ZUCi
SYSTEMS
PERFECTION. ALWAYS.

Crafting a Customized App for Enhanced Access and Functionality in **Elevating User Experience**

About the Client

The client is a leading environmental, social, and governance (ESG) company with an aim to contribute to the sustainable development of the communities and industries it serves. They strive to achieve this by providing innovative environmental management solutions.
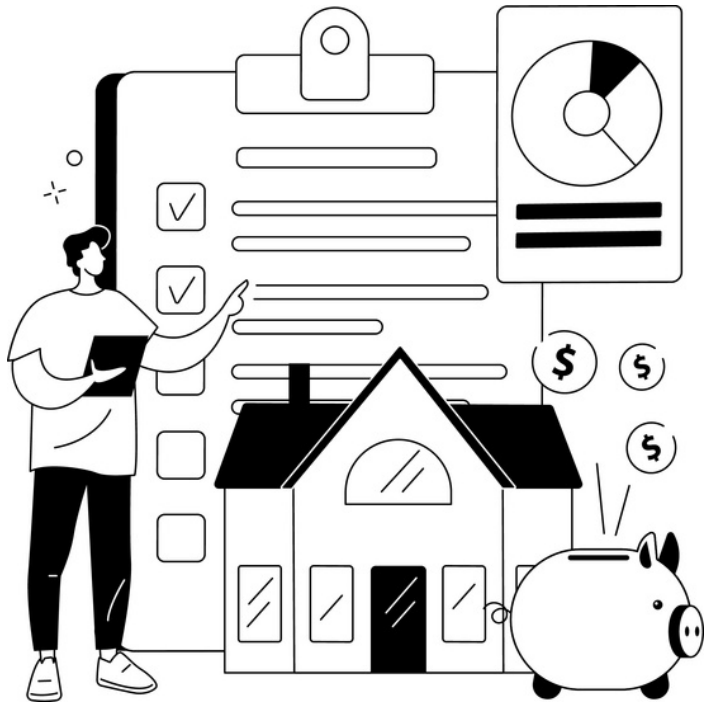
Business Requirement:

Our client's challenge was to effectively monitor the life and quality of the assets available in their facilities. They required a web application that enabled seamless asset tracking, management, and verification. This application was required to offer offline functionality too, to ensure uninterrupted usage even when an internet connection is unavailable. The goal was to streamline asset updates, verification processes, and enhance overall asset management efficiency.

In light of these requirements, our client chose Zuci Systems as their preferred partner, acknowledging our technical capability.

How Zuci Systems Helped?

Zuci's team developed a web application for Admins and Asset Managers to capture all the information about the assets that were in their facilities, JWT tokens were implemented to ensure the secure transfer of data. Features were added to store essential files, which improved app performance, especially in low-connectivity scenarios. Additionally, data storage was optimized, allowing users to work offline and sync changes upon reconnection. Angular templates and components were employed to enhance the app's user interface. App components were grouped to improve organization and efficiency. Third-party systems and Google APIs were integrated for authentication, data upload, and photo synchronization.

The PHP JWT library facilitated seamless data exchange, PHP Spreadsheet improved data export efficiency, and PHP Mailer ensured secure notifications.

