AUTHENTICATION AND AUTHORIZATION EXPLAINED

SESSION, COOKIES JWT, TOKEN, SSO, OAUTH 2.0



OVERVIEW

Authentication and Authorization are two key concepts in web security that control user access to systems and resources.



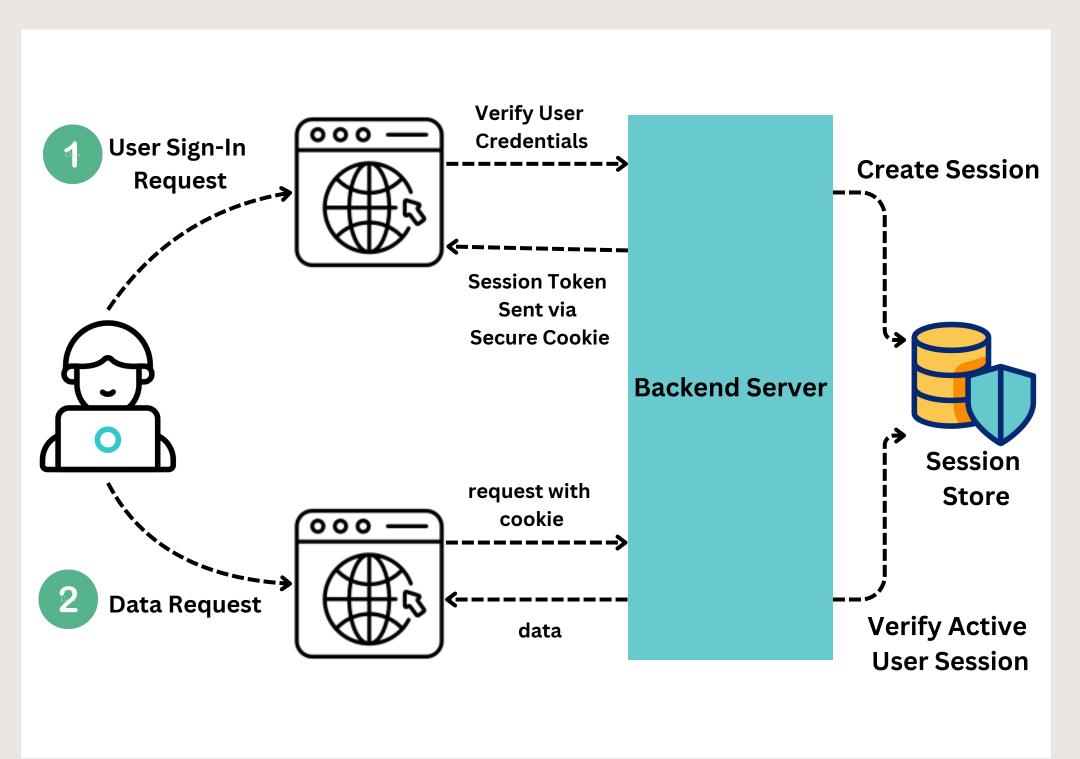
Authentication (Who You Are)

- Authentication is the process of verifying a user's identity. It ensures that the person accessing a system is who they claim to be.
- Example: Logging into a website using a username and password, fingerprint, or OAuth (Google/Facebook login).

Authorization (What You Can Do)

