

## **MAD lab 9**

### **1 Install Event: Cache Assets**

- During the `install` event, essential assets such as HTML, CSS, JavaScript, and images are stored in the cache.
- This ensures the application can load quickly and function offline if needed.

### **2 Activate Event: Cleanup Old Caches**

- When a new service worker is activated, outdated caches from previous versions are deleted.
- This prevents unnecessary storage usage and ensures users always receive the latest updates.

### **3 Fetch Event: Supports Both Cache-First & Network-First Strategies**

- If the requested resource is available in the cache, it is served immediately (cache-first strategy).
- If not, a network request is made, and the response is stored in the cache for future use (network-first strategy).
- This approach improves performance and ensures availability even when offline.

### **4 Sync Event: Retry Sending Data When Online**

- If the user submits data while offline (e.g., form submissions or transactions), the service worker stores it locally.
- When the device reconnects to the internet, the stored data is automatically sent to the server.
- This ensures a seamless user experience and prevents data loss.

### **5 Function to Send Pending Screenshots to the Server**

- Screenshots or other pending media files captured while offline are temporarily stored.
- When an internet connection is restored, these files are automatically uploaded to the server.
- This guarantees that critical data is not lost due to connectivity issues.

## 6 Push Event: Display Push Notifications

- The service worker listens for push notifications from the server.
- When a notification is received, it displays a system notification to the user.
- This helps keep users engaged by providing real-time updates.

[http://127.0.0.1:5500/snapit\\_pwa/](http://127.0.0.1:5500/snapit_pwa/) [Network requests](#) [Update](#) [Unregister](#)

Source [service-worker.js](#)

Received 17/3/2025, 11:32:18 pm

Status ● #3147 activated and is running [Stop](#)

Clients [http://127.0.0.1:5500/snapit\\_pwa/index.html#](http://127.0.0.1:5500/snapit_pwa/index.html#) [↗](#)

Push  [Push](#)

Sync  [Sync](#)

Periodic sync  [Periodic sync](#)

Update Cycle

Version	Update Activity	Timeline
▶ #3147	Install	
▶ #3147	Wait	
▶ #3147	Activate	<div style="width: 100px; height: 10px; background-color: yellow;"></div>

