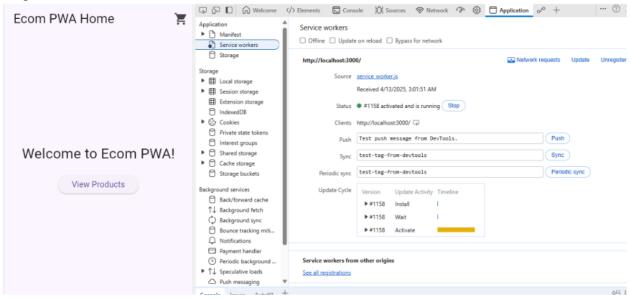
EXPERIMENT 8	
Name	DIMPLE DALWANI
Class_Roll no	D15C_8
DOP	
DOS	
Grade	
Sign	

<u>Aim</u>:To code and register a service worker, and complete the install and activation process for a new service worker for the E-commerce PWA.

Github link: https://github.com/dimpledalwani/flutter-ecom-pwa1.git

<u>Theory</u>: The **service worker** is a JavaScript file that runs in the background and plays a vital role in enabling offline capabilities, caching, and background processes in a **Progressive Web App (PWA)**. In an e-commerce PWA, coding and registering a service worker involves defining its lifecycle events—**install**, **activate**, and **fetch**—to handle asset caching and content delivery. The registration is done in the main JavaScript file using navigator.serviceWorker.register(). During the **install phase**, essential files are cached, and in the **activation phase**, old caches are cleared. This ensures that users can access the e-commerce site even without an internet connection, improving speed, reliability, and performance.

Output:



<u>Conclusion</u>:In conclusion, successfully coding and registering a service worker, along with completing its install and activation phases, is a fundamental step in turning an e-commerce site into a PWA. It significantly enhances the app's functionality by enabling offline access, faster load times, and smoother user interactions. This strengthens user trust and retention, making the e-commerce platform more robust and user-friendly.