Experiment No 09

Aim: To implement Service worker events like fetch, sync and push for E-commerce PWA.

Code:

```
index.html
<html lang="en">
<head>
 <meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
 <meta http-equiv="X-UA-Compatible" content="ie=edge">
 <title>Food Ninja</title>
<!-- materialize icons, css & js -->
 <link type="text/css" href="C:\Users\Aakas\Desktop\MAD & PWA\Exp 9\pwa-tutorial-lesson-</pre>
10/css/materialize.min.css" rel="stylesheet">
 k href="https://fonts.googleapis.com/icon?family=Material+Icons" rel="stylesheet">
 <link type="text/css" href="C:\Users\Aakas\Desktop\MAD & PWA\Exp 9\pwa-tutorial-lesson-</pre>
10/css/styles.css" rel="stylesheet">
 <script type="text/javascript" src="C:\Users\Aakas\Desktop\MAD & PWA\Exp 9\pwa-tutorial-
lesson-10/js/materialize.min.js"></script>
<link rel="manifest" href="C:\Users\Aakas\Desktop\MAD & PWA\Exp 9\pwa-tutorial-lesson-</pre>
10/manifest.json">
<!-- ios support -->
lesson-10/img/icons/icon-96x96.png">
<meta name="apple-mobile-web-app-status-bar" content="#FFE1C4">
</head>
<body class="grey lighten-4">
 <!-- top nav -->
 <nav class="z-depth-0">
  <div class="nav-wrapper container">
   <a href="/">Food<span>Ninja</span></a>
  <span class="right grey-text text-darken-1">
    <i class="material-icons sidenav-trigger" data-target="side-menu">menu</i>
   </span>
 </div>
 </nav>
 <!-- side nav -->
 ul id="side-menu" class="sidenav side-menu">
  <a class="subheader">FOODNINJA</a>
 <a href="/" class="waves-effect">Home</a>
 <a href="C:\Users\Aakas\Desktop\MAD & PWA\Exp 9\pwa-tutorial-lesson-</a>
10/pages/about.html" class="waves-effect">About</a>
 <div class="divider"></div>
 <a href="C:\Users\Aakas\Desktop\MAD & PWA\Exp 9\pwa-tutorial-lesson-</a>
10/pages/contact.html" class="waves-effect">
```

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<i class="material-icons">mail_outline</i>Contact</a>
  <!-- recipes -->
 <div class="recipes container grey-text text-darken-1">
  <div class="card-panel recipe white row">
   <img src="C:\Users\Aakas\Desktop\MAD & PWA\Exp 9\pwa-tutorial-lesson-10/img/dish.png"</pre>
alt="recipe thumb">
   <div class="recipe-details">
    <div class="recipe-title">Edame Noodles</div>
    <div class="recipe-ingredients">Edame Beans, Noodels, Garlic oil</div>
   </div>
   <div class="recipe-delete">
    <i class="material-icons">delete outline</i>
   </div>
  </div>
  <div class="card-panel recipe white row">
   <img src="C:\Users\Aakas\Desktop\MAD & PWA\Exp 9\pwa-tutorial-lesson-10/img/dish.png"</pre>
alt="recipe thumb">
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   </div>
   <div class="recipe-delete">
    <i class="material-icons">delete outline</i>
```

```
</div>
  </div>
 </div>
 <div class="center">
  <a class="btn-floating btn-small btn-large add-btn sidenav-trigger" data-target="side-form">
   <i class="material-icons">add</i>
  </a>
 </div>
 <!-- add recipe side nav -->
 <div id="side-form" class="sidenav side-form">
  <form class="add-recipe container section">
   <h6 >New Recipe</h6>
   <div class="divider"></div>
   <div class="input-field">
    <input placeholder="e.g. Ninja soup" id="title" type="text" class="validate">
    <label for="title">Recipe Title</label>
   </div>
   <div class="input-field">
    <input placeholder="e.g. Tofu, mushroom, garlic" id="ingredients" type="text" class="validate">
    <label for="ingredients">Ingredients</label>
   </div>
   <div class="input-field center">
    <button class="btn-small">Add</button>
   </div>
  </form>
 </div>
 <script src="C:\Users\Aakas\Desktop\MAD & PWA\Exp 9\pwa-tutorial-lesson-
10/js/app.js"></script>
 <script src="C:\Users\Aakas\Desktop\MAD & PWA\Exp 9\pwa-tutorial-lesson-10/js/ui.js"></script>
</body>
</html>
self.addEventListener('fetch', function(event) {
event.respondWith(
caches.match(event.request)
.then(function(response) {
if (response) {
return response;
}
return fetch(event.request);
}
)
);
});
```

```
// Register your service worker:
navigator.serviceWorker.register('/sw.js');
// Then later, request a one-off sync:
navigator.serviceWorker.ready.then(function(swRegistration) {
return swRegistration.sync.register('myFirstSync');
});
self.addEventListener('sync', function(event) {
if (event.tag == 'myFirstSync') {
event.waitUntil(doSomeStuff());
}
});
self.addEventListener(
"push",
(event) => {
let message = event.data.json();
switch (message.type) {
case "init":
doInit();
break;
case "shutdown":
doShutdown();
break;
}
},
false
);
manifest.json
{
 "name": "Food Ninja",
 "short_name": "FoodNinja",
 "start_url": "/index.html",
 "display": "standalone",
 "background color": "#FFE9D2",
 "theme_color": "#FFE1C4",
 "orientation": "portrait-primary",
 "icons": [
   "src": "/img/icons/icon-72x72.png",
   "type": "image/png",
   "sizes": "72x72"
  },
   "src": "/img/icons/icon-96x96.png",
   "type": "image/png",
   "sizes": "96x96"
```

```
},
   "src": "/img/icons/icon-128x128.png",
   "type": "image/png",
   "sizes": "128x128"
  },
   "src": "/img/icons/icon-144x144.png",
   "type": "image/png",
   "sizes": "144x144"
  },
   "src": "/img/icons/icon-152x152.png",
   "type": "image/png",
   "sizes": "152x152"
  },
   "src": "/img/icons/icon-192x192.png",
   "type": "image/png",
   "sizes": "192x192"
  },
   "src": "/img/icons/icon-384x384.png",
   "type": "image/png",
   "sizes": "384x384"
  },
   "src": "/img/icons/icon-512x512.png",
   "type": "image/png",
   "sizes": "512x512"
  }
 ]
}
app.js
if('serviceWorker' in navigator){
 navigator.serviceWorker.register('/sw.js')
  .then(reg => console.log('service worker registered', reg))
  .catch(err => console.log('service worker not registered', err));
}
document.addEventListener('DOMContentLoaded', function() {
 // nav menu
 const menus = document.querySelectorAll('.side-menu');
 M.Sidenav.init(menus, {edge: 'right'});
 // add recipe form
 const forms = document.querySelectorAll('.side-form');
```

```
M.Sidenav.init(forms, {edge: 'left'});
});
```

Output:

