



Spring Security

# Understanding JWT

# Why use JSON Web Token (JWT)

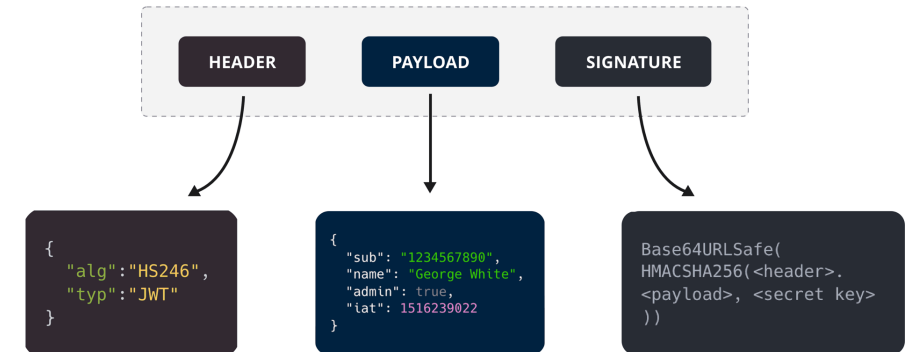
1. Stateless
2. Scalable in Distributed Systems
3. Cross domain authentication
4. Ideal for Decentralized systems and microservices
5. Highly secure

# JSON Web Token (JWT)

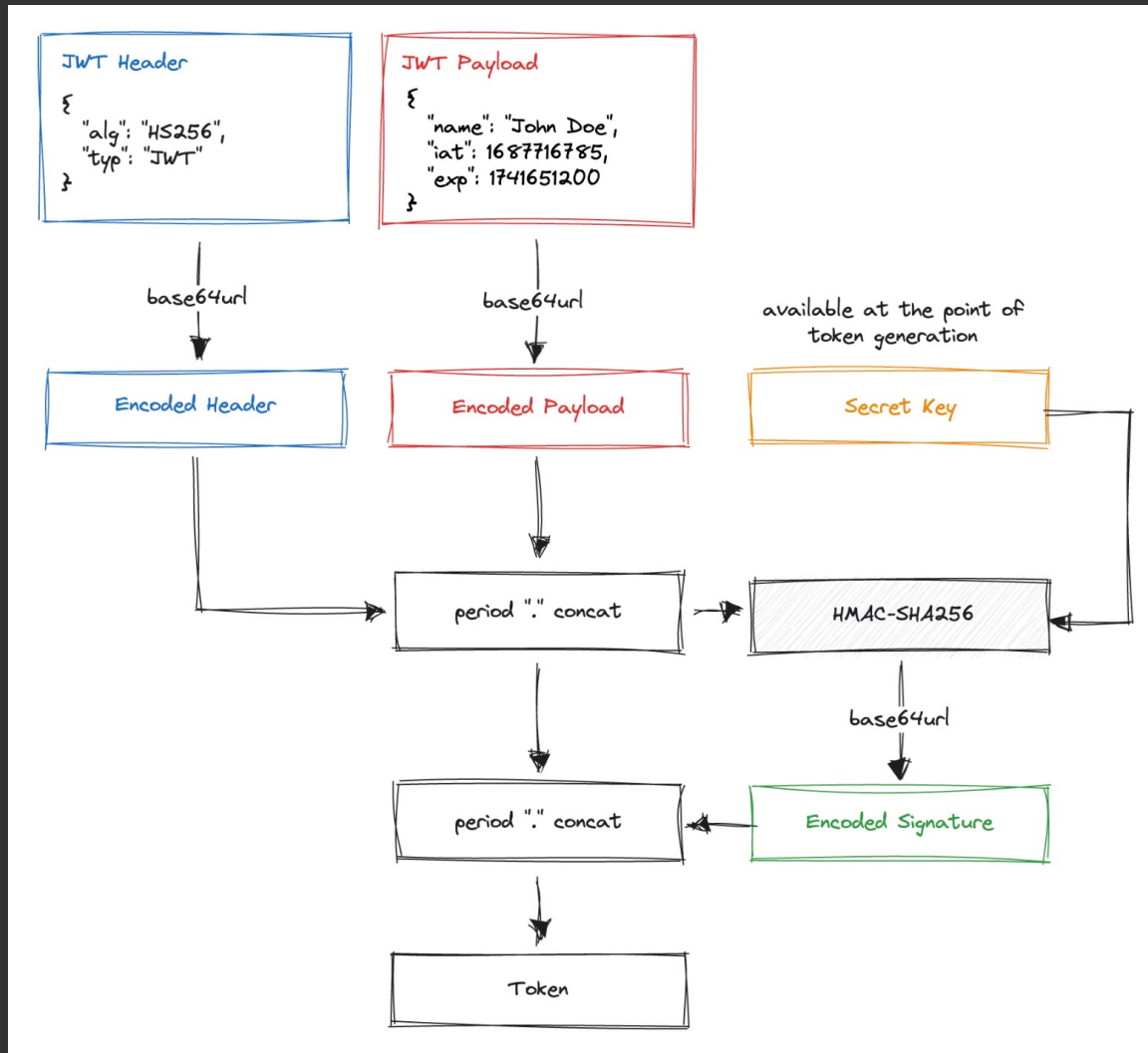
JWT is a compact, URL-safe means of representing claims to be transferred between two parties.

