

**Aim:** To write meta data of your Ecommerce PWA in a Web app manifest file to enable “add to homescreen feature”.

## Theory

In Progressive Web Apps (PWA), the web app manifest is a JSON file that provides important metadata about the web application. This metadata tells the browser how the app should behave when installed on a user’s device, such as its name, icons, color themes, and launch behavior.

The main goal of this experiment is to enable the “Add to Home Screen” feature, which allows users to install the PWA directly on their device like a native app.

## What We Implemented:

We created a manifest.json file and linked it in the <head> section of our index.html using:

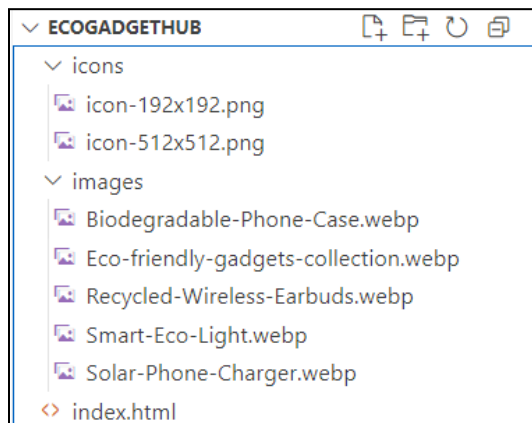
```
<link rel="manifest" href="manifest.json">
```

In the manifest file:

- "name" and "short\_name" define how the app is named on the home screen and splash screen.
- "start\_url" specifies the entry point when the app is opened.
- "display": "standalone" ensures the app opens without browser UI, giving it an app-like feel.
- "theme\_color" and "background\_color" customize the app's appearance on launch.
- "orientation": "portrait" locks the screen orientation.
- "scope" limits what URLs the PWA has control over.
- "icons" define images used for the home screen and splash screen when the app is installed.

By including this manifest and serving the site over HTTPS, the browser detects that it’s a PWA and automatically enables the Add to Home Screen option.

