

-PWA

- icon & manifest contd..

```
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1, shrink-to-fit=1">
  <meta http-equiv="x-ua-compatible" content="ie=edge">
  <link rel="stylesheet" href="css/bootstrap.min.css">
  <title>Form</title>

  <link rel="apple-touch-icon" sizes="180x180" href="/apple-touch-icon.png">
  <link rel="icon" type="image/png" sizes="32x32" href="/favicon-32x32.png">
  <link rel="icon" type="image/png" sizes="16x16" href="/favicon-16x16.png">
  <link rel="manifest" href="/manifest.json">
  <link rel="mask-icon" href="/safari-pinned-tab.svg" color="#264de4">
  <meta name="msapplication-TileColor" content="#ffc40d">
  <meta name="theme-color" content="#262ce4">

  <meta name="apple-mobile-web-app-capable" content="yes">
  <meta name="apple-mobile-web-app-status-bar-style" content="default">
  <link rel="apple-touch-startup-image" href="/apple-touch-icon.png">
</head>
```

```
{ } manifest.json x
1  {
2    "name": "SSN College of Engineering",
3    "short_name": "SSN",
4    "icons": [
5      {
6        "src": "/android-chrome-192x192.png",
7        "sizes": "192x192",
8        "type": "image/png"
9      },
10     {
11       "src": "/android-chrome-256x256.png",
12       "sizes": "256x256",
13       "type": "image/png"
14     }
15   ],
16   "theme_color": "#262ce4",
17   "background_color": "#ffe22d",
18   "display": "standalone",
19   "start_url": "/index.html"
20 }
```

-PWA

- SW registration

- css
- ▾ js
 - JS bootstrap.min.js
 - JS jquery.slim.min.js
 - JS main.js
 - JS popper.min.js
- 🖼 android-chrome-192x192.png
- 🖼 android-chrome-256x256.png
- 🖼 apple-touch-icon.png
- 📡 browserconfig.xml
- 🖼 favicon-16x16.png
- 🖼 favicon-32x32.png
- ★ favicon.ico
- 🔗 index.html
- {} manifest.json
- 🖼 mstile-150x150.png
- 🖼 safari-pinned-tab.svg
- JS sw.js

JS main.js



```
1  if ('serviceWorker' in navigator) {
2      navigator.serviceWorker.register('/sw.js').then(function(result) {
3          console.log('SW registered..');
4          console.log('Scope: ' + result.scope);
5      }, function(err) {
6          console.log('SW could not be not registered..');
7          console.log(err);
8      });
9  } else {
10     console.log("SW not supported !!")
11 }
```

-PWA

- SW registration

```
<script src="js/main.js"></script>
</head>
<body>
```

// index.html

The screenshot shows a web browser at 127.0.0.1:5500/index.html. The page has a form titled "Employee Information" with sections for "Contact Info" and "Vehicle Info". The "Contact Info" section includes fields for "Employee name" and "Email", with a note "We'll never share your email address". The "Vehicle Info" section includes fields for "Your vehicle name", "Vehicle type" (a dropdown menu), and "Vehicle number", followed by a radio button question "Is your vehicle register in your name ?" and a row of color selection checkboxes: Green, Red, White, Brown, Blue, Grey, and Other. A blue "Submit" button is at the bottom.

The Chrome DevTools Audits panel is open, showing "Progressive Web App" checks. A "PWA" icon with a plus sign is in the top right. The checks are categorized into three groups:

- Fast and reliable** (lightning bolt icon):
 - 1 Page load is fast enough on mobile networks (green checkmark)
 - 2 Current page does not respond with a 200 when offline (red warning triangle)
 - 3 start_url does not respond with a 200 when offline (red warning triangle, note: "Timed out waiting for fetched start_url.")
- Installable** (plus icon):
 - 4 Uses HTTPS (green checkmark)
 - 5 Registers a service worker that controls page and start_url (green checkmark)
 - 6 Web app manifest meets the installability requirements (green checkmark)
- PWA Optimized** (star icon):
 - 7 Does not redirect HTTP traffic to HTTPS (red warning triangle)
 - 8 Is not configured for a custom splash screen (red warning triangle, note: "Failures: Manifest does not have a PNG icon of at least 512px.")
 - 9 Sets an address-bar theme color (green checkmark)
 - 10 Content is sized correctly for the viewport (green checkmark)
 - 11 Has a <meta name="viewport"> tag with width or initial-scale (green checkmark)
 - 12 Contains some content when JavaScript is not available (green checkmark)

At the bottom, there is a section "Additional items to manually check" with "3 audits" and a dropdown arrow.

The screenshot shows the Chrome DevTools Console with the "Console" tab selected. It displays a log entry: "SW registered..". Below the message, the scope is shown as "Scope: http://127.0.0.1:5500/". A blue arrow icon is visible at the bottom left of the console area.

-PWA

- SW install

```
JS sw.js x
1  var cName = 'f1';
2
3  var cFiles = [
4      '/',
5      '/index.html',
6      '/manifest.json',
7      '/css/bootstrap.min.css',
8      '/js/main.js',
9      'js/bootstrap.min.js',
10     'js/jquery.slim.min.js',
11     'js/popper.min.js'
12 ];
13
14 self.addEventListener('install', function(evt) {
15     console.log('Install event');
16     //local cache implementation
17     evt.waitUntil(
18         caches.open(cName).then(function(cResult) {
19             console.log('caching..');
20             return cResult.addAll(cFiles);
21         }).then(function() {
22             return self.skipWaiting();
23         }).catch(function(err) {
24             console.log('caching error..', err);
25         })
26     );
27 });
```

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- SW activate

```
self.addEventListener('activate', function(evt) {  
  console.log('Activated SW.. ');  
  evt.waitUntil(  
    caches.keys().then(function(keyColln) {  
      return Promise.all(keyColln.map(function(key) {  
        if (key !== cName) {  
          console.log('deleting older cache', key);  
          return caches.delete(key);  
        }  
      }));  
    }));  
  });  
  return self.clients.claim();  
});
```

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- SW fetch

```
self.addEventListener('fetch', function(evt) {  
  console.log('Fetching ' + evt.request.url);  
  evt.respondWith(  
    caches.match(evt.request)  
    // caches.match(evt.request).then(function(matchRes) {  
    //   return matchRes || fetch(evt.request);  
    // })  
  );  
});
```

-PWA

- SW 'beforeinstallprompt'

```
<body>
  <section id="a2hs">
    <h4>Install this App</h4>
    
    Add this Form to home screen <br>
    <a href="javascript:void(0)" onClick="dismiss()" style="text-decoration:none;">No</a>
    <button onClick="install()">Yes</button>
  </section>
```

-PWA

- SW 'beforeinstallprompt'

```
var ie;
window.addEventListener('beforeinstallprompt',function(evt) {
  console.log('bip event..');
  ie = evt;
  evt.preventDefault();
  document.getElementById('a2hs').style.display = 'block';
});

function dismiss() {
  document.getElementById('a2hs').style.display = 'none';
}

function install() {
  dismiss();
  ie.prompt();
  ie.userChoice.then(function(res) {
    if (res.outcome === 'accepted')
      console.log('App installed..');
    else
      console.log('App not installed..');
  });
}

window.addEventListener('appinstalled', function(evt) {
  console.log('Event appinstalled..');
});
```


-PWA

- SW 'beforeinstallprompt'

