

Aufgabe 2: Um wieviel ist das Laden des JavaScript Bundles chunk-vendors.a72f7e98.js schneller geworden? **um 12 ms**

Aufgabe 4: Wie lauten deine Pre-Cache Manifest Hashes von app vor und nach dem Hinzufügen der Überschrift?

Davor:

```
{  
  "revision": "5b6119bec1e3a52cb24a",  
  "url": "/js/app.4cc8b4c5.js"  
},
```

Danach:

```
{  
  "revision": "5256d4e17abfe50f7aaa",  
  "url": "/js/app.e682fbc1.js"  
},
```

Aufgabe 6: Füge im Client in der Datei service-worker.js die Route /employees dem Service Worker hinzu. Wähle: Network first. Benenne gleichzeitig den Cache, indem die Daten abgespeichert werden. Schalte außerdem den Logger ein.


The screenshot shows a web application interface on the left and the Chrome DevTools Application panel on the right. The web application has a header "Willkommen bei der Service Worker Untersuchung!!", a main image of a group of people, and a text area "Hier könnte Ihre Werbung stehen!" with a "Get Employees" button. The DevTools Application panel shows the "Cache" section with a list of cached resources. The "Cache Storage" section is expanded, showing a list of caches. The "Back-forward Cache" is selected, and the "Preview" tab is active, displaying a list of 20 employee records. The "Console" panel at the bottom is empty.

| # | Name | Response-... | Content-Ty... | Content-Le... | Time Cached | Vary Header |
|---|------------|--------------|---------------|----------------|-------------|----------------|
| 0 | /employees | | basic | application... | 0 | 1.12.2021, ... |

| id | gender | name | title | first | last |
|----|--------|-----------|-------|-----------|-----------|
| 1 | male | Lucas | Mr | Lucas | Garcia |
| 2 | male | Elijah | Mr | Elijah | Stokke |
| 3 | female | Erin | Miss | Erin | Bates |
| 4 | female | Brooklyn | Miss | Brooklyn | Walker |
| 5 | female | Megan | Mrs | Megan | Kutlay |
| 6 | female | Tara | Mrs | Tara | Storheim |
| 7 | male | Edgar | Mr | Edgar | Henderson |
| 8 | male | Hugh | Mr | Hugh | Shilton |
| 9 | male | Clifford | Mr | Clifford | Willis |
| 10 | female | Annabelle | Mrs | Annabelle | last |
| 11 | female | Ellenore | Mrs | Ellenore | Walstra |
| 12 | female | Karen | Miss | Karen | Solberg |
| 13 | male | Tomas | Mr | Tomas | Hernandez |
| 14 | female | Elsa | Mrs | Elsa | Mercier |
| 15 | female | Pihla | Miss | Pihla | Salmela |
| 16 | female | Sabina | Mrs | Sabina | Kruijs |
| 17 | female | Alisa | Mrs | Alisa | Ahonen |
| 18 | male | Tienne | Mr | Tienne | Gauthier |
| 19 | female | Nina | Mrs | Nina | Davies |
| 20 | female | Josephine | Mrs | Josephine | Richards |

| | |
|--|--|
| workbox | Precaching is responding to: /css/app.0241f0ea.css |
| workbox | Precaching is responding to: /css/chunk-vendors.5d3035bc.css |
| workbox | Precaching is responding to: /js/app.74437882.js |
| workbox | Precaching is responding to: /js/chunk-vendors.a72f7e98.js |
| workbox | Precaching is responding to: /img/employees.183434f7.jpg |
| workbox | Precaching is responding to: /service-worker.js |
| App is being served from cache by a service worker. For more details, visit https://goo.gl/AFskqB | |
| Service worker has been registered. | |
| workbox | Precaching is responding to: /manifest.json |
| Workbox is loaded | |
| ⚠ Service Worker was updated because "Update on reload" was checked in the DevTools Application panel. | |
| New content is downloading. | |
| workbox | Precaching 0 files. 29 files are already cached. |
| workbox | Router is responding to: /employees |
| workbox | Using NetworkFirst to respond to '/employees' |

Willkommen bei der Service Worker Untersuchung!!



