



A. P. SHAH INSTITUTE OF TECHNOLOGY

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Department of Information Technology

Academic Year: 2022-23

Semester: VI

Class / Branch / Div: TE- IT A/B/C

Subject: MAD & PWA Lab

Name of Instructor: Saylee Laplkear

Name of Student: Rahul

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Roll No. 32

Date of Submission: 4/4/25

Experiment No.:9

Aim: To Construct meta data for PWA in a Web app manifest file to enable “add to homescreen feature”

Prerequisites: HTML, JavaScript, JSON.

Software: VS code, Browser.

Code:

Index.html

```
<!DOCTYPE html>

<html>

<head>

<!-- Responsive -->

<meta charset="utf-8">

<meta name="viewport" content="width=device-width, initial-scale=1">

<meta http-equiv="X-UA-Compatible" content="ie=edge">

<!-- Title -->

<title>PWA Tutorial</title>

<!-- Meta Tags required for Progressive Web App -->

<meta name= "apple-mobile-web-app-status-bar" content="#aa7700">

<meta name="theme-color" content="black">

<!-- Manifest File link -->

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



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```
<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>
```

```
</head>
```

```
<body>
```

```
<h1 style="color: green;"> TE-IT Name: Yaminee Patil Moodle no: </h1>
```

```
<p>
```

This is a simple tutorial for creating a PWA application.

```
</p>
```

```
</body>
```

```
</html>
```



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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);

        })

    );

});
```

Manifest.json

```
{

    "name": "PWA Tutorial",

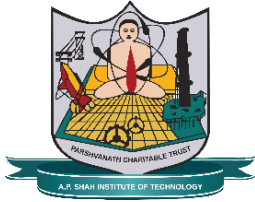
    "short_name": "PWA",

    "start_url": "index.html",

    "display": "standalone",

    "background_color": "#5900b3",

    "theme_color": "black",
```



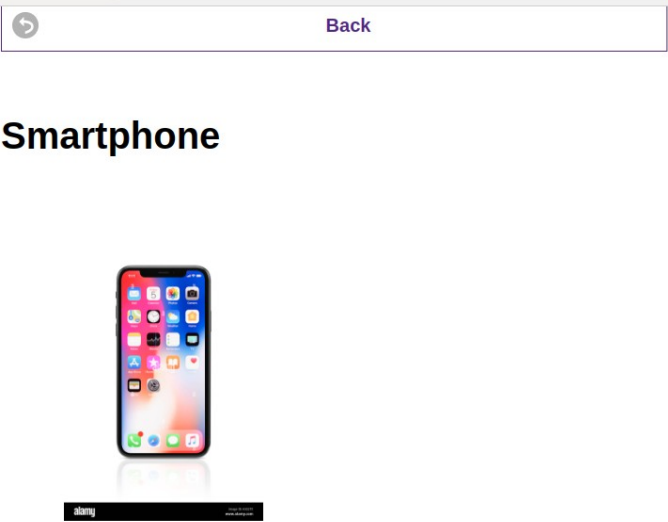
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```
"scope": ".",  
"description": "This is a PWA tutorial.",  
"icons": [  
  {  
    "src": "images/icon-192x192.png",  
    "sizes": "192x192",  
    "type": "image/png"  
  },  
  {  
    "src": "images/icon-512x512.png",  
    "sizes": "512x512",  
    "type": "image/png"  
  }  
]  
}
```

Output:



Smartphone

Price: \$699

Application

Manifest

Service workers

Storage

Storage

Local storage

Session storage

IndexedDB

Web SQL

Cookies

Private state tokens

Interest groups

Shared storage

Cache storage

Background services

Back/forward cache

Background fetch

Background sync

Bounce tracking mitigation

Notifications

Payment handler

Periodic background sync

Speculative loads

Push messaging

Reporting API

Frames

ton

Service workers

☒ Offline ☐ Update on reload ☐ Bypass for network

Service workers from other origins

[See all registrations](#)



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Conclusion: In this experiment we have designed PWA in a Web app manifest file to enable “add to homescreen feature”