MAD PWA LAb 7

NAME: Prajakta Upadhye **Batch :** C

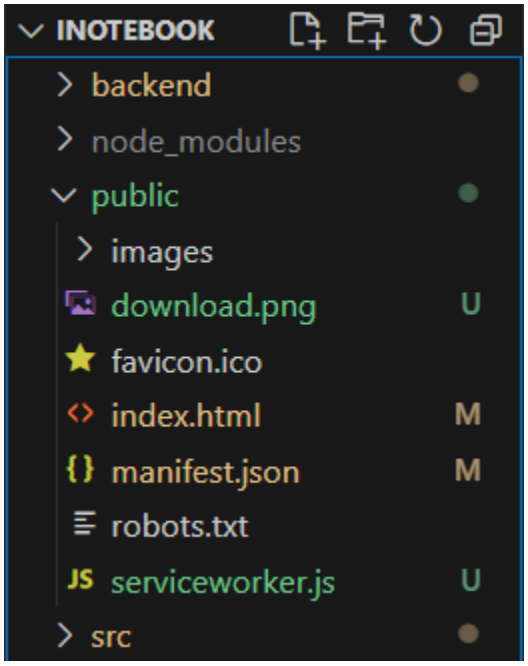
Class : D15A **Roll No.** : 65

AIM: To write meta data of your Ecommerce PWA in a Web app manifest file to enable "add to homescreen feature"

THEORY:

Regular Web App

A regular web app is a website that is designed to be accessible on all mobile devices such that the content gets fit as per the device screen. It is designed using a web technology stack (HTML, CSS, JavaScript, Ruby, etc.) and operates via a browser. They offer various native-device features and functionalities. However, it entirely depends on the browser the user is using. In other words, it might be possible that you can access a native-device feature on Chrome but not on Safari or Mozilla Firefox because the browsers are incompatible with that feature



Progressive Web App

Progressive Web App (PWA) is a regular web app, but some extras enable it to deliver an excellent user experience. It is a perfect blend of desktop and mobile application experience to give both platforms to the end-users.

manifest.json

```
{
   "short_name": "React App",
   "name": "Create React App Sample",
   "icons": [
     {
       "src": "favicon.ico",
       "sizes": "64x64 32x32 24x24 16x16",
       "type": "image/x-icon"
     },
     {
       "src": "logo192.png",
       "type": "image/png",
       "sizes": "192x192"
     },
     {
       "src": "logo512.png",
       "type": "image/png",
       "sizes": "512x512"
     }
   ],
   "start_url": ".",
   "display": "standalone",
   "theme_color": "#000000",
   "background_color": "#ffffff"
 }
```

serviceworker.js

```
var staticCacheName = "pwa";

self.addEventListener("install", function (e) {
e.waitUntil(
   caches.open(staticCacheName).then(function (cache) {
   return cache.addAll(["/"]);
   })
```

```
);
});

self.addEventListener("fetch", function (event) {
console.log(event.request.url);

event.respondWith(
   caches.match(event.request).then(function (response) {
   return response || fetch(event.request);
   })
);
});
```

public/index.html

```
<!DOCTYPE html>
<html lang="en">

<head>
  <meta charset="utf-8" />
  <link rel="icon" href="%PUBLIC_URL%/favicon.ico" />
  <meta name="viewport" content="width=device-width, initial-scale=1" />
  <meta name="theme-color" content="#000000" />
  <meta name="description" content="Web site created using create-react-app" />
  <link rel="apple-touch-icon" href="%PUBLIC_URL%/logo192.png" />
  <!--
     manifest.json provides metadata used when your web app is installed on a
     user's mobile device or desktop. See
https://developers.google.com/web/fundamentals/web-app-manifest/
   -->
  <link rel="manifest" href="%PUBLIC_URL%/manifest.json" />
  <!--
     Notice the use of %PUBLIC_URL% in the tags above.
     It will be replaced with the URL of the `public` folder during the build.
     Only files inside the `public` folder can be referenced from the HTML.

     Unlike "/favicon.ico" or "favicon.ico", "%PUBLIC_URL%/favicon.ico" will
     work correctly both with client-side routing and a non-root public URL.
     Learn how to configure a non-root public URL by running `npm run build`.
   -->

  <!-- Bootstrap CSS -->
```

