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Business Domain

Public Infrastructure

Project Type

IoT framework, Track and Trace, Work Order Planning, Mobile App, Dashboarding

The Digital Parking System of Antwerp's Smart City Has Benefited over 150,000 Users in No-Parking Zones for 7 Years

Client

The Client is a Belgian software development company that has completed multiple projects within and outside the country.

Project

An end-to-end solution with a user-friendly design based on a cloud platform. It features IoT integration to communicate with IoT devices and an agile work scheduling tool to improve the efficiency and performance of daily parking activities.

Objective

The city administration receives 50,000+ requests annually for the temporary use of public street space for street events, removals, construction, and utility works. To minimize inconvenience, the city has embarked on a full digitization of the entire process.

Team Reinforcement

The Client needed to expand its workforce to build all the modules required to implement the framework. The Intetics expert team helped to deliver a quality solution on time.

Challenge

The Client is a Belgian software development company that provides a variety of services, including innovation consultancy and opportunity scanning beyond standard solution design and delivery.

The Client needed to build a solution to help create a no-parking space request facility in a few clicks (including payment) and to schedule work time for employees who place no-parking signs across the city. Such a solution required the Client to build multiple modules.

However, they lacked a sufficient number of in-house specialists to complete the task on their own. The Intetics Remote In-Sourcing® team joined the Client's workforce to complete the task on time.

Quick Facts

- ✓ The solution has been operational for 7 years
- ✓ 150,000+ users
- ✓ Client able to concentrate on customers and quality service, not technical details

Technologies

PHP / React / React native / NEST JS / Typescript / Postgres / RabbitMQ / Websockets / AWS / MS Azure / REST API

Solution

★ 01

The application has been operational since 2016 and has helped around 150,000 users so far.

★ 02

Thanks to its integration with public utilities and the ReactNative-based mobile app, the public utility workers who install no-parking signs can upload work orders, schedule, and route on the go.

★ 03

The solution has payment functionality and several integrations with administrative services to enable access to a no-transport zone, to send a license plate number to the police for the issuance of a fine, and to provide current data on the utility car's license plate to provide automated access to the zone.

★ 04

Features:

1. SmartSigns with Sigfox for power-efficient data transfer
2. Complex parking space booking and price calculation logic
3. Public web site for real-time status updates, requests, and complaints.



Benefits and Results

- ★ The solution provides numerous automated possibilities: public utility workers can seamlessly check their schedules and adjust routes. Sign time ranges have been automated, and more.
- ★ The comprehensive solution allows for parking space booking across multiple locations and with different time ranges, as well as utility workflow management.
- ★ Via a website, citizens can check if a sign is valid and post a complaint about a sign or trash left in the street.
- ★ The application has been helping citizens to book public spaces and public utility workers to organize their workflows for 7 years.

Techstack:

PHP, React, React native, NEST JS,
Typescript, Postgres, RabbitMQ,
Websockets, AWS, MS Azure, REST API

Team: 7

Intetics team:
2 Full stack Software Engineers
Client's team:
1 Full stack Software Engineer, 1 Tech Lead
Engineer, 1 QA Engineer, 1 Business
Analyst, 1 Project Manager