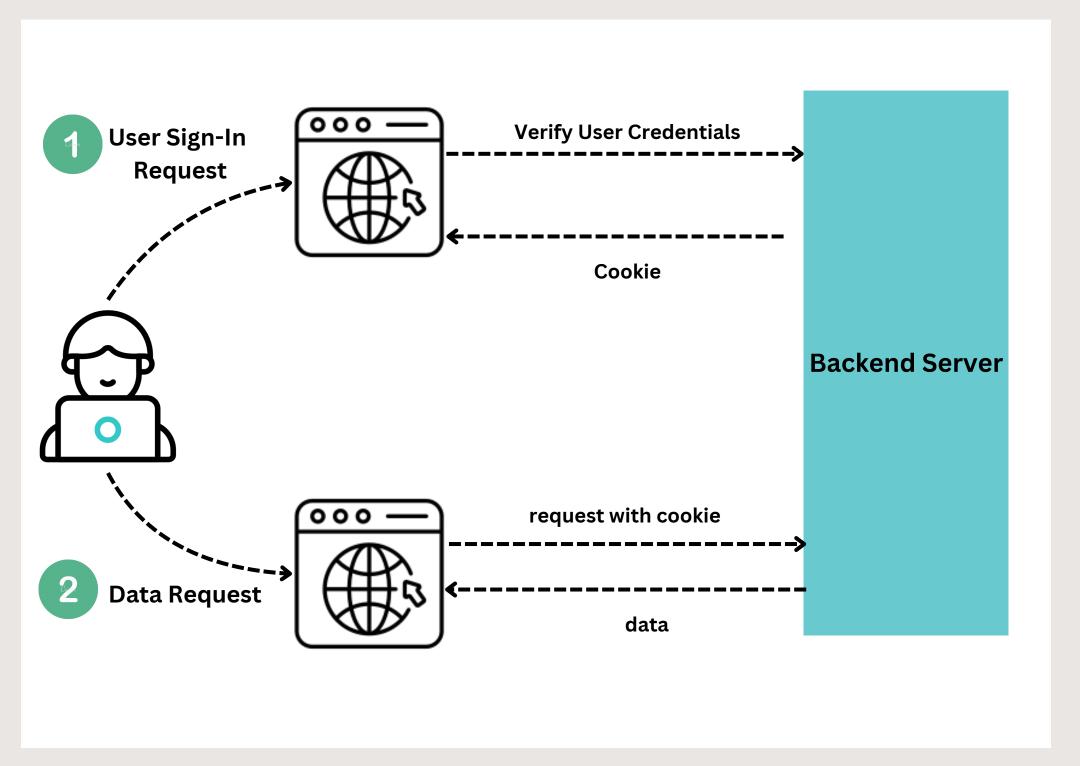
- Authorization determines what actions or resources a user is allowed to access after authentication.
- Example: A user may be authenticated into a banking app, but only authorized to view their own account and not others.

SESSIONS



Sessions enhance security by maintaining serverside control over authentication but can introduce scalability challenges in distributed architectures.

