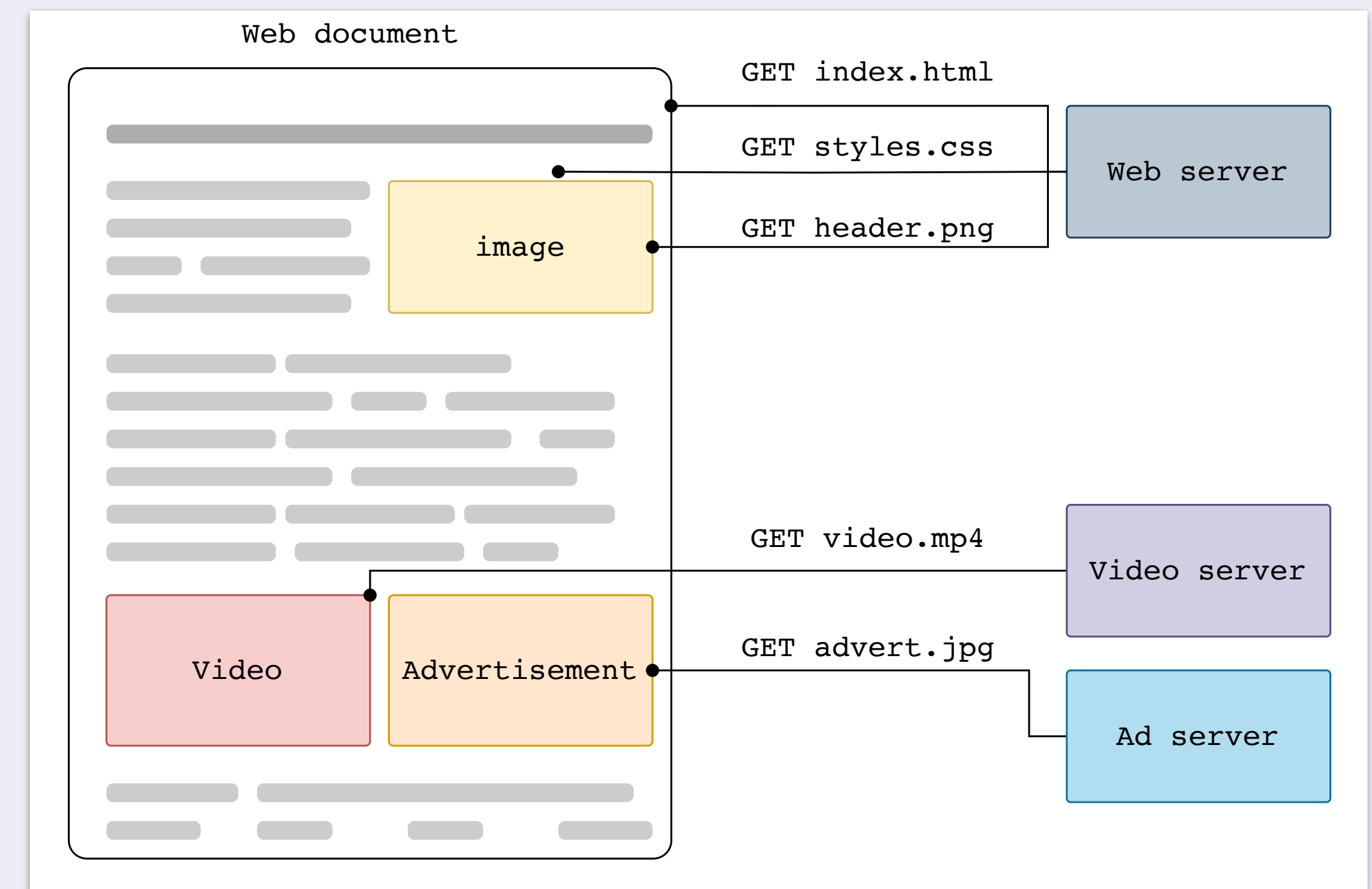


En *statisk* webbserver

- Statiskt innehåll
 - HTML, CSS, JS, bilder, videor, osv.
- Manuellt är omständigt
 - Kontrollera vilken resurs förfrågan är ute efter
 - Kontrollera att filen finns, läs in filen, ...
 - Svara med rätt innehåll, headers, m.m.
 - Lätt att misstag görs / behöver debugga



Standard Library

Vanligen förkortat *std*, ett bibliotek av bla. nytto-funktioner från Deno själva