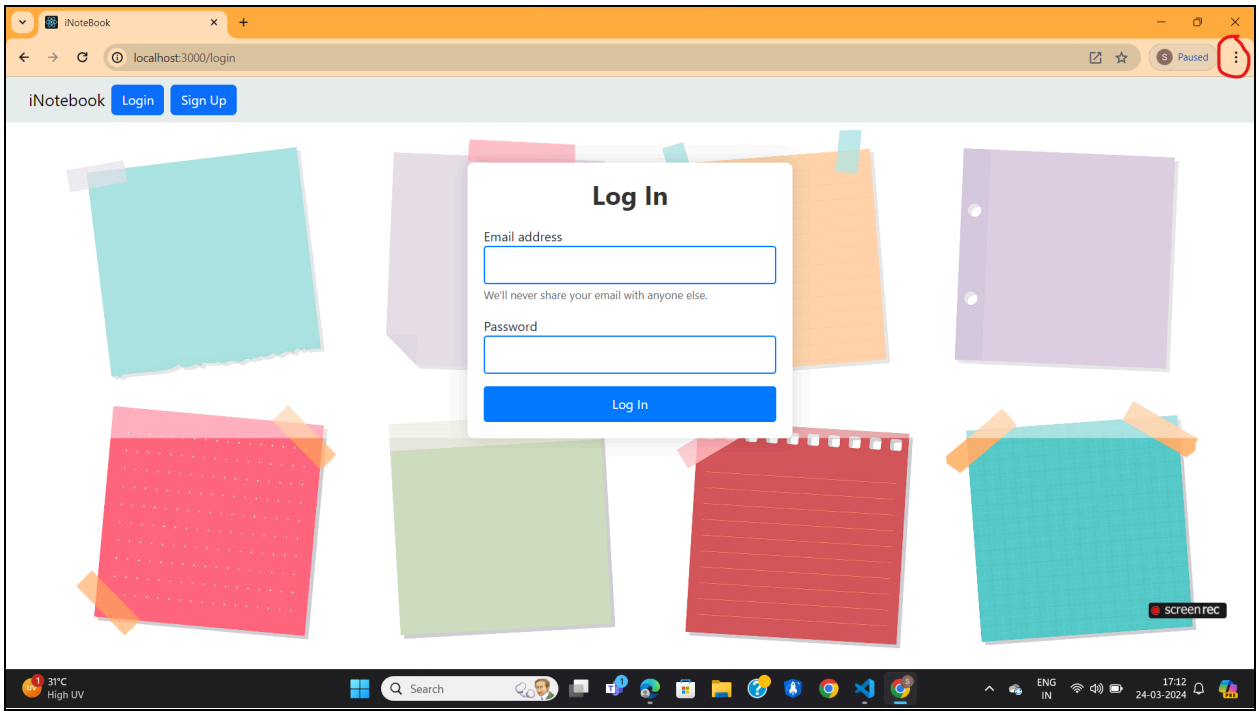
```
  <link rel="stylesheet"
href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0/dist/css/bootstrap.rtl.min.css"

integrity="sha384-PJsj/BTMqILvmcej7ulplguok8ag4xFTPryRq8xevL7eBYSmpXKcbNVuy+P0
RMgq" crossorigin="anonymous">

  <title>iNoteBook</title>
</head>

<body>
  <noscript>You need to enable JavaScript to run this app.</noscript>
  <div id="root"></div>
  <!--
      This HTML file is a template.
      If you open it directly in the browser, you will see an empty page.

      You can add webfonts, meta tags, or analytics to this file.
      The build step will place the bundled scripts into the <body> tag.

      To begin the development, run `npm start` or `yarn start`.
      To create a production bundle, use `npm run build` or `yarn build`.
    -->

  <!-- Option 1: Bootstrap Bundle with Popper -->
  <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0/dist/js/bootstrap.bundle.min.js"

integrity="sha384-geWF76RCwLtnZ8qwWowPQNguL3RmwHVBC9FhGdlKrxdiJJigb/j/68SIy
3Te4Bkz"
    crossorigin="anonymous"></script>

    <script src="https://kit.fontawesome.com/e7a7193d30.js" crossorigin="anonymous"></script>

    <script>
        window.addEventListener("load", () => {
          registerSW();
        });

        // Register the Service Worker
        async function registerSW() {
          if ("serviceWorker" in navigator) {
```

```
        try {
          await navigator;
          ServiceWorker;
          register("serviceworker.js");
        } catch (e) {
          console.log("SW Registration Failed.");
        }
      }
    }
  </script>
</body>
</html>
```

