Experiment 8	
Name	Pratik Manish Patil
Roll No	40
DOP	
DOS	
Sign	
Grade	

Aim: To code and register a service worker, and complete the install and activation process for a new service worker for the PWA.

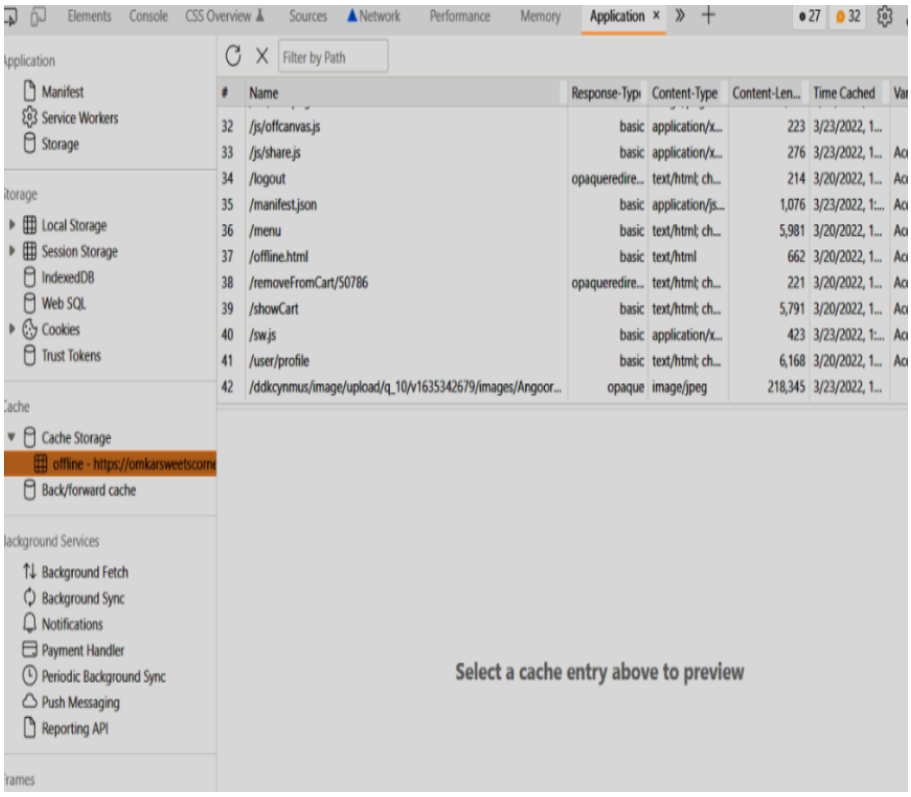
Theory:

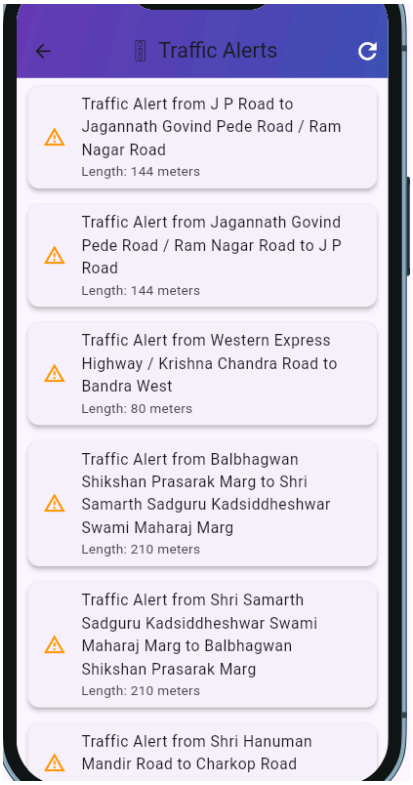
A Service Worker is a type of web worker script that runs in the background, separate from the main browser thread. It plays a key role in enabling Progressive Web App (PWA) features like offline support, background sync, and push notifications.

When a service worker is registered, it goes through three phases:
1. Install – Triggered once when the service worker is installed for the first time. Used to cache necessary assets.
2. Activate – Triggered when the service worker takes control of the page. Typically used for clearing out old caches.
3. Fetch – Intercepts network requests and serves cached responses if available, enabling offline access.

These features help improve performance, reliability, and user experience, especially in unstable or no network conditions.

Output:





Conclusion:

In this experiment, we implemented a Service Worker in our PWA to enhance performance and offline functionality. We successfully coded, registered, and completed the install and activate phases. This setup ensures that our app can cache key resources, load faster, and work in low or no network conditions, ultimately offering a more reliable and app-like experience to users..