Frontend Developer Reference Cheat Sheet

Frontend Developer Reference Cheat Sheet (Extended)

What is AJAX?

- AJAX (Asynchronous JavaScript and XML) is a technique to fetch data from a server without reloading the page.
- Often used with the Fetch API or XMLHttpRequest.

Example using Fetch:

```
fetch('/api/user')
  .then(response => response.json())
  .then(data => console.log(data));
```

What is a CDN (Content Delivery Network)?

- A geographically distributed network of servers that deliver content faster to users.
- Helps reduce latency and improve performance.

Example:

```
<script src="https://cdn.jsdelivr.net/npm/axios/dist/axios.min.js"></script>
```

Cross-Site Scripting (XSS) vs Cross-Site Request Forgery (CSRF)

XSS (Cross-Site Scripting):
- Attacker injects malicious scripts into a trusted site.
- Victim unknowingly runs the script.

Example:

```
<script>alert('XSS')</script>
```

CSRF (Cross-Site Request Forgery):
- Attacker tricks user into performing unwanted actions (e.g., submitting a form) while logged in.
- Requires user to be authenticated.

Mitigation:
- XSS: Sanitize user input.
- CSRF: Use CSRF tokens and SameSite cookies.

What is OAuth?

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- OAuth is an authorization framework that allows third-party applications to access user data without sharing credentials.

Example:

- Logging in with Google or GitHub uses OAuth 2.0.
- The app gets an access token to access your data securely.

Flow:

User -> Auth Server -> Access Token -> Third-party App

What is Same-Origin Policy?

- A security policy that restricts how documents/scripts from one origin can interact with resources from another origin.

Same origin means:

- Same protocol (http/https)
- Same domain
- Same port

Example:

- Your site at https://example.com cannot access http://another.com data without CORS being enabled.

What is ES6 (ECMAScript 2015)?

- ES6 is a major update to JavaScript that introduced modern features.

Key features:

- let/const: block-scoped variables.
- Arrow functions: const sum = (a, b) => a + b;
- Template literals: `Hello, ${name}`
- Destructuring: const {name, age} = user;
- Modules: export/import

Example:

const greet = (name = "User") => `Hello, ${name}`;