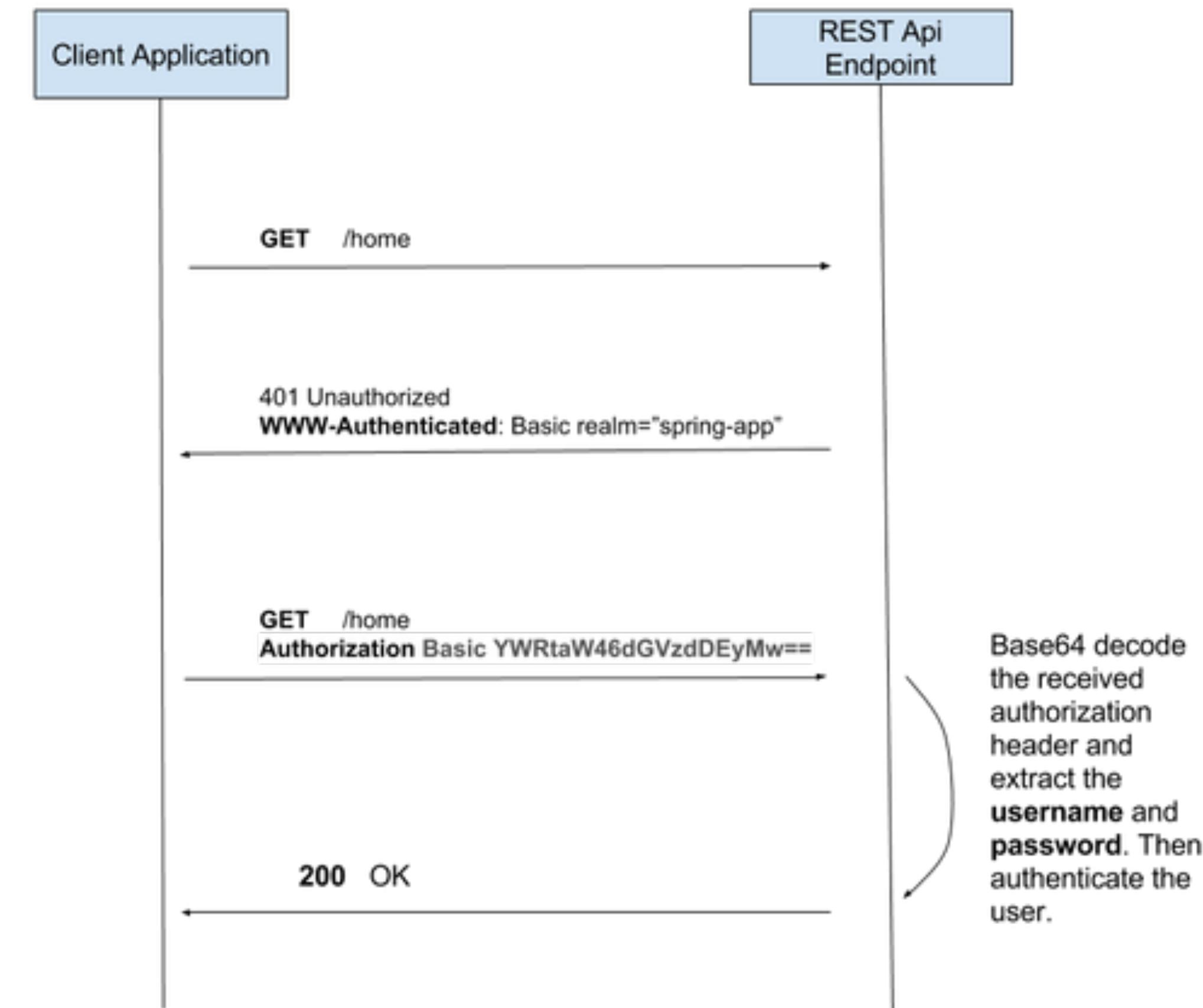
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Authentication Methods