Our engineers followed Test Driven Development practices and used namespaces for robust coding. Backend processes were optimized by consolidating Cron tasks into a single file, leading to significant improvements in efficiency. This meticulous approach yielded a secure, efficient, and user-friendly app, seamlessly meeting the needs of asset management within the organization.
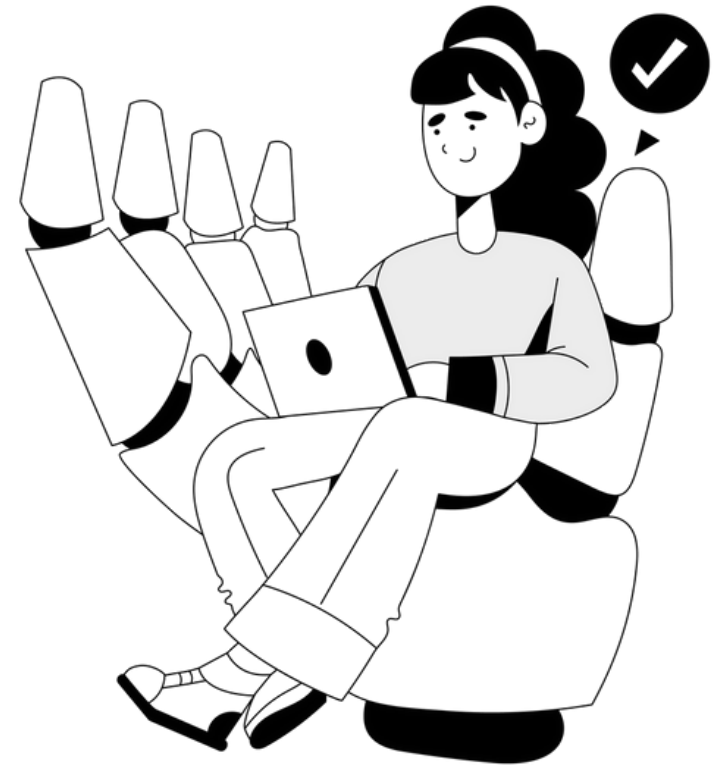
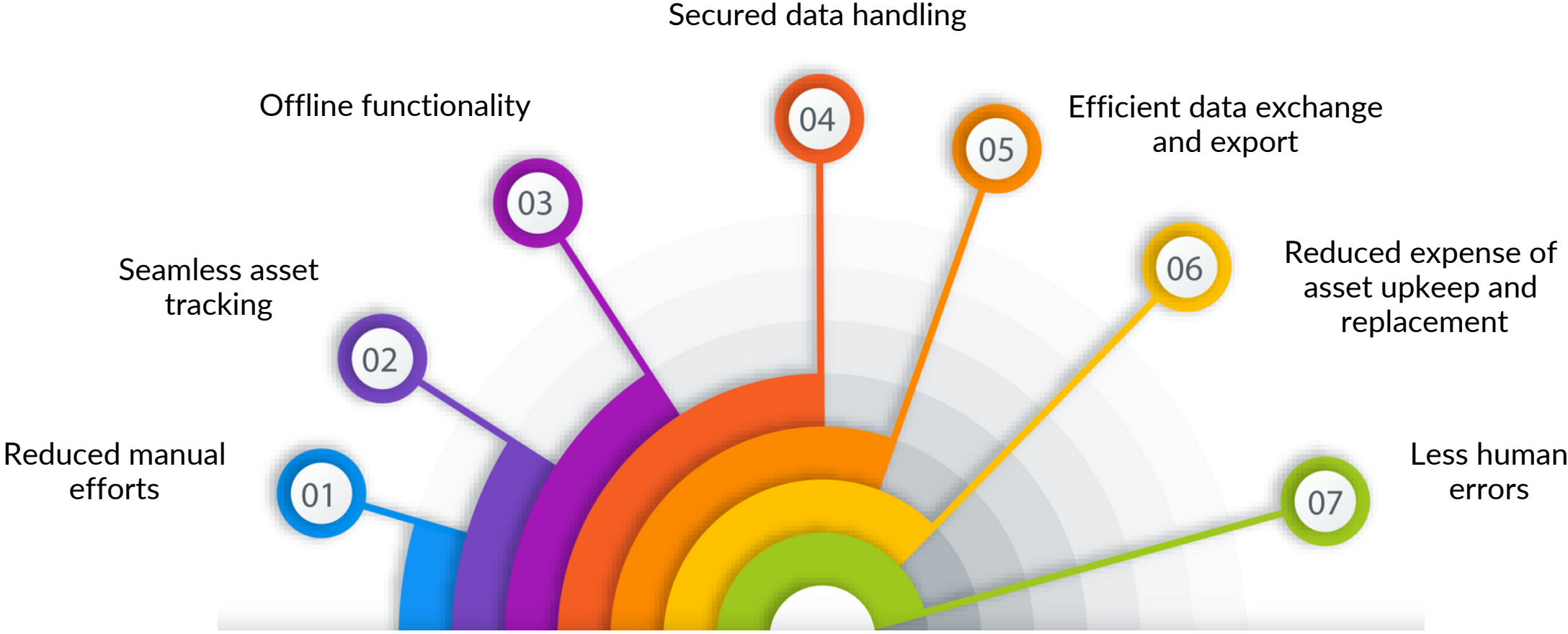# Development Best Practices Followed by Zuci Systems:

1. Code Quality:

Our team used ESLint for static code analysis, quickly identifying issues. Additionally, we employed SonarQube, an automated code review tool, to systematically ensure the delivery of clean and polished code.

2. Website Performance:

Our team optimized the site's speed and functionality by implementing techniques such as Ahead of Time (AOT) compilation for faster loading, lazy loading to load content only when needed, and utilizing Lighthouse, an open-source tool that assisted in enhancing various aspects of the site, including speed, user-friendliness, and more.

Business Outcomes

Reduced manual efforts

Seamless asset tracking

Offline functionality

Secured data handling

Efficient data exchange and export

Reduced expense of asset upkeep and replacement

Less human errors

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Tech Stack

Zuci Can Enhance Your Team's Digital Abilities

30-min free consultation →

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