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D15B / 43
MPL PRACTICAL 8

Service Worker Registration: Handles installation and activation processes.

1. Register the Service Worker

1. Open `main.jsx` (or wherever React renders the app).
2. Import the `registerSW` function from `virtual:pwa-register`.
3. Call `registerSW()` to activate the service worker.
4. This ensures that the app works offline and updates correctly.

2. Verify PWA Installation

1. Start the Vite development server.
2. Open Chrome DevTools (`F12`) → Go to **Application** → **Manifest**.
3. Check if the **Install** button appears in the address bar.
4. Install the app and check if it works like a standalone application.

3. Test Service Worker Activation

1. Open Chrome DevTools → **Application** → **Service Workers**.
2. Check if the service worker is registered.
3. Enable **Offline mode** and refresh the page to test caching.
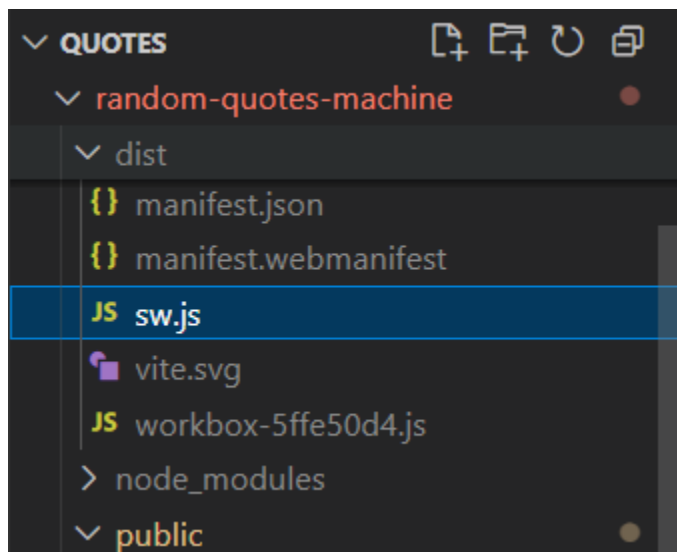4. If the app loads, the service worker is working successfully.

npm run build

npm run preview

Open the preview URL in your browser (usually http://localhost:4173)

File tree:
```
> dev-dist
> node_modules
> public
v src
    AddTask.jsx
  # App.css
    App.jsx
    ExpandableTask.jsx
    main.jsx
  (i) Readme.txt
    Search.jsx
    Task.jsx
    TaskList.jsx
  .eslintrc.cjs
  .gitignore
  <> index.html
  {} package-lock.json
  {} package.json
  (i) README.md
    vite.config.js
```

```jsx
1   import React from "react";
2   import ReactDOM from "react-dom/client";
3   import App from "./App.jsx";
4
5   // Register the service worker with a prompt for updates
6   import { registerSW } from "virtual:pwa-register";
7
8   const updateSW = registerSW({
9     onNeedRefresh() {
10      if (confirm("New version available. Reload now?")) {
11        location.reload();
12      }
13    },
14    onOfflineReady() {
15      console.log("App is ready to work offline!");
16    },
17  });
18
19  ReactDOM.createRoot(document.getElementById("root")).render(
20    <React.StrictMode>
21      <App />
22    </React.StrictMode>
23  );
24
```

```
v QUOTES
  v random-quotes-machine
    v dist
      {} manifest.json
      {} manifest.webmanifest
      JS sw.js
      vite.svg
      JS workbox-5ffe50d4.js
    > node_modules
    v public
```

have been impressed with the urgency of

Knowing is not enough; we must apply.

willing is not enough; we must do. **"**

lo da Vinci

Change Qoute

---

localhost:4173

Welcome | Elements | Console | Sources | Application | +

Application
- ▶ 📄 Manifest
- 🔧 Service workers
- 🗃 Storage

Storage
- ▶ ⊞ Local storage
- ▶ ⊞ Session storage
- ⊞ Extension storage
- 🗃 IndexedDB
- ▶ 🗃 Cookies
- 🗃 Private state tokens
- 🗃 Interest groups
- ▶ 🗃 Shared storage
- ▶ 🗃 Cache storage
- 🗃 Storage buckets

Background services
- 🗃 Back/forward cache
- ↑↓ Background fetch
- ↻ Background sync
- 🗃 Bounce tracking mitigati...
- 🔔 Notifications
- 🗃 Payment handler
- 🕐 Periodic background sync
- ↑↓ Speculative loads
- 🗃 Push messaging

Service workers

☐ Offline ☐ Update on reload ☐ Bypass for network

http://localhost:4173/　　　　　　　🖵 Network requests　　Update　　Unregister

Source　sw.js
　　　　　Received 8/4/2025, 9:49:59 pm

Status　● #1108 activated and is running　[Stop]

Clients　http://localhost:4173/ 🖵

Push　[Test push message from DevTools.]　[Push]

Sync　[test-tag-from-devtools]　[Sync]

Periodic sync　[test-tag-from-devtools]　[Periodic sync]

Update Cycle

Version	Update Activity	Timeline
▶ #1108	Install	▎
▶ #1108	Wait	▎
▶ #1108	Activate	▄▄▄▄

Service workers from other origins

See all registrations