API Key Authentication

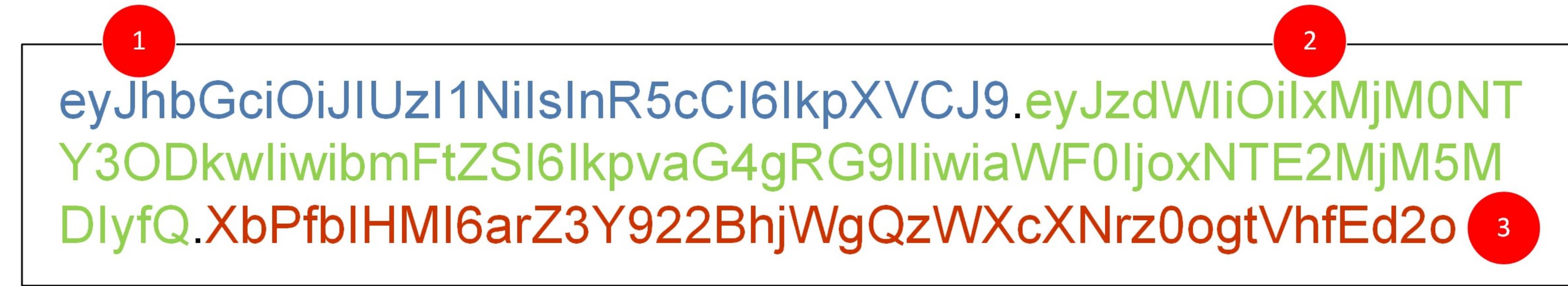


Basic Authentication



www.SpringBootDev.com
Chathuranga Tennakoon

JSON Web Token



1 Header

```
{  
  "alg": "HS256",  
  "typ": "JWT"  
}
```

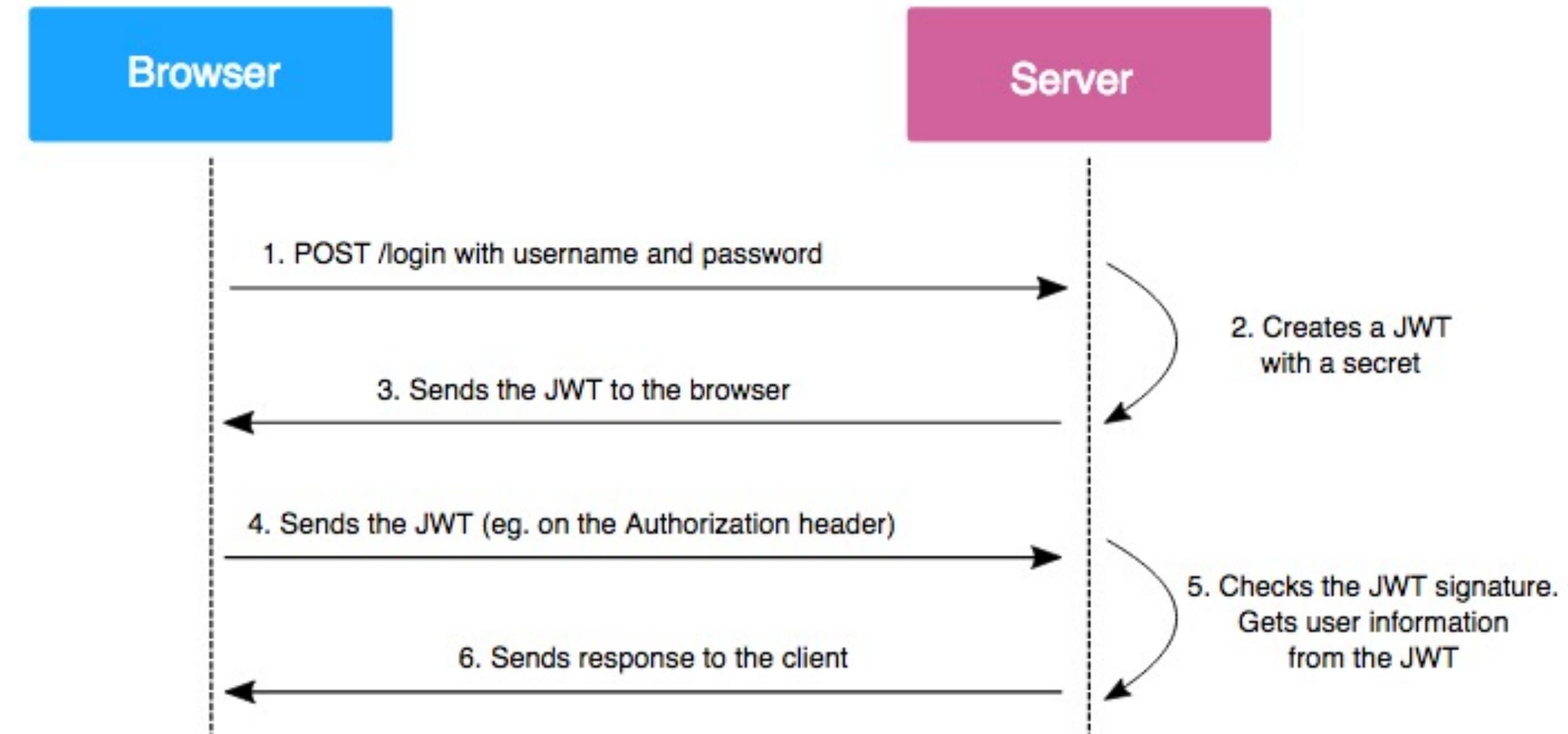
2 Payload

```
{  
  "sub": "1234567890",  
  "name": "John Doe",  
  "iat": 1516239022  
}
```

