**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):**

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| --- |
| <!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):**

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| --- |
| /\* Add your styles here \*/ |

**JavaScript (app.js):**

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| --- |
| 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(); |

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| --- |
| // 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):**

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| --- |
| 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):**

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| --- |
| 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.