- Mer eller mindre alla programmeringsspråk har ett sk. *standard library*
- Importeras separat (finns inte tillgängligt globalt)
- Deno's standard library: <https://jsr.io/@std>
- Vi kommer använda HTTP-modulen: <https://jsr.io/@std/http>
- Mer specifikt dessa funktioner:
 - [`serveFile\(req: Request, filePath: string, options?: ServeFileOptions\)`](#)
 - [`serveDir\(req: Request, opts?: ServeDirOptions\)`](#)

Importera från std

```
import { serveFile, serveDir } from "jsr:@std/http";  
  
// Gör något med serveFile(...)  
  
// Gör något med serveDir(...)
```

serveFile

`serveFile(req: Request, filePath: string, options?: ServeFileOptions)`

Vi kan ignorera *options* argumentet

```
import { serveFile } from "jsr:@std/http";

function handler(request) {
    return serveFile(request, "index.html");
}

Deno.serve(handler);
```

```
import { serveFile } from "jsr:@std/http";

function handler(request) {
    if (request.url.endsWith("style.css")) {
        return serveFile(request, "style.css");
    } else if (request.url.endsWith("dog.jpg")) {
        return serveFile(request, "dog.jpg");
    } else {
        return serveFile(request, "index.html");
    }
}

Deno.serve(handler);
```

serveDir

`serveDir(req: Request, opts?: ServeDirOptions)`

- `opts` är ett objekt där vi bla. kan ange egenskaperna:
 - `fsRoot`: `string`, vilken mapp vi ska utgå från, default är `"."`
 - `urlRoot`: `string`, vilken URL *root* vi ska utgå från
- Det vill säga: `{ fsRoot: "...", urlRoot: "..." }`

serveDir

Svara med statiska filer från mappen "public", såsom HTML, CSS, m.m.

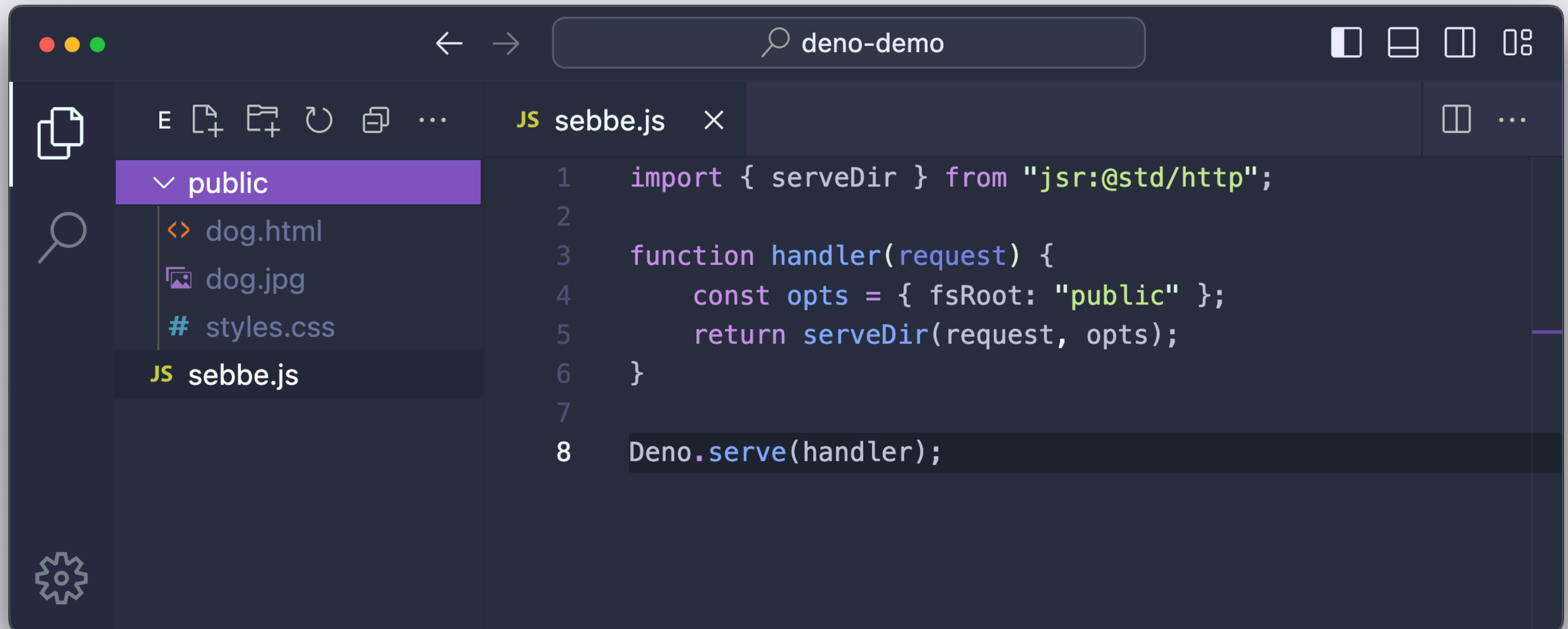
```
import { serveDir } from "jsr:@std/http";

function handler(request) {
  const opts = { fsRoot: "public" };
  return serveDir(request, opts);
}

Deno.serve(handler);
```

serveDir

Svara med statiska filer från mappen "public", såsom HTML, CSS, m.m.



