

Progressive Web App Development

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Service Workers

The screenshot shows a web browser at localhost:8080 displaying a COVID-19 dashboard. The dashboard has a title "COVID-19" and a subtitle "Spread of Coronavirus in INDIA". Below the title, there are three buttons: "INFECTED", "DEATHS", and "CURED". Under "INFECTED" is the number "560", under "DEATHS" is "12", and under "CURED" is "100". At the bottom, there are three buttons: "NEWS", "PRECAUTIONS", and "HELPLINE NO.". The browser's developer console shows the following log:

```
service worker installed sw.js:12
InstallEvent {isTrusted: true, type: "install", target: ServiceWorkerGlobalScope, currentTarget: ServiceWorkerGlobalScope, eventPhase: 2, ...}
registration script.js:5
service worker activated sw.js:16
ExtendableEvent {isTrusted: true, type: "activate", target: ServiceWorkerGlobalScope, currentTarget: ServiceWorkerGlobalScope, eventPhase: 2, ...}
```

The screenshot shows the same COVID-19 dashboard as above, but the browser's developer console now shows the "service worker activated" event. The log is as follows:

```
service worker installed sw.js:12
InstallEvent {isTrusted: true, type: "install", target: ServiceWorkerGlobalScope, currentTarget: ServiceWorkerGlobalScope, eventPhase: 0, bubbles: false, cancelable: false, defaultPrevented: false, composed: false, timeStamp: 0, srcElement: ServiceWorkerGlobalScope, returnValue: true, cancelBubble: false, path: [], __proto__: InstallEvent}
service worker activated sw.js:16
ExtendableEvent {isTrusted: true, type: "activate", target: ServiceWorkerGlobalScope, currentTarget: ServiceWorkerGlobalScope, eventPhase: 0, bubbles: false, cancelable: false, defaultPrevented: false, composed: false, timeStamp: 0, srcElement: ServiceWorkerGlobalScope, returnValue: true, cancelBubble: false, path: [], __proto__: ExtendableEvent}
registration script.js:5
```

localhost:8080

AppsDESIGNanimatePHPCMSAIAimeassignmentWebApp

COVID-19

Spread of Coronavirus in INDIA

INFECTED

560

DEATHS

12

CURED

100

NEWS

PRECAUTIONS

HELPLINE NO.

Elements

Application

Manifest

Service Workers

Clear storage

Storage

Local Storage

Session Storage

IndexedDB

Web SQL

Cookies

Cache

Cache Storage

Application Cache

Background Services

Background Fetch

Background Sync

Notifications

Payment Handler

Push Messaging

Frames

top

Console

Sources

Network

Application

Other bookmarks

Service Workers

Offline

Update on reload

Bypass for network

http://localhost:8080/

Update

Unregister

Source

sw.js

Received 3/26/2020, 4:30:02 PM

Status

#752 activated and is running

stop

Clients

http://localhost:8080/

focus

Push

Test push message from DevTool!

Push

Sync

test-tag-from-devtools

Sync

Service workers from other origins

Caching and Offline Functionality with Service Workers

The screenshot shows a web browser at localhost:8080 displaying a COVID-19 dashboard. The dashboard has a title "COVID-19 Spread of Coronavirus in INDIA" and three main statistics: INFECTED (560), DEATHS (12), and CURED (100). Below these are three buttons: NEWS, PRECAUTIONS, and HELPLINE NO. The browser's Application tab is open, showing a table of cached resources.

#	Name	Respo...	Conte...	Conte...	Time C...
0	/index.html	basic	text/ht...	2,659	3/26/2...
1	/offline.html	basic	text/ht...	121	3/26/2...
2	/scripts/script.js	basic	applic...	347	3/26/2...
3	/sw.js	basic	applic...	1,004	3/26/2...

Total entries: 4

The screenshot shows the same COVID-19 dashboard as above, but with a more detailed view of the Service Worker cache. The dashboard statistics are the same: INFECTED (560), DEATHS (12), and CURED (100). The browser's Application tab is open, showing a table of cached resources.

