SMART PUBLIC RESTROOM

Building the project by developing the restroom information platform and mobile app.
Use web development technologies (e.g., HTML, CSS, JavaScript) to create a platform that displays real-time restroom availability and cleanliness data.
Design mobile apps for iOS and Android platforms that provide users with access to realtime restroom information .

- Building a complete restroom information platform and mobile apps is a complex project. While I can't provide the full code for such an extensive project, I can give you a high-level structure and snippets for each part of the project:

Restroom Information Platform (Web):

HTML (index.html):

```
<!DOCTYPE html>
<html>
<head>
   <title>Restroom Information</title>
</head>
<body>
   <h1>Real-time Restroom Information</h1>
   <div id="restroomData"></div>

   <script src="app.js"></script>
</body>
</html>
```

CSS (styles.css):

```
/* Add your styles here */
```

JavaScript (app.js):

```
Const restroomData = document.getElementById('restroomData');
// Fetch and display restroom data
Async function fetchRestroomData() {
   Try {
      Const response = await fetch('/api/restrooms');
      Const data = await response.json();
```

```
    // Display restroom data on the web page
    restroomData.innerHTML = JSON.stringify(data, null, 2);
  } catch (error) {
    Console.error(error);
  }
}
// Periodically update restroom data
setInterval(fetchRestroomData, 5000); // Update every 5 seconds
fetchRestroomData();
```

Mobile Apps (iOS and Android):

iOS (Swift):

```
Import UIKit
Class RestroomViewController: UIViewController {
  @IBOutlet weak var restroomInfoLabel: UILabel!
  Override func viewDidLoad() {
    Super.viewDidLoad()
    // Fetch and display restroom data
    fetchRestroomData()
  }
  Func fetchRestroomData() {
    // Implement code to make HTTP request to your API
    // Update restroomInfoLabel with real-time data
  }
}
```

Android (Java/Kotlin):

```
Import android.os.Bundle;
Import android.widget.TextView;
Import androidx.appcompat.app.AppCompatActivity;
Public class RestroomActivity extends AppCompatActivity {
  Private TextView restroomInfoTextView;
  @Override
  Protected void onCreate(Bundle savedInstanceState) {
    Super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_restroom);
    restroomInfoTextView = findViewById(R.id.restroomInfoTextView);
   // Fetch and display restroom data
    fetchRestroomData();
  }
  Private void fetchRestroomData() {
```

```
   // Implement code to make HTTP request to your API
    // Update restroomInfoTextView with real-time data
  }
}
```

- In both iOS and Android, you'll need to use libraries or frameworks to make HTTP requests to your web platform's API and display the real-time restroom information.