

PWA EXP No : 89

Aim : To implement service worker events like fetch sync and push for Fundraising PWA

Theory :

Fetch Event : you can track and manage page network traffic with this event. you can check existing cache. Man first and network first requests and return a response that you want.

- cache first : In this function if the received request has cached before the cached response is returned to the page. But if not, a new response requested from network.

- Network first : In this function firstly we can try getting an updated response from the network. If this process completed successfully the new response will be cached and returned. But if the process fails, we check whether the request has been cleared / cached before not. If cache exists it is returned to the page but if not this is up to you. you can return dummy content or information message to the page.

Sync Event : Background Sync is a web API that is used to delay a process until the internet

connection is stable. we can adopt this definition to the real world: there is an email client application that works on the browser and we want to send an email with the tool. internet connection is broken while we are writing content and we didn't receive it when completed. The writing we click the send button.

Push Event: This is the event that handles push notification that received from the server. you can apply any method with received data. you can handle push notification with the event. In this example.

conclusion: we implemented advanced service worker events which now offers better offline handling, automatic background sync and real-time push notification. This enhances user, making it true PWA with modern capabilities.

Aim: To implement Service worker events like fetch, sync and push for E-commerce PWA.

Storage

Storage

Local storage

Local storage

Extension storage

IndexedDB

Cookies

Private state tokens

Interest groups

Shared storage

Cache storage

Storage buckets

Background services

Back/forward cache

Background fetch

Background sync

Bounce tracking mitigati...

Notifications

Payment handler

Periodic background sync

Speculative loads

Push messaging

Reporting API

Frames

top

http://localhost:5173/

Network requ

Source dev-sw.js

Received 4/11/2025, 9:55:49 PM

Status ● #78 activated and is running Stop

Clients http://localhost:5173/

Push Test push message from DevTools. Push

Sync test-tag-from-devtools Sync

Periodic sync test-tag-from-devtools Periodic sync

Update Cycle

Version	Update Activity	Timeline
▶ #78	Install	
▶ #78	Wait	
▶ #78	Activate	█

Service workers from other origins

See all registrations

Make the following changes to the service-worker.js

- // Install Event: Cache assets
- // Activate Event: Cleanup old caches
- // Fetch Event: Supports both Cache-First & Network-First
- // Sync Event: Retry sending data when online
- // Function to send pending screenshots to the server
- // Push Event: Display push notifications



Conclusion: We implemented the functionality of offline web cache capture so that in the absence of a stable internet connection, the app would display a generic waiting page.