## Folder Structure



## Code

### index.html

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

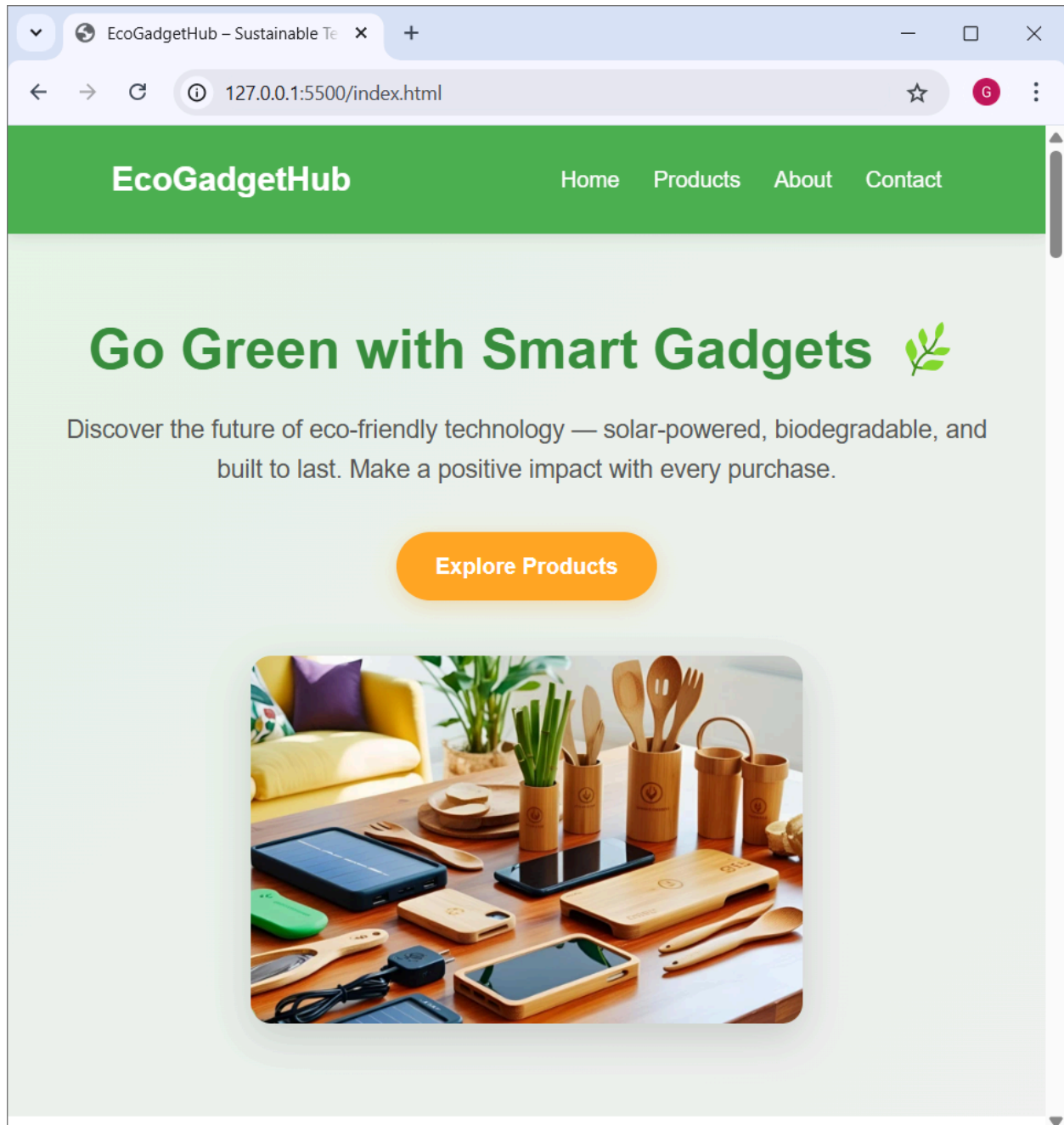
```
<head>
  <meta charset="UTF-8" />
  <meta name="viewport" content="width=device-width, initial-scale=1" />
  <title>EcoGadgetHub – Sustainable Tech Gadgets</title>
  <link rel="manifest" href="manifest.json">
</style>
</head>
<body>
  <script>
    if ("serviceWorker" in navigator) {
      navigator.serviceWorker
        .register("serviceworker.js")
        .then(() => console.log("Service Worker Registered"))
        .catch((error) =>
          console.log("Service Worker Registration Failed", error)
        );
    }
  </script>
</body>
</html>
```

### manifest.json

```
{
  "name": "Eco Friendly Gadget Collection",
  "short_name": "Ecogadgethub",
  "start_url": "/index.html",
  "display": "standalone",
  "background_color": "#ffffff",
  "theme_color": "#4caf50",
  "orientation": "portrait",
  "scope": "/",
  "icons": [
    {
      "src": "icons/icon-192x192.png",
      "sizes": "192x192",
      "type": "image/png"
    },
    {
      "src": "icons/icon-512x512.png",
      "sizes": "512x512",
```

```
"type": "image/png"  
}  
]  
}
```

### Screenshot



Sub - Sustainable Te x +

127.0.0.1:5500/index.html

Elements Console Sources Network Performance Memory Application Privacy and security >> 1

Application

- Manifest
- Service workers
- Storage

Storage

- Local storage
- Session storage
- Extension stor...
- IndexedDB
- Cookies
- Private state t...
- Interest groups
- Shared storage
- Cache storage
- Storage buckets

Background services

- Back/forward ...
- Background fe...

### App Manifest

[manifest.json](#)

#### Errors and warnings

- Richer PWA Install UI won't be available on desktop. Please add at least one screenshot with the form\_factor set to wide.
- Richer PWA Install UI won't be available on mobile. Please add at least one screenshot for which form\_factor is not set or set to a value other than wide.

