Implementation:

Fetch Event

- You can track and manage page network traffic with this event.
- You can check existing cache, manage “cache first” and “network first” requests and return a response that you want.

```
self.addEventListener('fetch', function(event) {
    console.log('fetch successfull');
});
```

Sync Event

- Background Sync is a Web API that is used to delay a process until the Internet connection is stable.
- We can adapt this definition to the real world; there is an e-mail client application that works on the browser and we want to send an email with this tool.
- Internet connection is broken while we are writing e-mail content and we didn’t realize it.
- When completing the writing, we click the send button.

```
self.addEventListener('sync', function(event) {
    console.log('Sync successfull');
});
```

Push Event

- This is the event that handles push notifications that are received from the server.
- You can apply any method with received data.

Sw.js file

```
self.addEventListener('install', function(event) {
  console.log('service worker has been installed');
});


self.addEventListener('activate', function(event) {
  console.log('service worker has been activated');
});
```

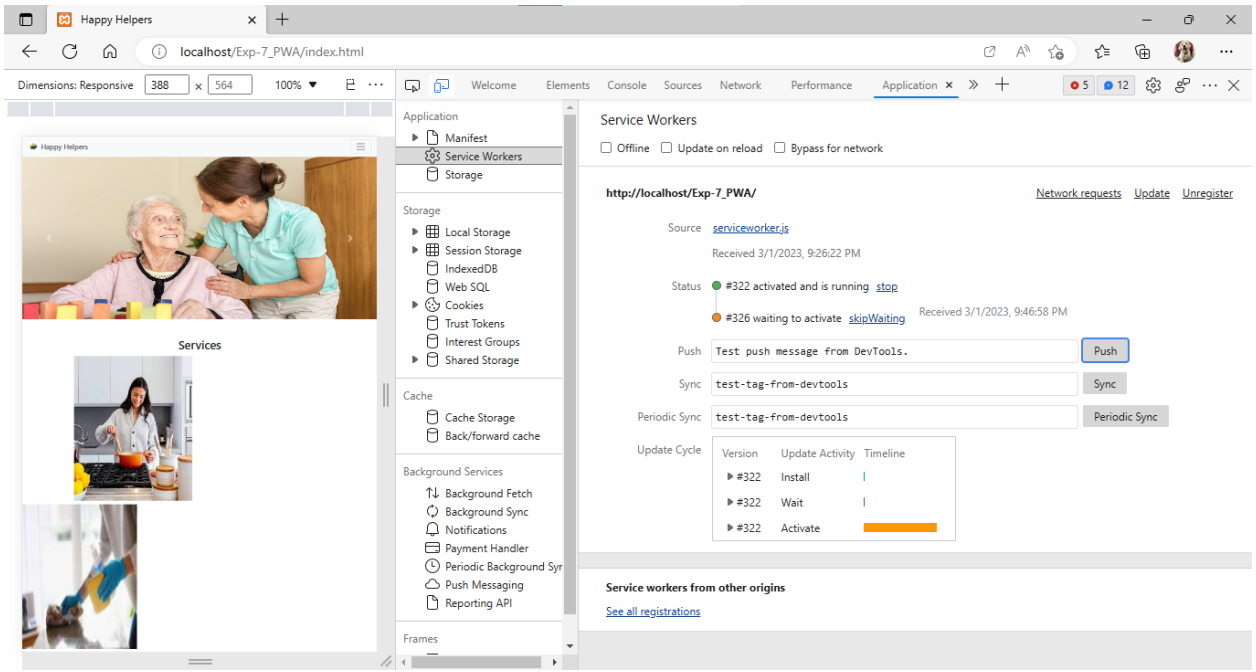
```
self.addEventListener('sync', function(event) {
   console.log('Sync successfull');
});

self.addEventListener('fetch', function(event) {
   console.log('fetch successfull');
});


self.addEventListener('push', (event) => {
   const options = {
      body: 'This notification was generated from a push!',
      icon: '',
      data: {
         dateOfArrival: Date.now(),
         primaryKey: '2'
      },
      actions: [{
            action: 'explore',
            title: 'Explore this new world',
            icon: ''
         },
         {
            action: 'close',
            title: 'Close',
            icon: ''
         },
      ]
   };
   event.waitUntil(
      self.registration.showNotification('Title', options)
   )
});
```

Output

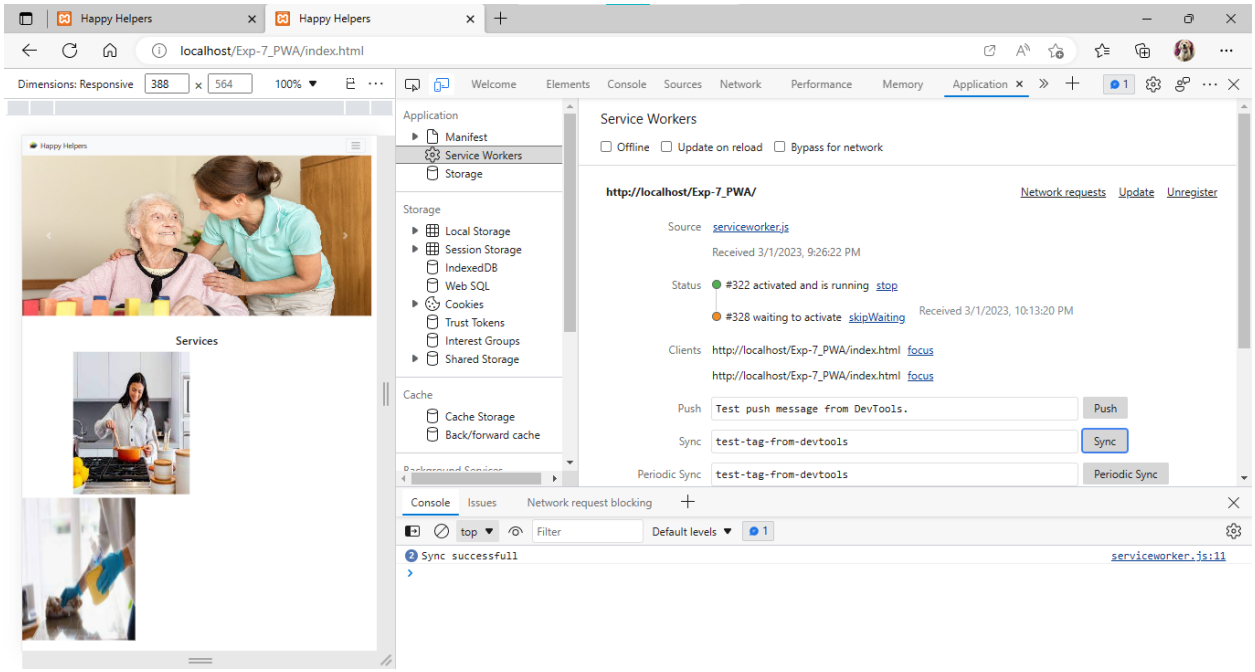
- **Fetch Event**

```
service worker registered ▶ ServiceWorkerRegistration
service worker has been installed
3 fetch successfull
>
```

- **Push Event**



- **Sync Event**



Conclusion: In this experiment, we studied fetch, sync and push events. We can track and manage page network traffic with this event. Background Sync is a Web API that is used to delay a process until the Internet connection is stable. Push event handles push notifications that are received from the server. We successfully implemented fetch, sync and push events work for Service Workers.