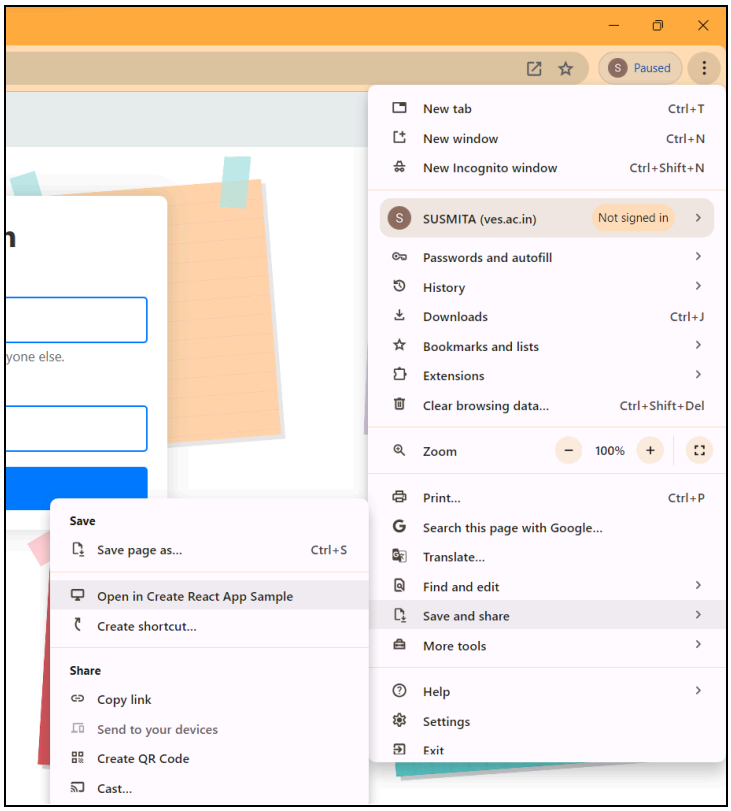
COMMAND: **npm run start**

```
You can now view inotebook in the browser.

  Local:            http://localhost:3000
  On Your Network:  http://192.168.0.104:3000

Note that the development build is not optimized.
To create a production build, use npm run build.

webpack compiled successfully
```

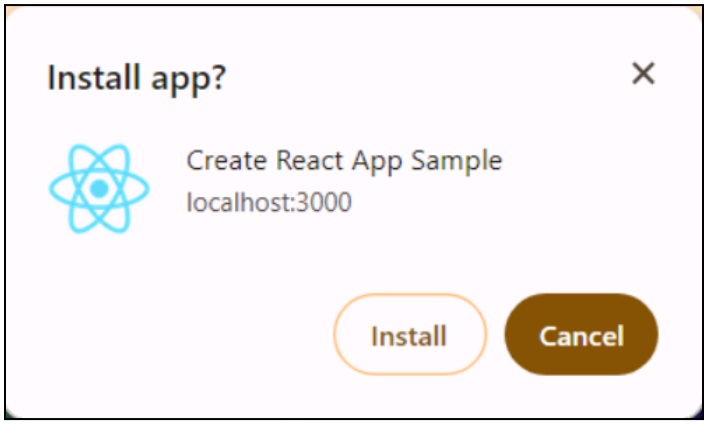
Open localhost:3000 on the browser



Click on 3 dots on the top right corner of the browser → go to **Save and Share** → Click on **Install Create React App Sample**

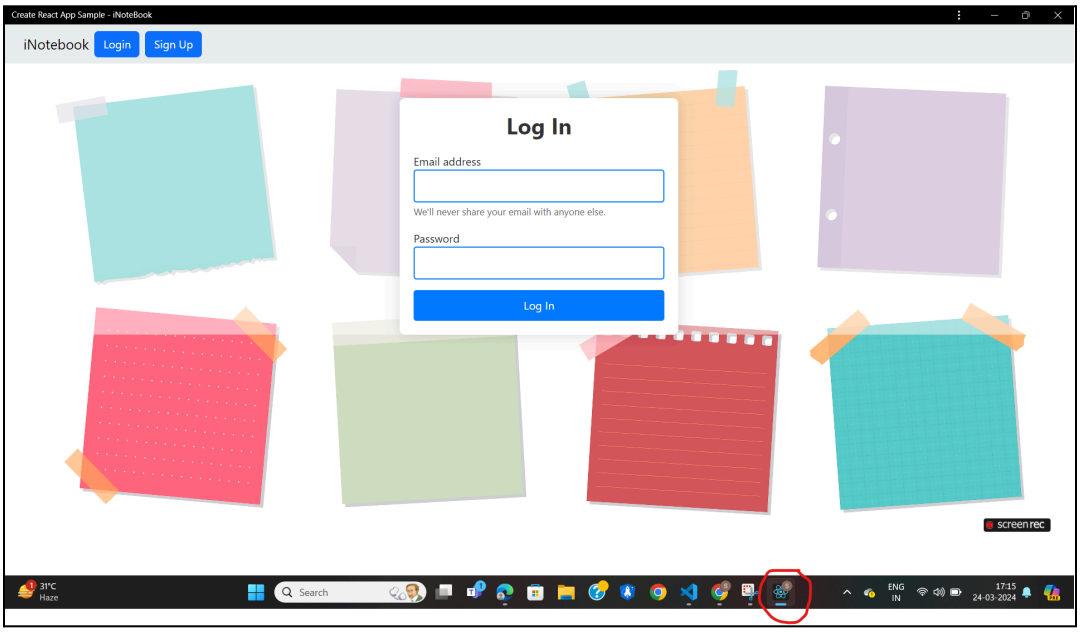


You will get the following pop-up:



Click on **Install**.

App Icon will appear at the bottom:



CONCLUSION:

Hence, we learnt how to write a metadata of our PWA in a Web App Manifest File to enable add to homescreen feature.