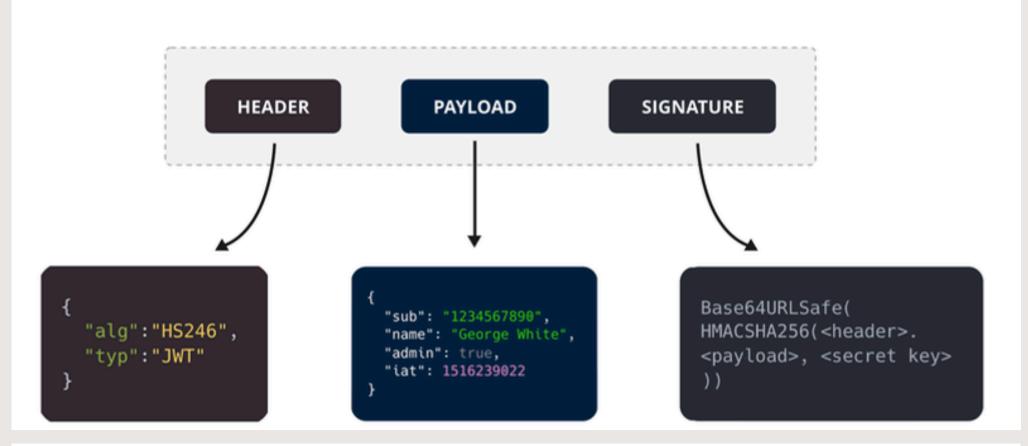
COOKIES

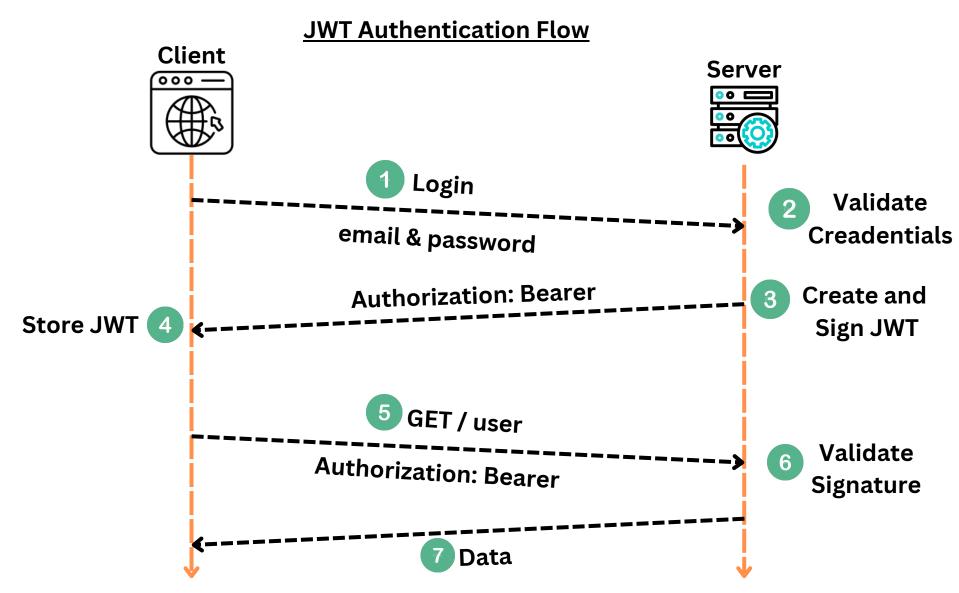


Cookies store session IDs to keep users logged in. Security features like HttpOnly and Secure help protect against threats like hacking and CSRF.

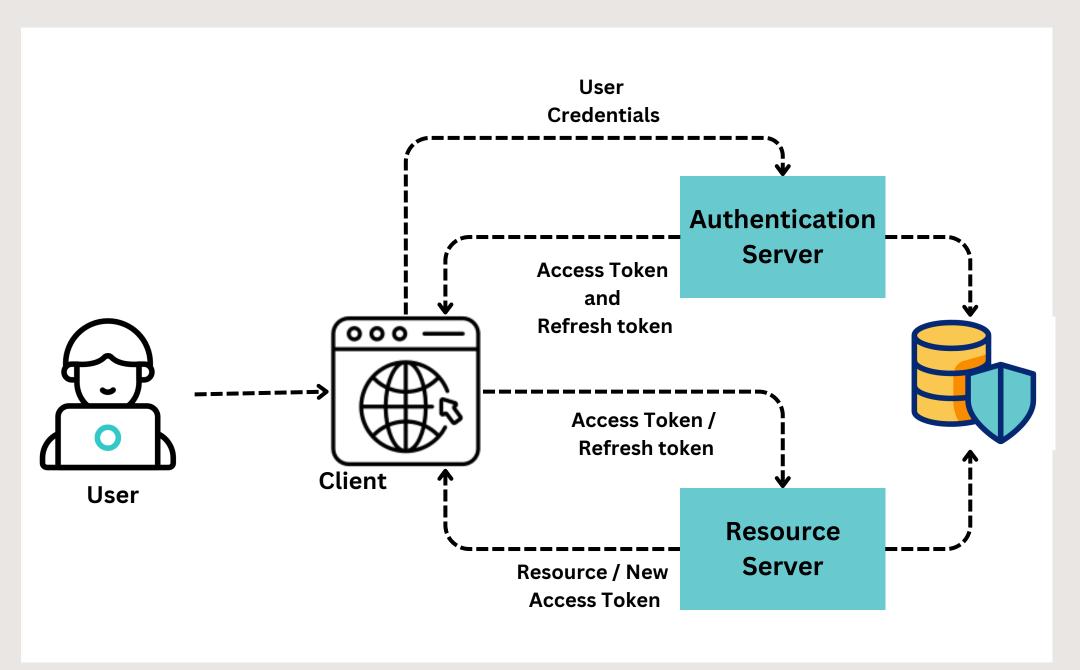


Structure of a JSON Web Token (JWT)



