Name: Rushikesh Yeole Class: D15B Roll_no: 72

Experiment 8

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

Theory:

Service Worker:

A service worker is a type of web worker, a JavaScript file that runs in the background separate from the main browser thread. It enables functionalities such as push notifications, background sync, and caching, making Progressive Web Apps (PWAs) more reliable and engaging.

Key features of service workers include:

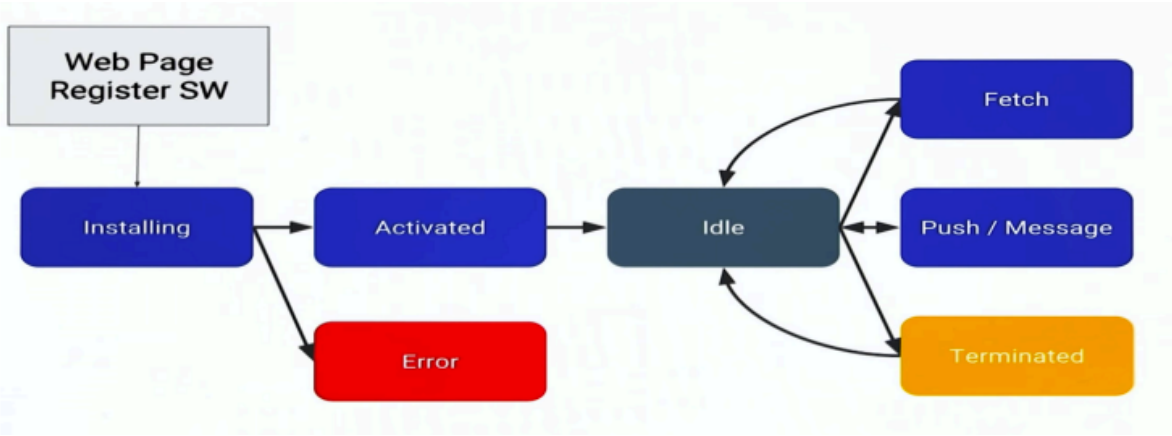
1. Background Processing: Service workers run independently of the main browser thread, allowing them to handle tasks such as fetching resources, intercepting network requests, and managing caches.

2. Offline Capabilities: By intercepting network requests, service workers can implement offline caching strategies, enabling PWAs to work even when the user is offline or has a poor network connection.

3. Push Notifications: Service workers can receive push notifications from a server, allowing PWAs to send timely updates or notifications to users, even when the PWA is not actively open in the browser.

4. Improved Performance: By caching resources and assets, service workers can improve the performance of PWAs by reducing network requests and enabling faster load times.