JWT is often used to transmit non-sensitive data that doesn't require confidentiality but still needs integrity and authenticity. This includes user identifiers, roles, permissions, and other claims necessary for making access control decisions.

Structure of a JSON Web Token (JWT)



# JWT Creation



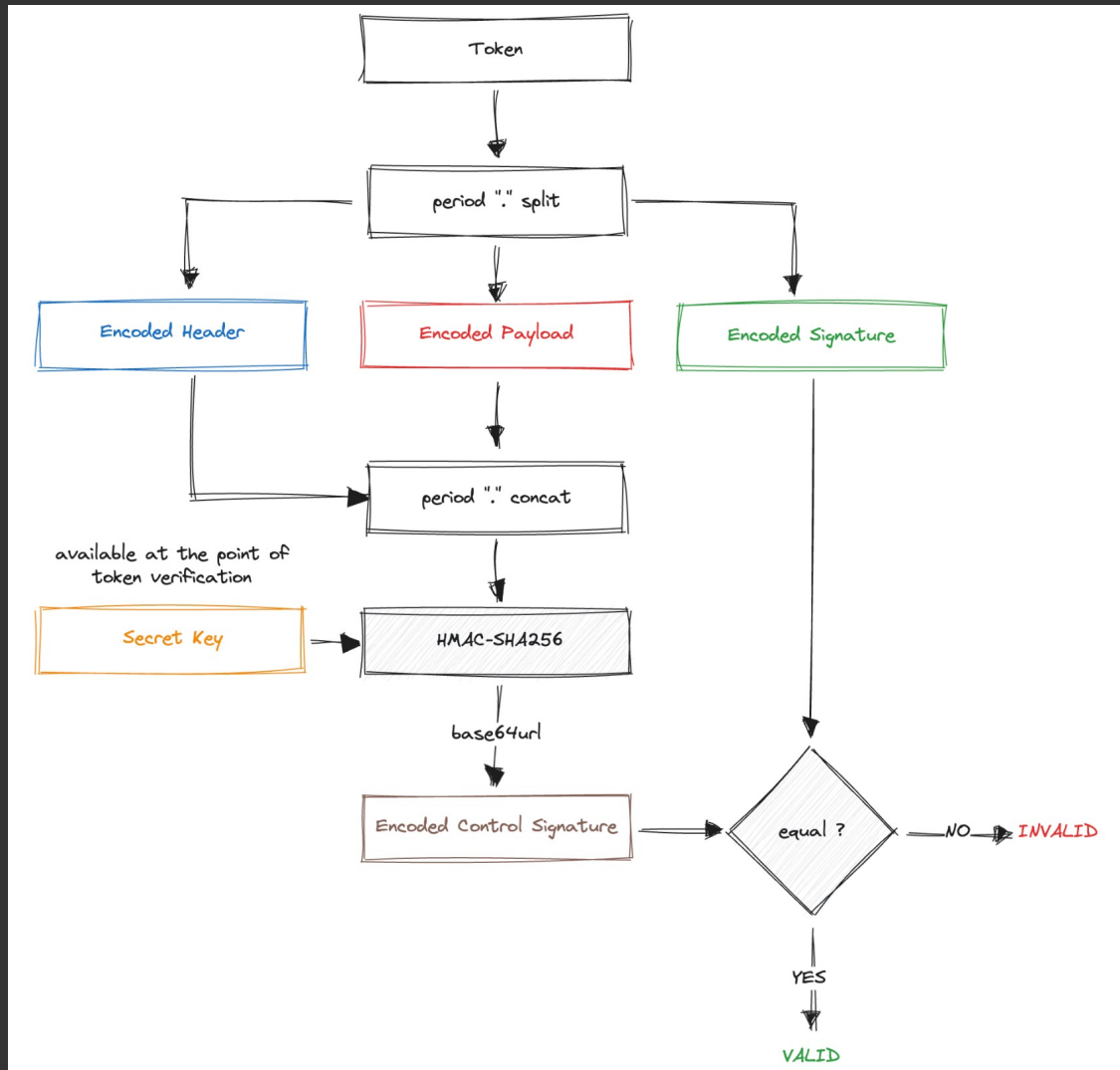
Sample Token:

eyJhbGciOiJIUzI1NiJ9.eyJzdWUiOiI0NSIsImVhbGVzIjpblJJREVSIl0sImhdCl6MTcyMTU2NzUxOSwiZXhwIjoxNzIxNTgxOTE5fQ.plEiLEboraXMhJrm8ckRLpoYSWC6n9mY3XNICpLFE4I