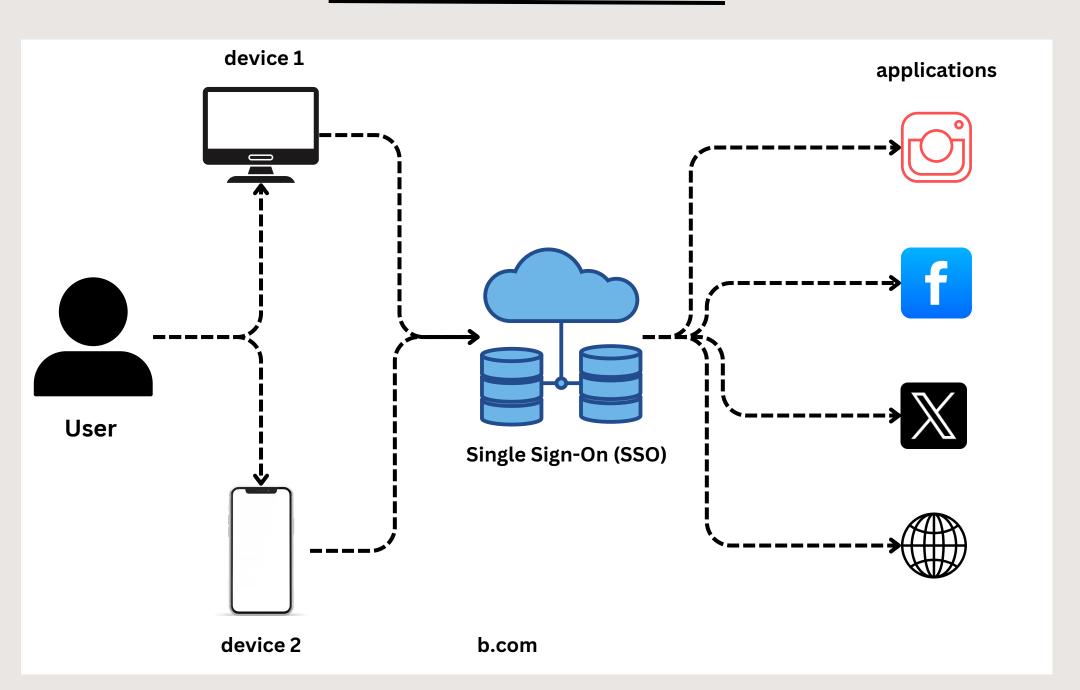


TOKEN



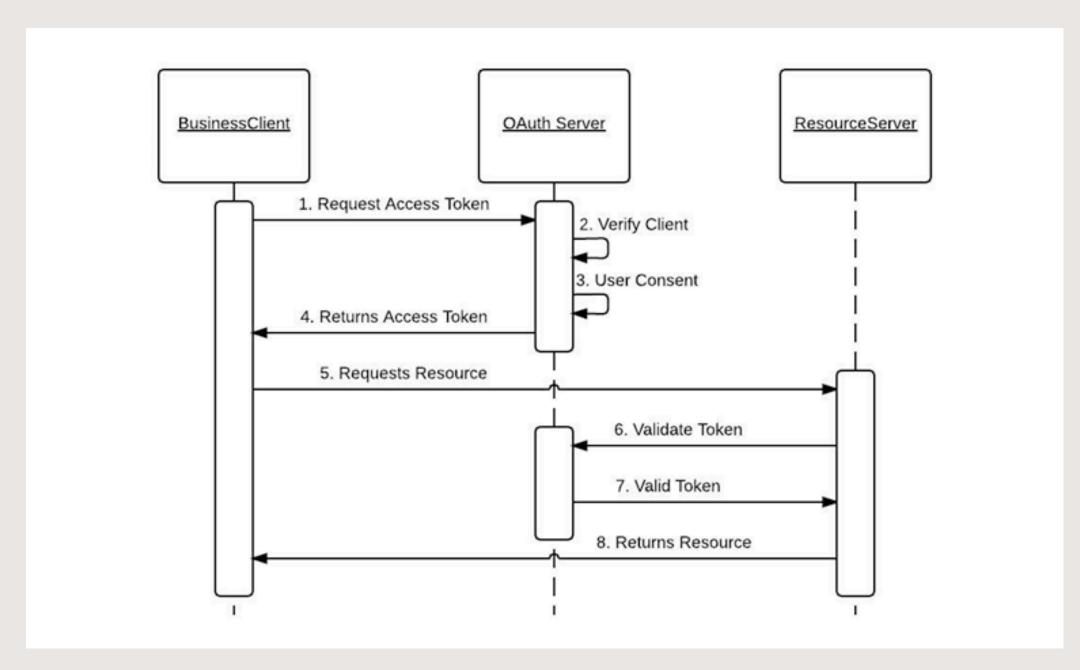
Token-based authentication is a security mechanism that allows users to verify their identity using a token instead of traditional session-based authentication. This method is commonly used in REST APIs, mobile apps, and Single Sign-On (SSO) systems.

SSO (SINGLE SIGN-ON)



Single Sign-On (SSO) is an authentication method that allows users to log in once and access multiple applications without needing to re-enter credentials. It improves security and user experience, especially in enterprise environments.

OAUTH 2.0



OAuth 2.0 is an authorization framework that allows users to grant third-party applications limited access to their resources without sharing passwords. It is widely used for SSO (Single Sign-On), API access, and third-party authentication (e.g., logging into an app with Google or Facebook).

I HOPE YOU WILL FIND IT USEFUL



FOLLOW ME FOR MORE

- in /in/mohamed-el-laithy-0155b2173/
- /dev.to/mohamed_el_laithy