Mobile App & Web Portal – Statement Of Work [SOW]

Project Overview

It's US based project. A leading urban management solutions provider engaged to redesign and enhance their SMART App & Management Portal. The goal was to improve operational efficiency, streamline reporting, and optimize workforce management by developing a modern, scalable platform.

Problem Statement

As-Is State:

- The existing system relied on multiple disconnected applications, causing inefficiencies.
- Limited reporting capabilities with inconsistent data tracking.
- Complex user role management and inefficient task assignments.
- Performance issues affecting real-time updates and data processing.

To-Be State:

- A unified SMART App & Management Portal with integrated functionalities.
- Optimized role-based access control and task management.
- Advanced reporting and analytics for improved decision-making.
- Secure, scalable cloud-based infrastructure with real-time updates.

Solution Provided

Technologies Used:

- **Mobile App:** React Native
- **Backend:** Node.js
- Web Application: React.js
- Database: MySQL
- Cloud Hosting: AWS
- Mapping Services: Google Maps / MapBox
- Support System: Zendesk
- Notifications: Firebase

Key Functionalities Implemented:

1. Management Portal

- Role-based access control with user authentication.
- Centralized dashboard with data visualization.
- Task allocation with geofencing support.
- Automated reporting and custom data filtering.

2. SMART Mobile App

- Secure authentication with OTP and biometric login.
- Shift tracking with automated time logs.
- Task assignment with real-time push notifications.
- GPS-based activity logging for workforce management.
- Offline mode with automatic data sync.

3. CMS & Web Forms

- Dynamic content management with multilingual support.
- Stakeholder request forms for service management.
- Automated workflows for approval processes.
- QR code-based asset tracking and audit logging.

4. Data Migration & Reporting

- Migration of legacy data into a new structured database.
- Custom reporting dashboards with real-time analytics.
- Role-based access to historical data for compliance tracking.
- Automated data validation and error correction mechanisms.

Implementation Strategy

Agile Development Approach

- **Sprint Planning & Execution:** Two-week sprint cycles for incremental feature releases.
- Task Tracking & Documentation: Managed via Jira & Confluence.
- Regular Status Reviews: Weekly check-in meetings and monthly CR releases.
- UAT & Feedback Loops: Iterative testing and continuous stakeholder engagement.

Project Phases

- 1. **Requirement Analysis & Wireframing** Identified functional and non-functional requirements, designed wireframes using Figma.
- 2. **Development & System Integration** Implemented modular architecture with seamless API integrations.

- 3. **Testing & QA** Conducted unit testing, security audits, and performance testing.
- 4. **Deployment & Data Migration** Executed structured data migration plans to ensure minimal downtime.
- 5. **Go-Live & Post-Deployment Monitoring** Continuous monitoring and phased rollout of feature enhancements.

Project Deliverables

- Fully integrated SMART App (Android & iOS).
- Management Portal with real-time analytics.
- CMS & Web Forms for dynamic content management.
- Automated Data Migration Strategy & Execution.
- User Training & Documentation for seamless onboarding.

Risk Mitigation Strategies

- Data Integrity Checks: Implemented automated validation scripts during migration.
- **Security Measures:** Enforced encryption, role-based access control, and two-factor authentication.
- Performance Optimization: Used caching mechanisms and AWS scaling solutions.
- User Training & Support: Developed training materials for smooth transition and adoption.

Conclusion

The **SMART App & Management Portal** project successfully transformed operational workflows, delivering a **scalable**, **efficient**, **and user-friendly** solution. With enhanced reporting, real-time task allocation, and a modern UI, the platform meets the client's evolving business needs while ensuring long-term sustainability.