Service worker cycle



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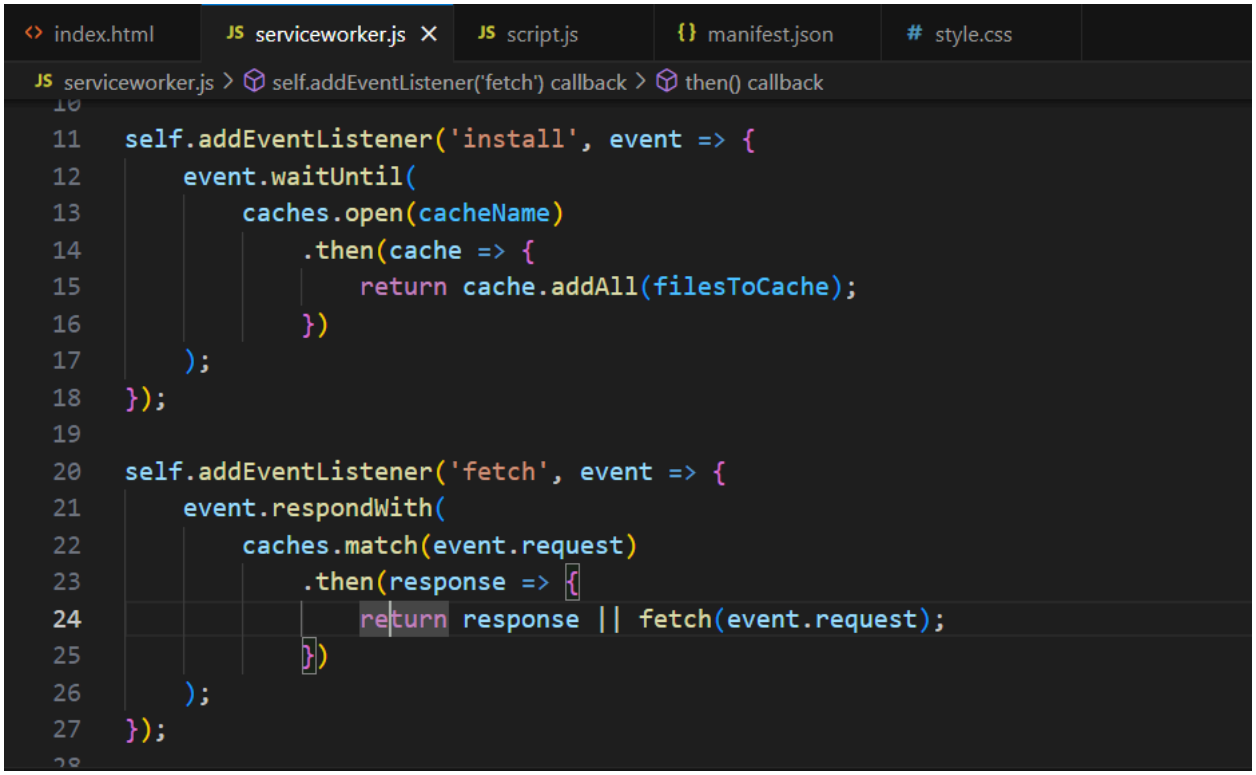
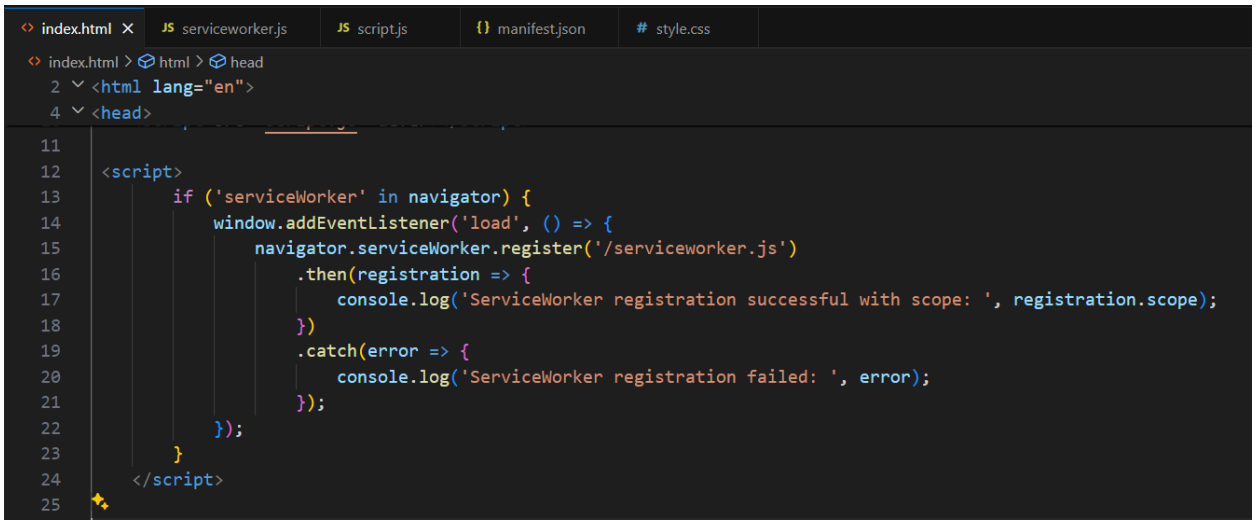
Steps for coding and registering a service worker for your E-commerce PWA completing the install and activation process:

1. Create the Service Worker File (service-worker.js)



2. Register the Service Worker: In your main JavaScript file (e.g., main.js or app.js), add the following code:



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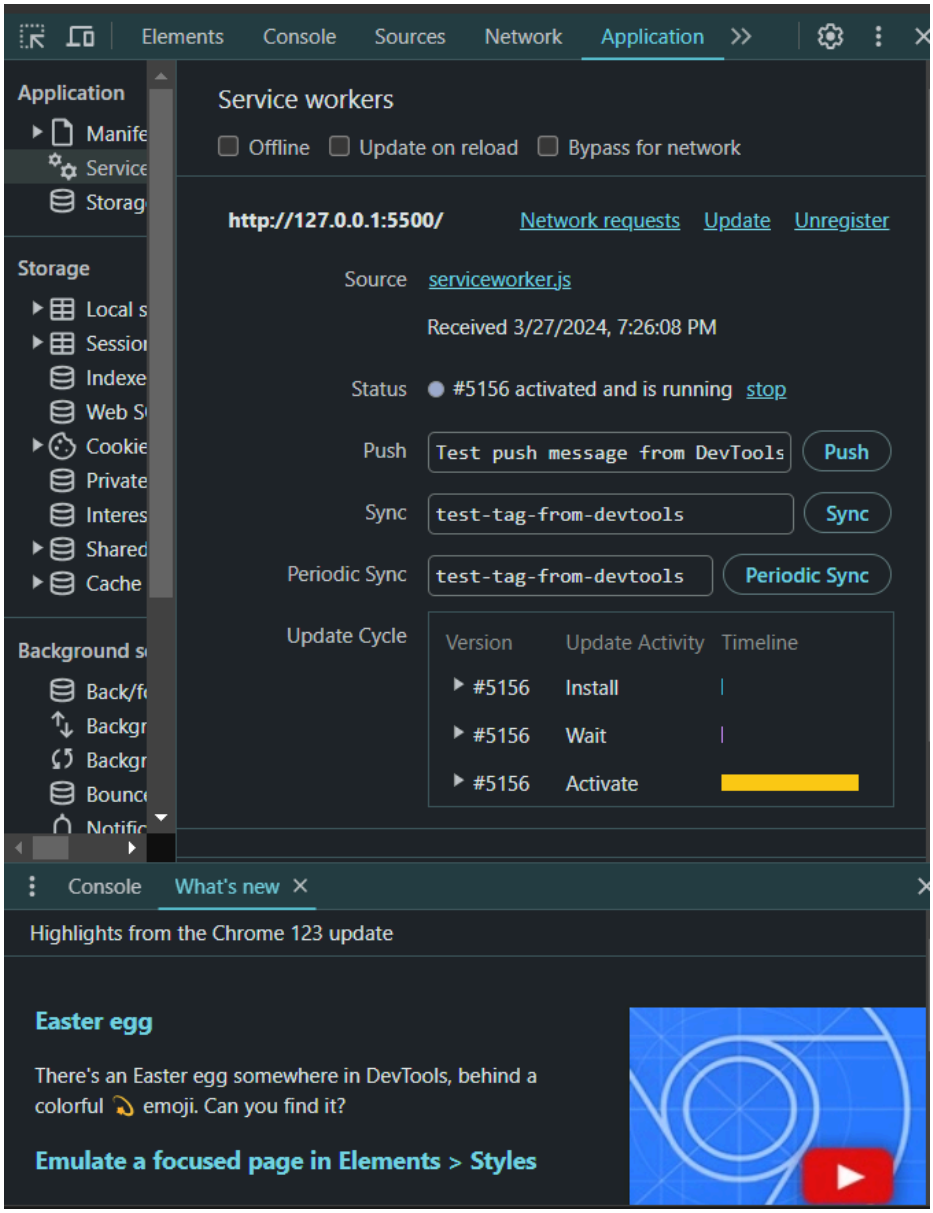
Output



Conclusion : I have understood and successfully registered a service worker, and completed the install and activation process for a new service worker for the E-commerce PWA.