localhost:8000/

×

+

←

→

↺

🛡️

📄

localhost:8000

←

150%

☆

⬇️

📄

🛡️

☰

Not Found

Document

×

+

←

→

↺

🛡️

📄

localhost:8000/dog.html

←

150%

☆

⬇️

📄

🛡️

☰

Hello World!

🖱️

🔍 Inspector

📄 Console

🔧 Debugger

↕️

 Network

{ }

Style Editor

⏭️

🚫 1

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✕

🗑️

🔍 Filter URLs

||

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🔍

🚫

✅

 Disable Cache

No Throttling ▾

⚙️

All HTML CSS JS XHR Fonts Images Media WS Other

Status	Method	Domain	File	Initiator	Type	Transferred	Size	
200	GET	🔒 localhost:8000	dog.html	document	html	429 B	275 B	2
200	GET	🔒 localhost:8000	styles.css	stylesheet	css	339 B	48 B	1
404	GET	🔒 localhost:8000	favicon.ico	FaviconLoader.sys.mj...	plain	154 B	9 B	1

```
import { serveFile, serveDir } from "jsr:@std/http";
```

```
function handler(request) {
```

```
  if (request.url == "http://localhost:8000/") {  
    return serveFile(request, "public/dog.html");  
  }
```

```
  const opts = { fsRoot: "public" };  
  return serveDir(request, opts);
```

```
}
```

```
Deno.serve(handler);
```

← Tillfällig lösning, vi kommer
att lära oss om bättre
metoder framöver

Document

localhost:8000

150%

1

Hello World!

Inspector

Console

Debugger

Network

Style Editor

Filter URLs

Disable Cache

No Throttling

All

HTML

CSS

JS

XHR

Fonts

Images

Media

WS

Other

Status	Method	Domain	File	Initiator	Type	Transferred	Size
200	GET	localhost:8000	/	document	html	429 B	275 B
200	GET	localhost:8000	styles.css	stylesheet	css	339 B	48 B
404	GET	localhost:8000	favicon.ico	FaviconLoader.sys.mj...	plain	154 B	9 B

