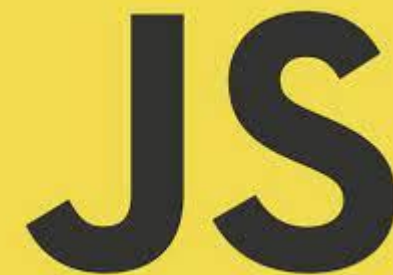


JAVASCRIPT

ASAS PENGATURACARAAN JAVASCRIPT

API DAN JS FETCH

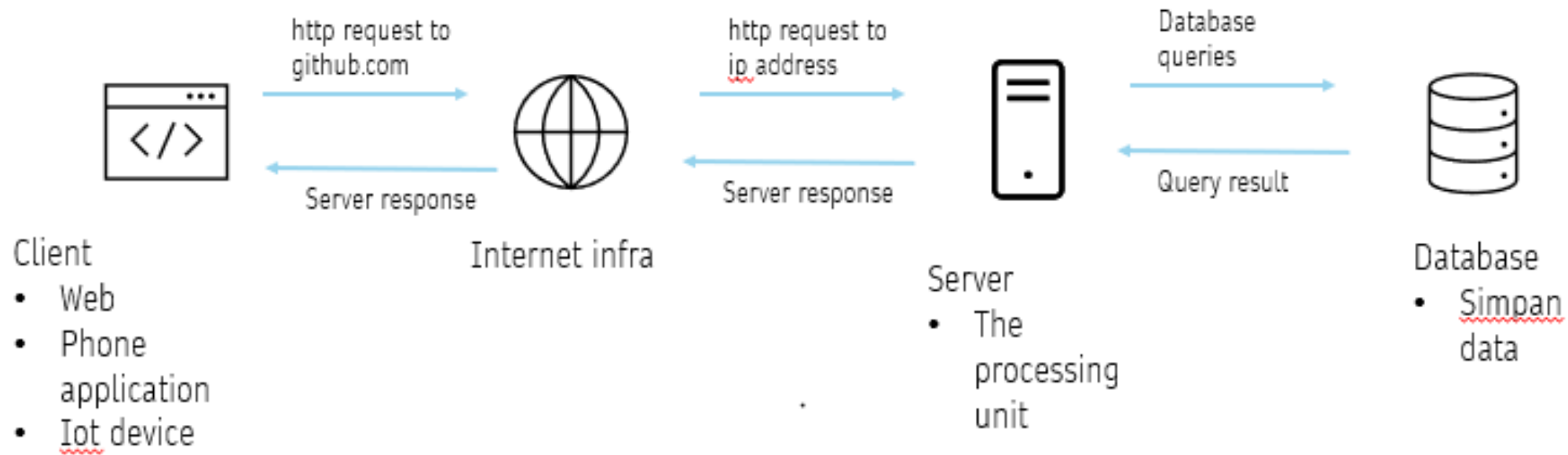
A yellow square containing the letters 'JS' in a bold, black, sans-serif font.

API(Application Programming Interface)

- ▶ *An application programming interface (API) is a way for two or more computer programs or components to communicate with each other. It is a type of software interface, offering a service to other pieces of software. (<https://en.wikipedia.org/wiki/API>)*
- ▶ Satu antara muka pengantara yang membolehkan dua aplikasi untuk berhubung dan bekerjasama.
- ▶ Contoh antaramuka
 - ▶ Database dengan backend
 - ▶ Backend dengan frontend
 - ▶ Backend dengan backend lain

WEB API

- ▶ API Protocol yang lazim digunakan
 - ▶ REST
 - ▶ SOAP
 - ▶ GraphQL
 - ▶ Websocket
- ▶ Membolehkan aplikasi kita bekerjasama dengan aplikasi lain
- ▶ Atau aplikasi frontend dengan aplikasi backend



REST API

- ▶ Pilihan standad sekarang
- ▶ Dibangunkan di atas HTTP Protocol

METHOD	Name	example
GET	Index	https://jsonplaceholder.typicode.com/todos/
GET	Show	https://jsonplaceholder.typicode.com/todos/1
POST	Create	https://jsonplaceholder.typicode.com/todos/
PUT/PATCH	Update	https://jsonplaceholder.typicode.com/todos/1
DELETE	Destroy	https://jsonplaceholder.typicode.com/todos/1

JS FETCH

- ▶ A promise based function
 - ▶ Asynchronous

```
39  // GET index
40  fetch('https://jsonplaceholder.typicode.com/posts')
41    .then((response) => response.json())
42    .then((json) => console.log(json))
43    .catch((err) => {debugger});
44
```

```
45 // GET show
46 fetch('https://jsonplaceholder.typicode.com/posts/1')
47   .then((response) => response.json())
48   .then((json) => console.log(json))
49   .catch((err) => {debugger});
50
```

```
51 // POST create
52 ✓ fetch('https://jsonplaceholder.typicode.com/posts', {
53     method: 'POST',
54     body: JSON.stringify({
55         title: 'foo',
56         body: 'bar',
57         userId: 1,
58     }),
59     headers: {
60         'Content-type': 'application/json; charset=UTF-8',
61     },
62 })
63 .then((response) => response.json())
64 .then((json) => console.log(json))
65 .catch((err) => {debugger});
66
```



```
68 //PUT update
69 fetch('https://jsonplaceholder.typicode.com/posts/1', {
70   method: 'PUT',
71   body: JSON.stringify({
72     id: 1,
73     title: 'foo',
74     body: 'bar',
75     userId: 1,
76   }),
77   headers: {
78     'Content-type': 'application/json; charset=UTF-8',
79   },
80 })
81 .then((response) => response.json())
82 .then((json) => console.log(json))
83 .catch((err) => {debugger})
84
85
```

```
85  
86 // DELETE  
87 fetch('https://jsonplaceholder.typicode.com/posts/1', {  
88   method: 'DELETE',  
89 })  
90   .then((response) => response.json())  
91   .catch((err) => {debugger});  
92
```

Assignment

- ▶ GET and display images using <https://www.pexels.com/api/documentation>

Terima Kasih. Soalan?