3 Signature

```
HMACSHA256(  
  BASE64URL(header)  
  .  
  BASE64URL(payload),  
  secret)
```

JSON Web Token



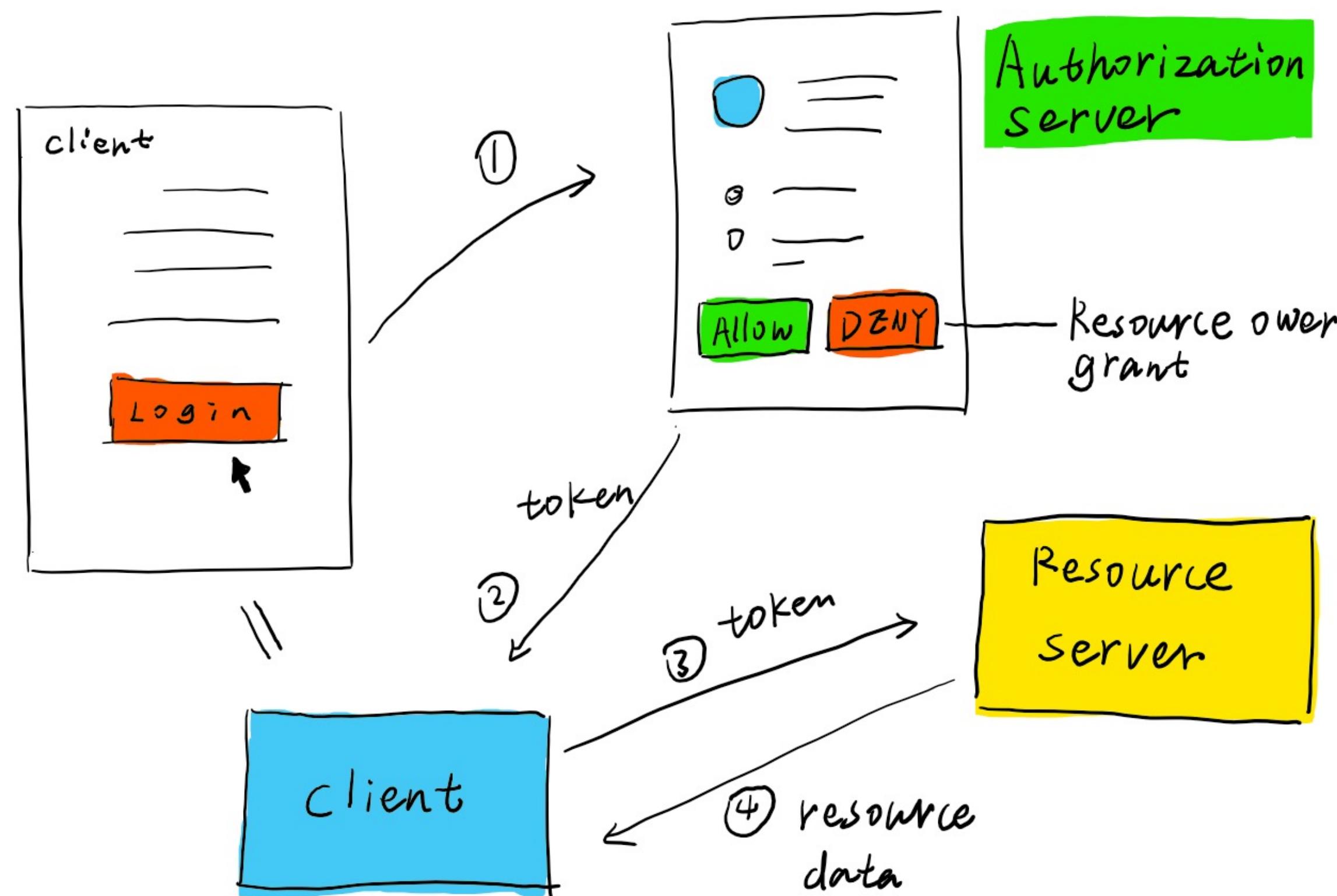
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Live Demo

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OAuth2

OAuth2





Thanks!

Any questions?

CREDITS

Special thanks to all people who made and share these awesome resources for free:

- Presentation template designed by [Slidesmash](#)
- Photographs by [unsplash.com](#) and [pexels.com](#)
- Vector Icons by [Matthew Skiles](#) and [fontawesome.com](#)