#### Identity

Name	Eco Friendly Gadget Collection
Short name	Ecogadgethub
Description	
Computed App ID	<a href="http://127.0.0.1:5500/index.html">http://127.0.0.1:5500/index.html</a> <a href="#">Learn more</a>

**Note:** id is not specified in the manifest, start\_url is used instead. To specify an App ID that matches the current identity, set the id field to /index.html.

Console AI assistance

Live reload enabled.

Service Worker Registered

index.html:675

index.html:641

Sub - Sustainable Te x +

127.0.0.1:5500/index.html

Elements Console Sources Network Performance Memory Application Privacy and security >> 1

Application

- Manifest
- Service workers
- Storage

Storage

- Local storage
- Session storage
- Extension stor...
- IndexedDB
- Cookies
- Private state t...
- Interest groups
- Shared storage
- Cache storage
- Storage buckets

Background services

- Back/forward ...
- Background fe...
- Background sy...
- Bounce trackin...
- Notifications
- Payment hand...
- Periodic backq...

### Presentation

Start URL	<a href="#">/index.html</a>
Theme color	<input checked="" type="checkbox"/> #4caf50
Background color	<input type="checkbox"/> #ffffff
Orientation	portrait
Display	standalone

#### Protocol Handlers

Define protocol handlers in the [manifest](#) to register your app as a handler for custom protocols when your app is installed.


Need help? Read [URL protocol handler registration for PWAs](#).