3 requests

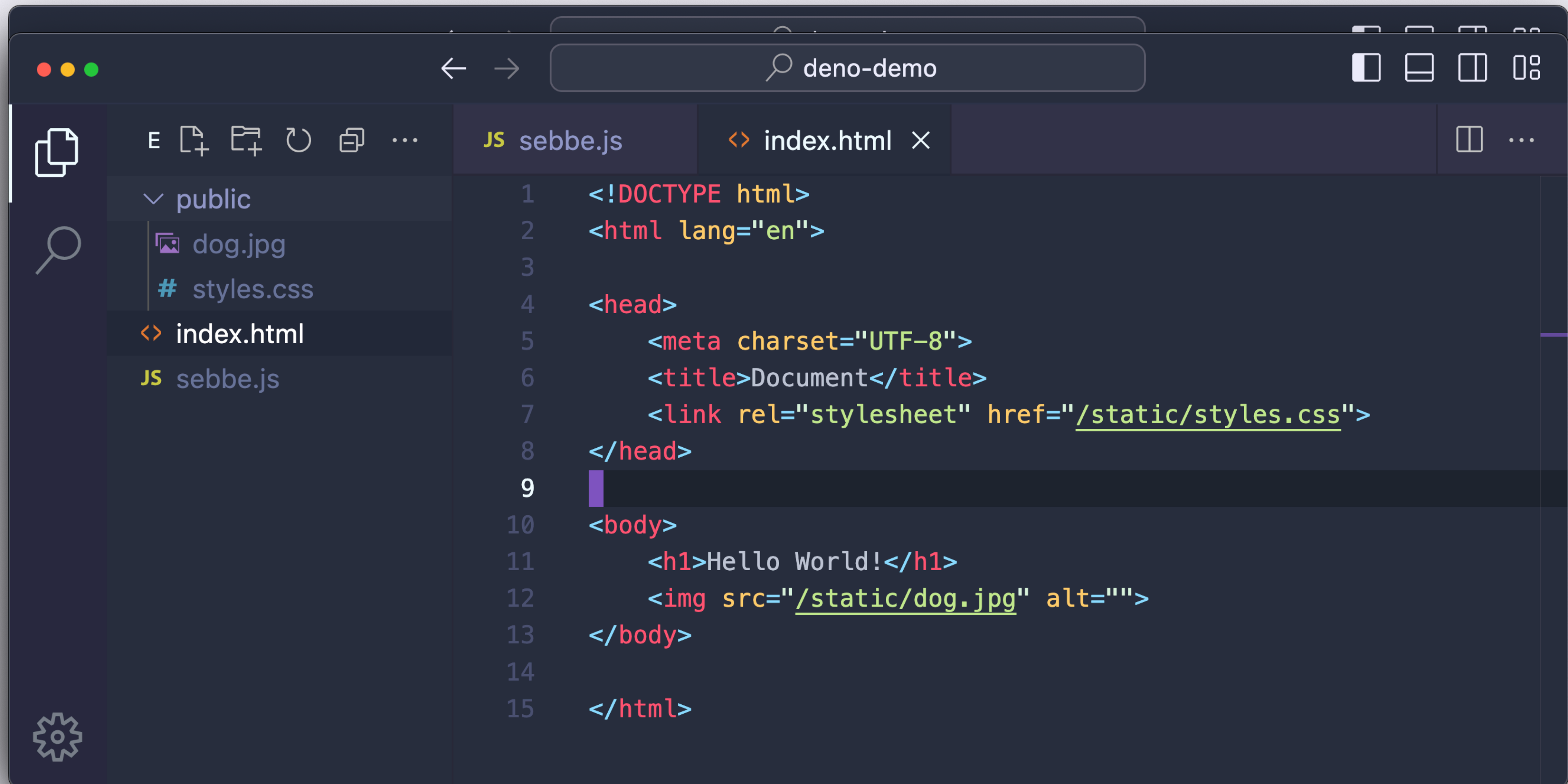
332 B / 922 B transferred

Finish: 17 ms

DOMContentLoaded: 6 ms

load: 13 ms

Särkilja det statiska innehållet



The image shows a web browser window with the address bar displaying "deno-demo". Below the browser, a code editor is open, showing the source code of the "index.html" file. The code is a simple HTML document with a head section containing meta, title, and link tags, and a body section containing a heading and an image tag. The code is syntax-highlighted, with tags in red, attributes in blue, and values in green. The file explorer on the left shows a "public" directory containing "dog.jpg", "styles.css", and "index.html".

```
1 <!DOCTYPE html>
2 <html lang="en">
3
4 <head>
5     <meta charset="UTF-8">
6     <title>Document</title>
7     <link rel="stylesheet" href="/static/styles.css">
8 </head>
9
10 <body>
11     <h1>Hello World!</h1>
12     
13 </body>
14
15 </html>
```

Särkilja det statiska innehållet

```
import { serveFile, serveDir } from "jsr:@std/http";

function handler(request) {
  if (request.url == "http://localhost:8000/"
    || request.url == "http://localhost:8000/home") {
    return serveFile(request, "index.html");
  }

  const opts = { fsRoot: "public", urlRoot: "static" };
  return serveDir(request, opts);
}

Deno.serve(handler);
```



Särkilja det statiska innehållet

Document

localhost:8000

150%

Hello World!



Inspector

Console

Debugger

Network

Style Editor

Performance

Memory

1

Filter URLs

||

+

Q

☒ Disable Cache

No Throttling ▾

All

HTML

CSS

JS

XHR

Fonts

Images

Media

WS

Other

Sta...	Met...	Domain	File	Initiator	Type	Transferred	Size	
200	GET	localhost:8000	/	document	html	420 B	247 B	
200	GET	localhost:8000	styles.css	stylesheet	css	359 B	75 B	
200	GET	localhost:8000	dog.jpg	img	jpeg	141,18 kB	140,93 kB	
404	GET	localhost:8000	favicon.ico	FaviconLoader...	plain	154 B	9 B	

Headers

Cookies

Request

Response

Timings

Filter Headers

Block

Resend

▶ GET http://localhost:8000/static/dog.jpg

Status

Version

Transferred

Referrer Policy

200 OK ?

HTTP/1.1

141,18 kB (140,93 kB size)

strict-origin-when-cross-origin

4 requests

141,26 kB / 142,12 kB transferred

Finish: 21 ms

☐ DOMContentLoaded: 1