

Phase 4:IoT Development part 2

Designing a mobile app for iOS and Android using HTML, CSS, and JavaScript typically involves creating a web app and packaging it within a WebView component for each platform. Here's a simplified example of how you can structure the HTML code for a basic restroom information app. Please note that this is a minimal example and does not cover all aspects of app development.

HTML (index.html):

```
<!DOCTYPE html>

<html>

<head>

  <title>Restroom Finder</title>

  <link rel="stylesheet" type="text/css" href="styles.css">

</head>

<body>

  <header>

    <h1>Restroom Finder</h1>

  </header>

  <main>

    <div id="map"></div>

    <div id="restroom-list">

      <!-- Restroom listings will be dynamically generated here -->

    </div>

  </main>

  <footer>

    <button id="refresh-button">Refresh</button>

  </footer>

  <script src="app.js"></script>

</body>

</html>
```

CSS (styles.css):

```
body {  
    font-family: Arial, sans-serif;  
}  
header {  
    background-color: #3498db;  
    color: #fff;  
    text-align: center;  
    padding: 10px;  
}  
main {  
    padding: 20px;  
}  
#map {  
    width: 100%;  
    height: 300px;  
}  
#restroom-list {  
    /* Styling for the restroom listings */  
}  
footer {  
    text-align: center;  
    padding: 10px;  
}  
button {  
    background-color: #3498db;  
    color: #fff;
```

```
padding: 10px 20px;
border: none;
cursor: pointer;
}
```

JavaScript (app.js):

```
const restroomData = [
  {
    name: "Restroom 1",
    location: "123 Main St",
    cleanliness: "Clean",
    availability: "Available",
  },
  {
    name: "Restroom 2",
    location: "456 Elm St",
    cleanliness: "Average",
    availability: "In Use",
  },
];

function renderRestroomList() {
  const restroomList = document.getElementById("restroom-list");
  restroomList.innerHTML = "";

  for (const restroom of restroomData) {
    const listing = document.createElement("div");
```

```

    listing.classList.add("restroom-listing");

    listing.innerHTML = `
        <h2>${restroom.name}</h2>
        <p><strong>Location:</strong> ${restroom.location}</p>
        <p><strong>Cleanliness:</strong> ${restroom.cleanliness}</p>
        <p><strong>Availability:</strong> ${restroom.availability}</p>
    `
    restroomList.appendChild(listing);
}
}

const refreshButton = document.getElementById("refresh-button");
refreshButton.addEventListener("click", renderRestroomList);
renderRestroomList();

```

In this simplified example:

- The HTML file (**index.html**) defines the structure of the app, including a header, a map section, a restroom listing section, and a refresh button in the footer.
- The CSS file (**styles.css**) provides basic styling for the app's elements.
- The JavaScript file (**app.js**) contains sample data, a function to render the restroom listings, and an event listener for the refresh button.