Hier könnte Ihre Werbung stehen!

Get Employees

picture of employee

Name: Mr Lucas Garcia

Email: lucas.garcia@example.com

Phone: 05-65-50-52-66

Delete

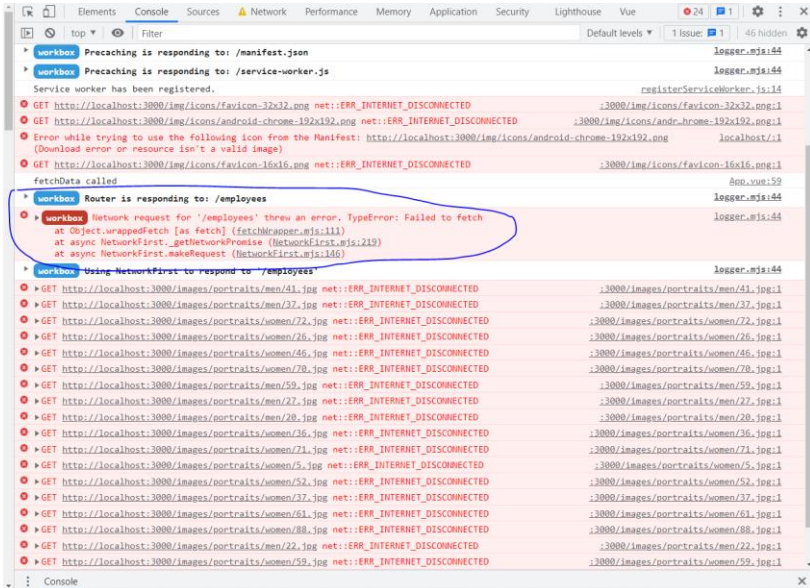
picture of employee

Name: Mr Elijah Stokke

Email: eljah.stokke@example.com

Phone: 58061332


Delete



Aufgabe 7: Überprüfe nun die Strategie Network first. Bei laufendem Server und aktivem Service Worker hole die Daten vom Server. Mache einen Screenshot (siehe nächste Seite).

Hier könnte Ihre Werbung stehen!

Get Employees

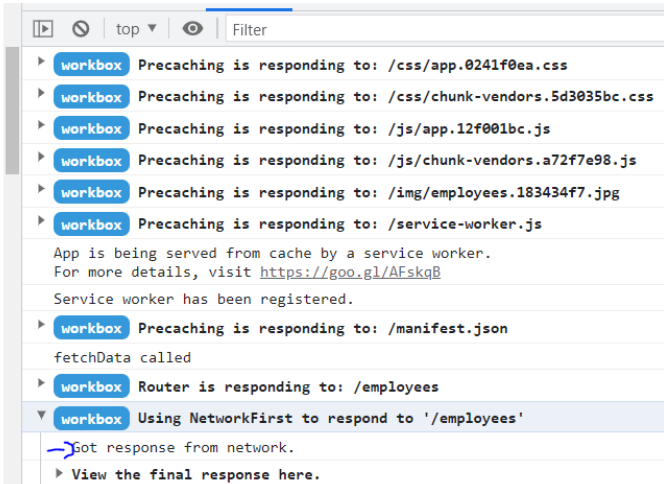


Name: Mr Haroon Younas

Email: lucas.garcia@example.com

Phone: 05-65-50-52-66

Delete



Hier könnte Ihre Werbung stehen!

Get Employees

picture of employee

Name: Mr Haroon Younas

Email: lucas.garcia@example.com

Phone: 05-65-50-52-66

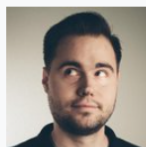
Delete

```
fetchData called
workbox Router is responding to: /employees
workbox Network request for '/employees' threw an error. TypeError: Failed to fetch
    at Object.wrappedFetch [as fetch] (fetchWrapper.mjs:111)
    at async NetworkFirst._getNetworkPromise (NetworkFirst.mjs:219)
    at async NetworkFirst.makeRequest (NetworkFirst.mjs:146)
workbox Using NetworkFirst to respond to '/employees'
    Unable to get a response from the network. Will respond with a cached response.
    Found a cached response in the 'haroons-cache' cache.
    View the final response here.
GET http://localhost:3000/images/portraits/men/41.jpg net::ERR_INTERNET_DISCONNECTED
GET http://localhost:3000/images/portraits/men/37.jpg net::ERR_INTERNET_DISCONNECTED
GET http://localhost:3000/images/portraits/women/72.jpg net::ERR_INTERNET_DISCONNECTED
GET http://localhost:3000/images/portraits/women/95.jpg net::ERR_INTERNET_DISCONNECTED
```

Aufgabe 8: Überprüfe nun selbstständig und analog zu dem vorigem Beispiel mit Screenshots die Strategie Cache first. Beschreibe deine Beobachtungen.

Hier könnte Ihre Werbung stehen!

Get Employees



Name: Mr Lucas Garcia

Email: lucas.garcia@example.com

Phone: 05-65-50-52-66

Delete

```
workbox Precaching is responding to: /css/app.0241f0ea.css
workbox Precaching is responding to: /css/chunk-vendors.5d3035bc
workbox Precaching is responding to: /js/app.12f001bc.js
workbox Precaching is responding to: /js/chunk-vendors.a72f7e98.
workbox Precaching is responding to: /img/employees.183434f7.jpg
App is being served from cache by a service worker.
For more details, visit https://goo.gl/AFskgB
workbox Precaching is responding to: /service-worker.js
workbox Precaching is responding to: /manifest.json
Service worker has been registered.
fetchData called
workbox Router is responding to: /employees
workbox Using CacheFirst to respond to '/employees'
```



Hier könnte Ihre Werbung stehen!

Get Employees

picture of employee

Name: Mr Lucas Garcia

Email: lucas.garcia@example.com

Phone: 05-65-50-52-66

Delete

picture of employee

```
workbox Precaching is responding to: /js/app.12f001bc.js
workbox Precaching is responding to: /js/chunk-vendors.a72f7e98.js
workbox Precaching is responding to: /img/employees.183434f7.jpg
App is being served from cache by a service worker.
For more details, visit https://goo.gl/AFskgB
workbox Precaching is responding to: /service-worker.js
workbox Precaching is responding to: /manifest.json
GET http://localhost:3000/img/icons/favicon-32x32.png net::ERR_INTERNET_DISCONNECTED
GET http://localhost:3000/img/icons/android-chrome-192x192.png net::ERR_INTERNET_DISCONNECTED
Error while trying to use the following icon from the Manifest: http://localhost:3000/img/icons/android-chrome-192x192.png (Download error or resource isn't a valid image)
GET http://localhost:3000/img/icons/favicon-16x16.png net::ERR_INTERNET_DISCONNECTED
fetchData called
workbox Router is responding to: /employees
workbox Using CacheFirst to respond to '/employees'
    Found a cached response in the 'haroons-cache' cache.
    View the final response here.
```

Beim NetworkFirst wurde geschaut, ob der Server erreichbar ist. Erst wenn der Server nicht erreichbar ist, erst danach benutzt er den Cache

Beim CacheFirst schaut es, ob ein Cache vorhanden ist und versucht ihn zu benutzen. Wenn kein Cache vorhanden ist, dann schickt es den Request an den Server.


Hier wähle am besten StaleWhileRevalidate.

Aufgabe 9: Hast du eine Idee wieso?

"stale-while-revalidate" ermöglicht es Ihnen, auf die Anforderung so schnell wie möglich mit einer zwischengespeicherten Cache zu antworten, falls verfügbar, und auf die Netzwerkanforderung zurückzugreifen, wenn sie nicht gecached ist. Die Netzwerkanforderung wird dann verwendet, um den Cache zu aktualisieren.

Aufgabe 10: Teste die neue Route online und offline!

