

Name- Vidhi Gulhane

D15B,15

PWA exp 9

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

```
pwa-main > JS service-worker.js > ...
12 self.addEventListener('install', event => {
16 |   self.skipWaiting();
17 | });
18
19 // Activate
20 self.addEventListener('activate', event => {
21 |   event.waitUntil(
22 |     caches.keys().then(keys =>
23 |       Promise.all(keys.map(key => {
24 |         if (key !== CACHE_NAME) {
25 |           return caches.delete(key);
26 |         }
27 |       }))
28 |   );
29 |   self.clients.claim();
30 | });
31
32
33 // Fetch
34 self.addEventListener('fetch', event => {
35 |   event.respondWith(
36 |     caches.match(event.request).then(cachedResponse => {
37 |       // Serve from cache if available
38 |       if (cachedResponse) return cachedResponse;
39 |
40 |       // Try fetching from network
41 |       return fetch(event.request).catch(() => {
42 |         // Fallback only for navigation (HTML page loads)
43 |         if (event.request.mode === 'navigate') {
44 |           return caches.match('/offline.html');
45 |         }
46 |       });
47 |     });
48 |   );
49 | });
```

Make the following changes to the service-worker.js

// Install Event: Cache assets

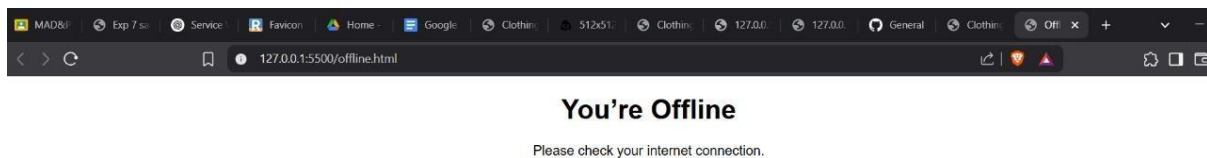
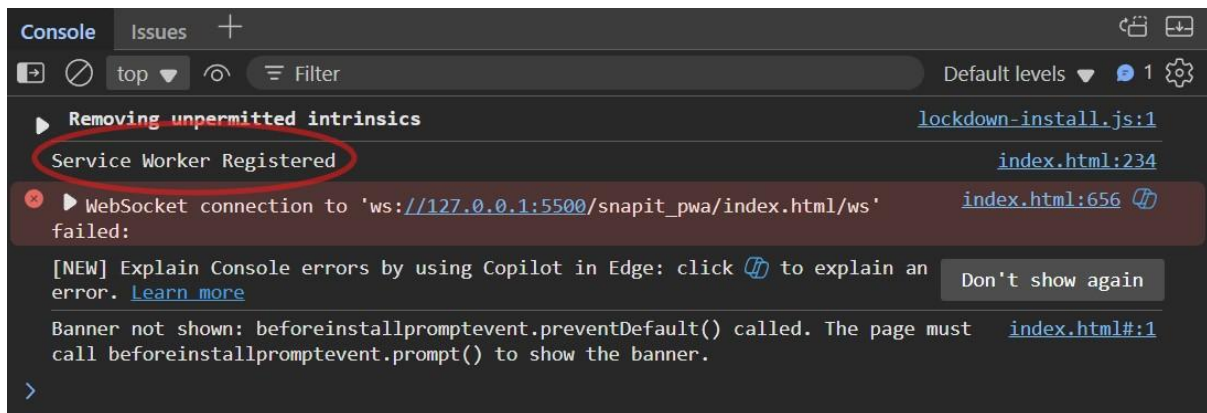
// Activate Event: Cleanup old caches

// 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.