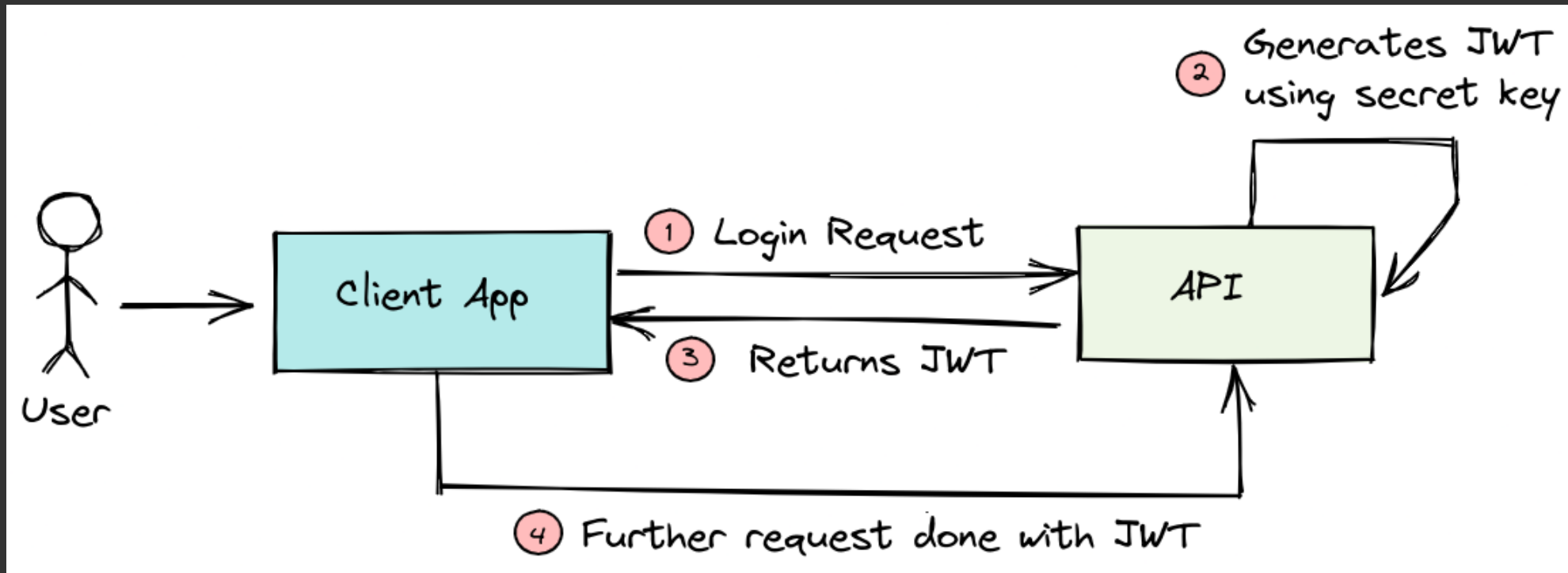
# JWT Verification

Sample Token:

eyJhbGciOiJIUzI1NiJ9.eyJzdWwiOiI0NSIsImVudGVzIjpblJJREVSIl0sImhhdCI6MTcyMTU2NzUxOSwiZXhwIjoxNzIxNTgxOTE5fQ.plEiLEboraXMhJrm8ckRLpoYSWC6n9mY3XNICpLFE4I



# Using JWT For Authentication



# JWT Dependencies

```
<dependency>
  <groupId>io.jsonwebtoken</groupId>
  <artifactId>jjwt-api</artifactId>
  <version>0.12.6</version>
</dependency>
<dependency>
  <groupId>io.jsonwebtoken</groupId>
  <artifactId>jjwt-impl</artifactId>
  <version>0.12.6</version>
  <scope>runtime</scope>
</dependency>
<dependency>
  <groupId>io.jsonwebtoken</groupId>
  <artifactId>jjwt-jackson</artifactId>
  <version>0.12.6</version>
  <scope>runtime</scope>
</dependency>
```