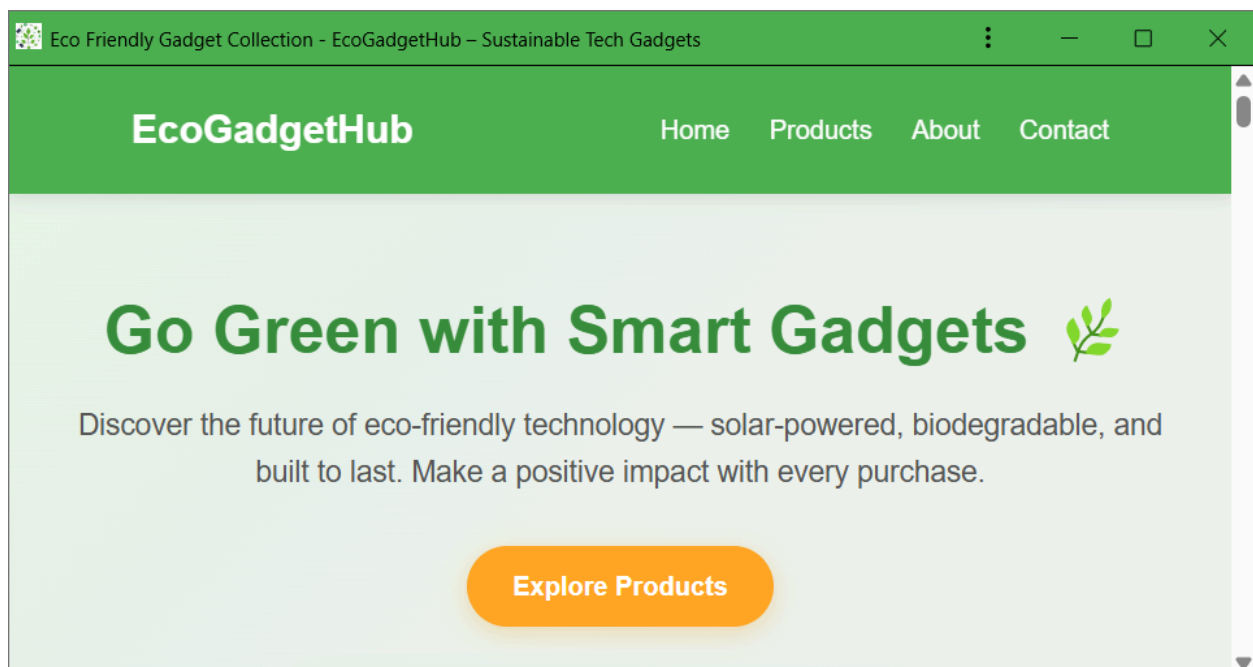
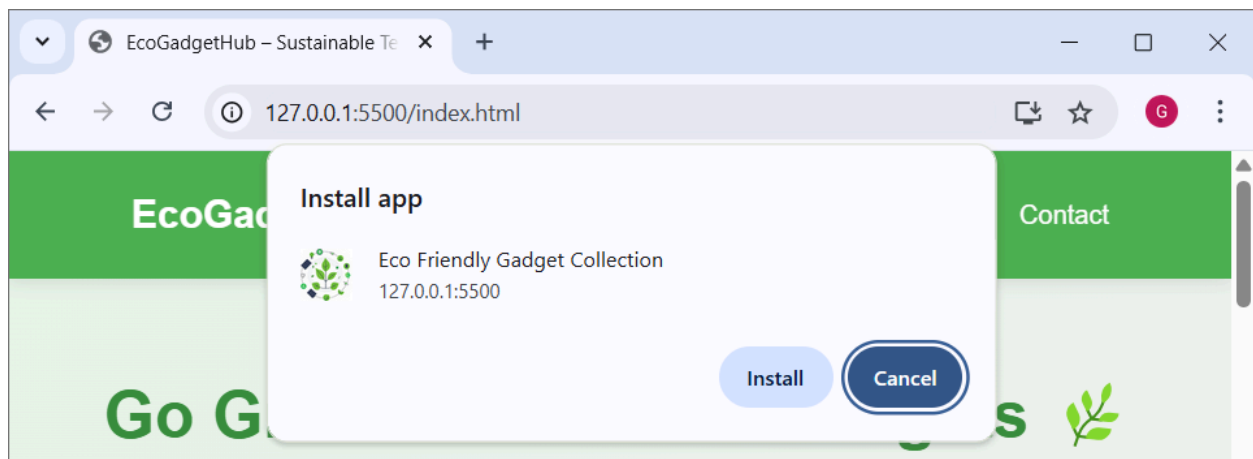
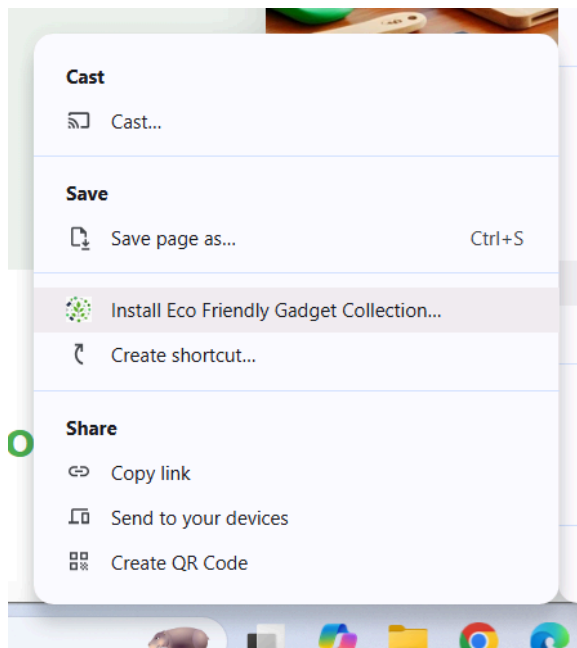
#### Icons

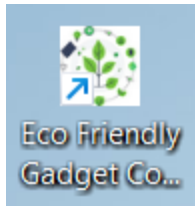
☐ Show only the minimum safe area for maskable icons

Need help? Read the [documentation on maskable icons](#).

192x192px  
image/png







### **Conclusion**

In this experiment, we successfully implemented the Web App Manifest for EcoGadgetHub, enabling the “Add to Home Screen” feature with proper icons and theme settings. Initially, we faced an issue where the manifest was not loading due to an incorrect file path, which we resolved by placing it in the root directory and correctly linking it in the HTML.