#	Name	Response-Type	Content-Type	Content-Length	Time Cached
0	/	basic	text/html; charset=UTF...	2,659	3/26/2020, 5:44:16 PM
1	/index.html	basic	text/html; charset=UTF...	2,659	3/26/2020, 5:54:27 PM
2	/offline.html	basic	text/html; charset=UTF...	121	3/26/2020, 5:54:27 PM
3	/scripts/script.js	basic	application/javascript; ...	347	3/26/2020, 5:54:27 PM
4	/sw.js	basic	application/javascript; ...	1,004	3/26/2020, 5:54:27 PM
5	/npm/popper.js@1.16.0/dist/umd/popper.min.js	cors	application/javascript; ...	0	3/26/2020, 5:44:17 PM
6	/jquery-3.4.1.slim.min.js	cors	application/javascript; ...	24,328	3/26/2020, 5:44:18 PM
7	/bootstrap/4.4.1/css/bootstrap.min.css	cors	text/css; charset=utf-8	23,681	3/26/2020, 5:44:19 PM
8	/bootstrap/4.4.1/js/bootstrap.min.js	cors	text/javascript; charset...	15,919	3/26/2020, 5:44:19 PM

Total entries: 9

Updating the Cache

COVID-19
Spread of Coronavirus in INDIA

INFECTED 560 DEATHS 12 CURED 100

Service Worker was updated because "Update on reload" was checked in the DevTools Application panel.
Deleting cache: ver1
Service worker registered. > ServiceWorkerRegistration

COVID-19
Spread of Coronavirus in INDIA

INFECTED 560 DEATHS 12 CURED 100

#	Name	Response-Type	Content-Type	Content-Length	Time Cached
0	/	basic	text/html; charset=U...	2,879	3/26/2020, 6:33:55 PM
1	/manifest.json	basic	application/json; cha...	191	3/26/2020, 6:34:03 PM
2	/scripts/scripts.js	basic	application/javascrip...	359	3/26/2020, 6:33:56 PM
3	/npm/popper.js@1.16.0/dist/umd/popper.min.js	cors	application/javascrip...	0	3/26/2020, 6:33:56 PM
4	/jquery-3.4.1.slim.min.js	cors	application/javascrip...	24,328	3/26/2020, 6:34:01 PM
5	/bootstrap/4.4.1/css/bootstrap.min.css	cors	text/css; charset=utf-8	23,681	3/26/2020, 6:33:57 PM
6	/bootstrap/4.4.1/js/bootstrap.min.js	cors	text/javascript; chars...	15,919	3/26/2020, 6:33:58 PM

Total entries 7

localhost:8080

Apps DESIGN animate PHP CMS AI Anime assignment WebApp Other bookmarks

COVID-19

Spread of Coronavirus in INDIA

INFECTED

DEATHS

CURED

56012100

Elements Console Sources Network Performance Memory Application Security Audits

Application

- Manifest
- Service Workers**
- Clear storage

Storage

- Local Storage
- Session Storage
- IndexedDB
- Web SQL
- Cookies

Cache

- Cache Storage
 - version2 - http://localhost:8080

Service Workers

☐ Offline ☒ Update on reload ☐ Bypass for network

http://localhost:8080/ [Update](#) [Unregister](#)

Source `sw_cache_update.js`

Received 3/26/2020, 6:33:54 PM

Status ● #815 activated and is running [stop](#)

Clients [http://localhost:8080/](#) [focus](#)

Push

Sync

Going Offline

localhost:8080

Apps DESIGN animate PHP CMS AI Anime assignment WebApp Other bookmarks

COVID-19

Spread of Coronavirus in INDIA

INFECTED

DEATHS

CURED

56012100

Elements Console Sources Network Performance Memory Application Security Audits

Application

- Manifest
- Service Workers**
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Storage

- Local Storage
- Session Storage
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- Web SQL
- Cookies

Cache

- Cache Storage
 - version2 - http://localhost:8080

Service Workers

☒ Offline ☒ Update on reload ☐ Bypass for network

http://localhost:8080/ [Update](#) [Unregister](#)