Get Employees



Name: Mr Lucas Garcia
Email: lucas.garcia@example.com
Phone: 05-65-50-52-66

Application

Manifest

Service Workers

Storage

Storage

Local Storage

Session Storage

IndexedDB

Web SQL

Cookies

Trust Tokens

Cache

Cache Storage

workbox-precache-v2-http://localhost:3000/ - ht

haroons-cache - http://localhost:3000

haroons-image-cache - http://localhost:3000

Filter by Path

| # | Name | Response... | Content-T... | Content-L... | Time Cach... | Vary Head... |
|----|--------------------------------|-------------|--------------|--------------|---------------|--------------|
| 0 | /images/portraits/men/20.jpg | basic | image/jpeg | 4,726 | 2.12.2021,... | Origin |
| 1 | /images/portraits/men/22.jpg | basic | image/jpeg | 4,752 | 2.12.2021,... | Origin |
| 2 | /images/portraits/men/27.jpg | basic | image/jpeg | 4,051 | 2.12.2021,... | Origin |
| 3 | /images/portraits/men/37.jpg | basic | image/jpeg | 5,084 | 2.12.2021,... | Origin |
| 4 | /images/portraits/men/41.jpg | basic | image/jpeg | 4,254 | 2.12.2021,... | Origin |
| 5 | /images/portraits/men/59.jpg | basic | image/jpeg | 2,799 | 2.12.2021,... | Origin |
| 6 | /images/portraits/women/0.jpg | basic | image/jpeg | 4,857 | 2.12.2021,... | Origin |
| 7 | /images/portraits/women/26.jpg | basic | image/jpeg | 4,680 | 2.12.2021,... | Origin |
| 8 | /images/portraits/women/36.jpg | basic | image/jpeg | 5,093 | 2.12.2021,... | Origin |
| 9 | /images/portraits/women/37.jpg | basic | image/jpeg | 5,554 | 2.12.2021,... | Origin |
| 10 | /images/portraits/women/46.jpg | basic | image/jpeg | 5,782 | 2.12.2021,... | Origin |

workbox

Router is responding to: /images/portraits/men/22.jpg

Router is responding to: /images/portraits/women/59.jpg

Router is responding to: /images/portraits/women/0.jpg

Using StaleWhileRevalidate to respond to '/images/portraits/men/41.jpg'

Using StaleWhileRevalidate to respond to '/images/portraits/men/37.jpg'

Using StaleWhileRevalidate to respond to '/images/portraits/women/72.jpg'


Using StaleWhileRevalidate to respond to '/images/portraits/women/26.jpg'

Using StaleWhileRevalidate to respond to '/images/portraits/women/46.jpg'

Using StaleWhileRevalidate to respond to '/images/portraits/women/70.jpg'


Using StaleWhileRevalidate to respond to '/images/portraits/men/59.jpg'

Using StaleWhileRevalidate to respond to '/images/portraits/men/27.jpg'




Hier könnte Ihre Werbung stehen!

Get Employees



Name: Mr Lucas Garcia
Email: lucas.garcia@example.com
Phone: 05-65-50-52-66

Delete



Elements

Console

Sources

Network

Application

Performance

Memory

Security

Lighthouse

Filter

Default levels

1 issue

64 hidden

workbox

Precaching is responding to: /css/app.0241f0ea.css

Precaching is responding to: /css/chunk-vendors.5d935bc.css

Precaching is responding to: /js/app.12f001bc.js

Precaching is responding to: /js/chunk-vendors.a72f7e98.js

Precaching is responding to: /img/employees.183434f7.jpg

Precaching is responding to: /service-worker.js

App is being served from cache by a service worker.
For more details, visit https://goo.gl/8e-shu8

workbox

Precaching is responding to: /manifest.json

GET http://localhost:3000/img/icons/favicon-32x32.png net::ERR_INTERNET_DISCONNECTED

GET http://localhost:3000/img/icons/favicon-16x16.png net::ERR_INTERNET_DISCONNECTED

GET http://localhost:3000/img/icons/android-chrome-192x192.png net::ERR_INTERNET_DISCONNECTED

Error while trying to use the following icon from the Manifest: http://localhost:3000/img/icons/android-chrome-192x192.png (Download error or resource isn't a valid image)

fetchData called

workbox

Router is responding to: /employees

Using CacheFirst to respond to '/employees'

Router is responding to: /images/portraits/men/41.jpg

Router is responding to: /images/portraits/men/37.jpg

Router is responding to: /images/portraits/women/72.jpg

Using StaleWhileRevalidate to respond to '/images/portraits/men/41.jpg'