Source `sw_cache_update.js` ● **4**

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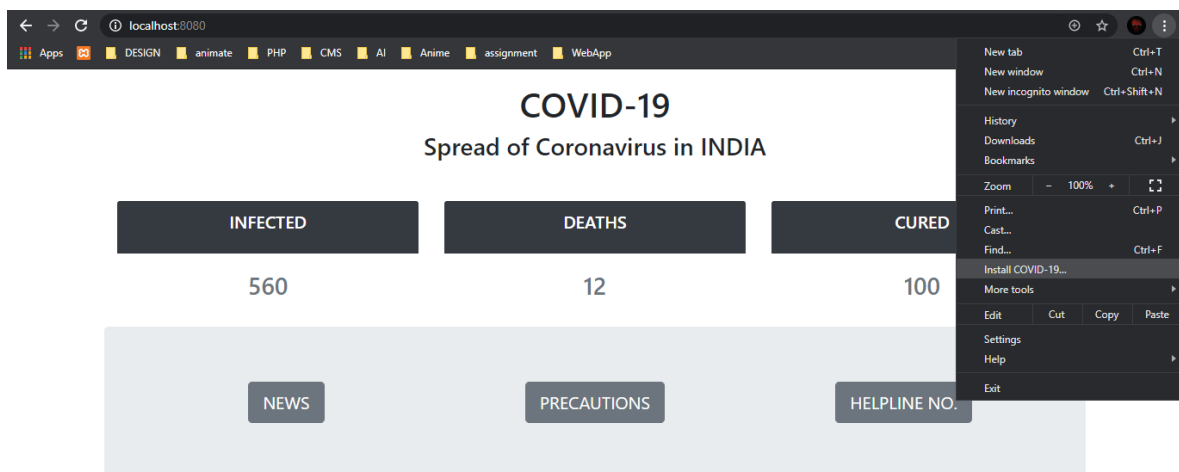
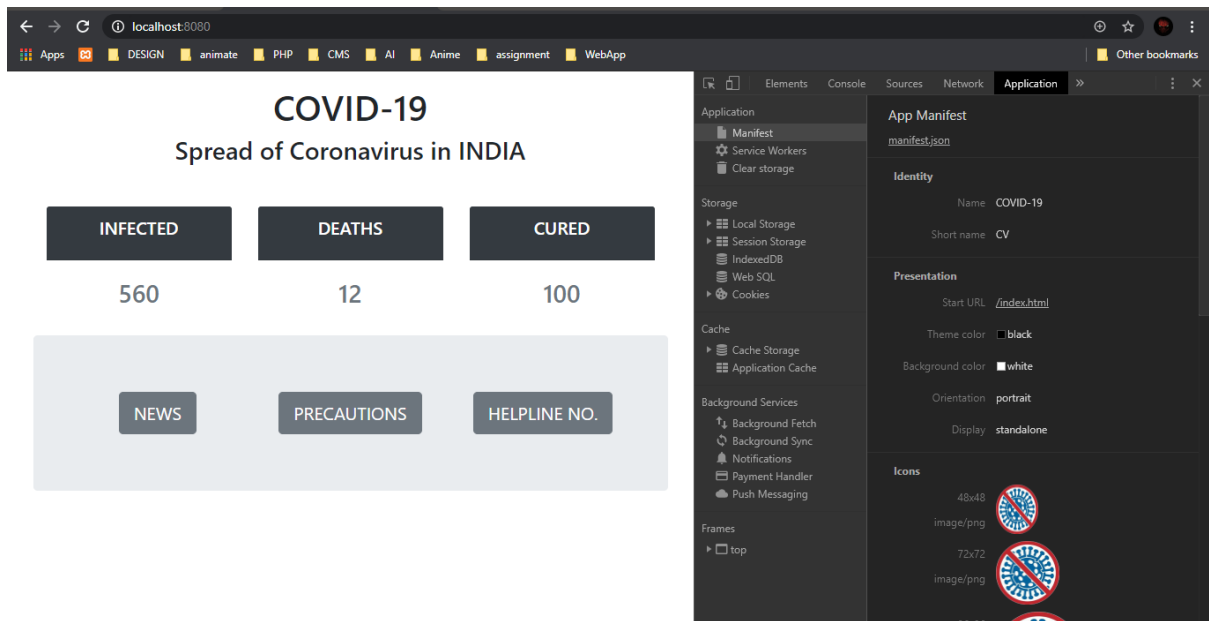
Status ● #826 activated and is running [stop](#)

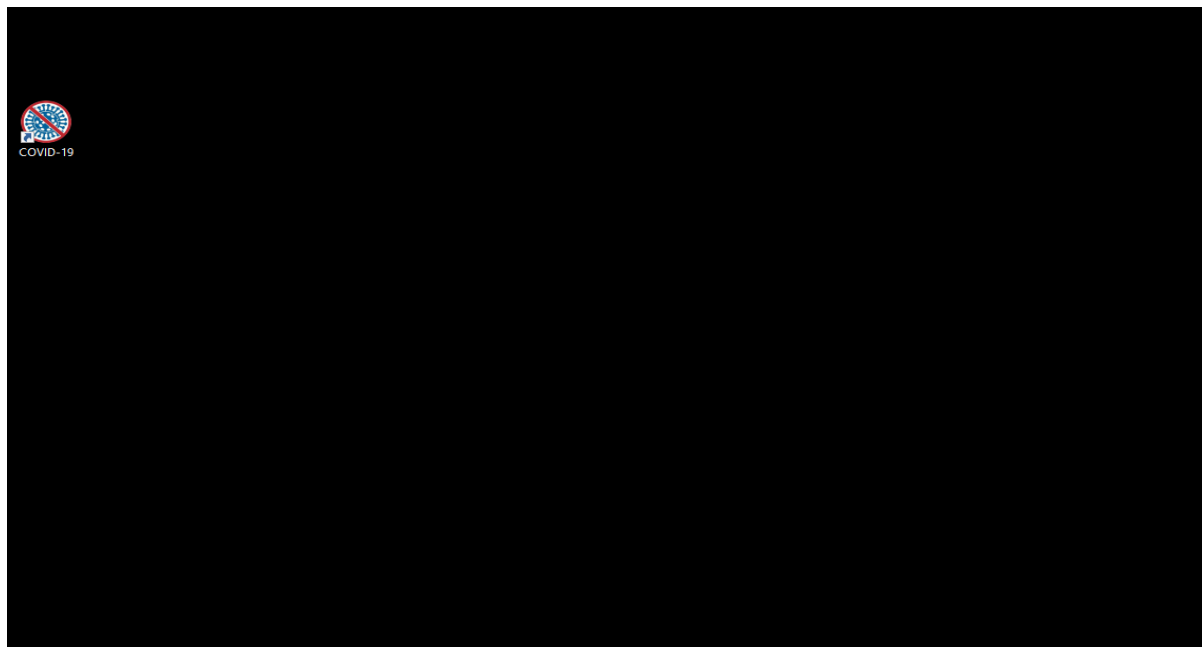
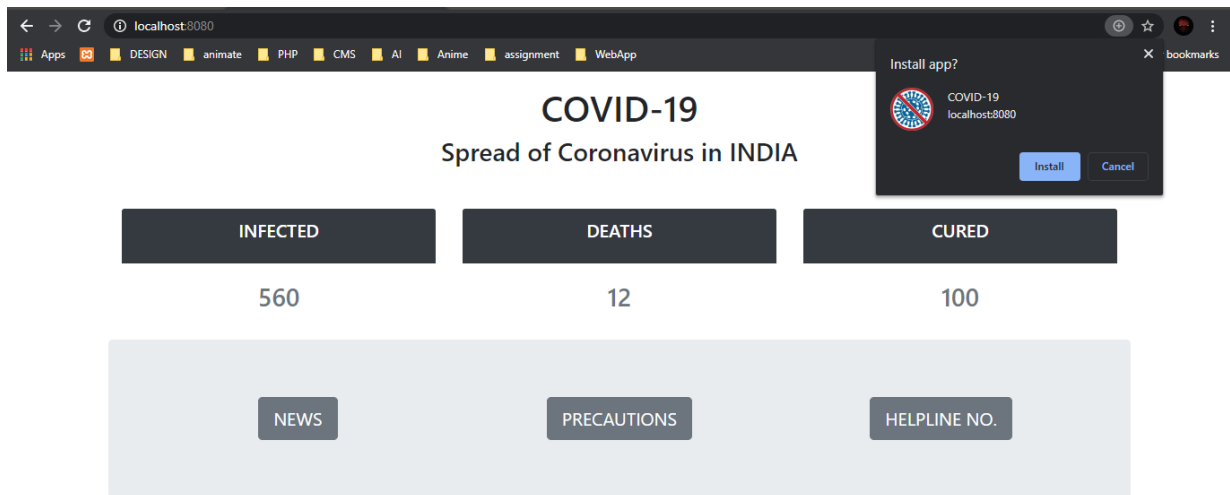
Clients [http://localhost:8080/](#) [focus](#)

Push

Sync

Adding your App to the Home Screen with Web App Manifest





COVID-19

Spread of Coronavirus in INDIA

INFECTED

560

DEATHS

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NEWS

PRECAUTIONS

HELPLINE NO.