

IoT Monitoring and Analytics System

The IoT tracking and monitoring system connects sensors and metering devices for lighting, air conditioning, thermostats, electricity, and plumbing via the Internet and transmits data for storage, analysis, monitoring, and invoicing.



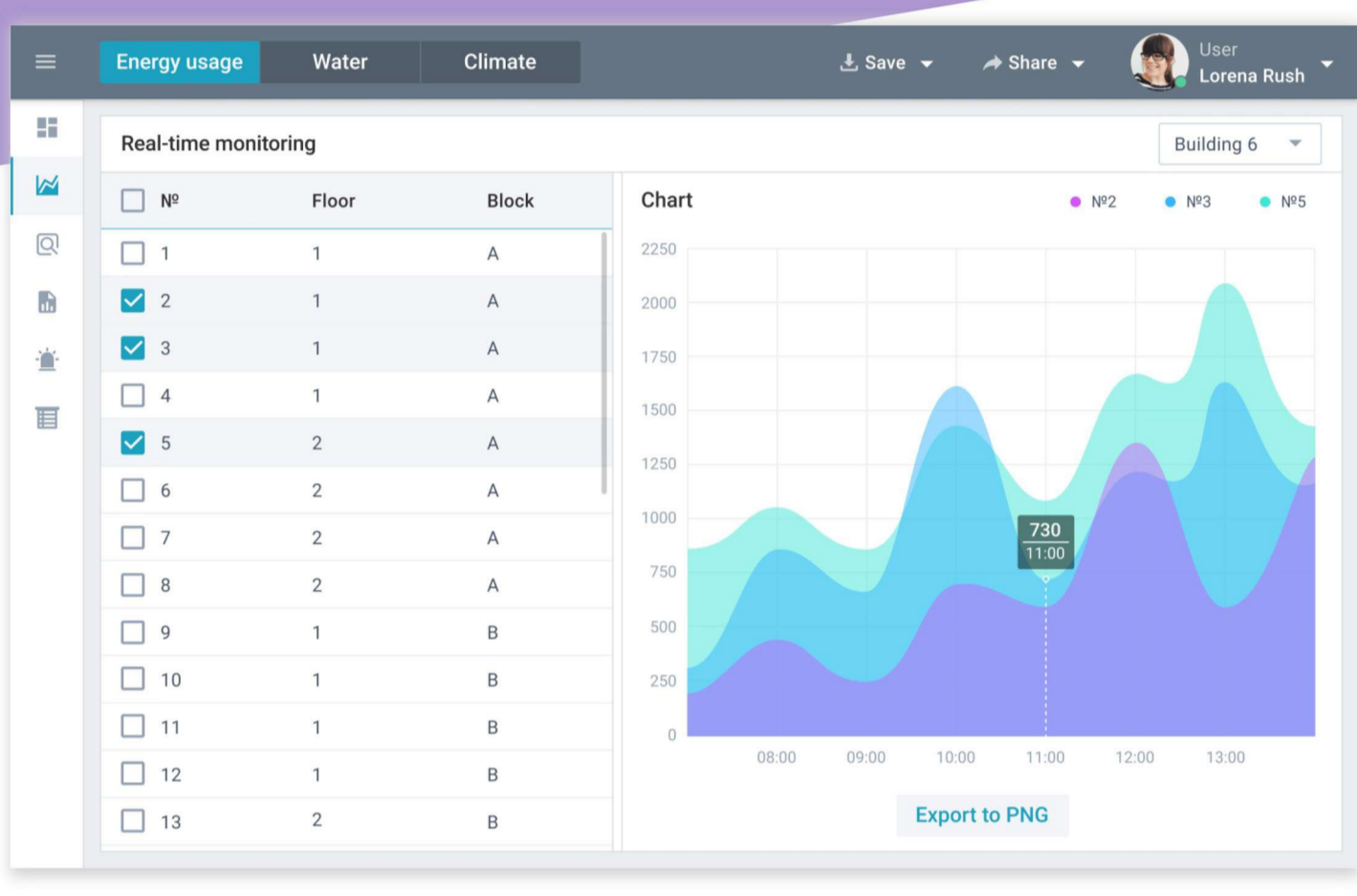
Business Challenge

The customer, a real estate investor, wanted automatic meter reading, which is a way of collecting consumption, diagnostic, and status data of its commercial buildings in real-time from water meters, energy metering devices. That info is then sent to the system for billing, troubleshooting, and analyzing purposes.

The customer insisted on developing a comprehensive, robust, and user-friendly monitoring system that gives access to information, sends building queries to the dashboards, and saves them time in producing reports. Analytics needed to be sharable and easy to deal with so that agents could show previous payments to prospective tenants' to influence them to sign up.

The second target was to improve responses to things like leaks and also handle emergencies such as fire more effectively.

Invoicing was also an imperative feature. Routines for collecting rental fees and producing invoices for utility services needed to be automated within the system. The company planned to implement the IoT monitoring system on one commercial building and then subsequently scale it to all its commercial properties.



Solution

IoT in real estate is a multi-functional technology that automates many manual routines. Calling on our significant experience in custom software development for real estate businesses, XB Software used Webix UI library to create a real-time data monitoring system, to implement features such as the collection of real-time data from heat, electricity, water, fire, leaks detectors, air composition analyzers, opening doors and windows, and activating different smoke and carbon monoxide alarms from several manufacturers.

Real-time data analysis and monitoring

Using IoT for commercial real estate to see the big picture of power and water consumption is the first step to smart property utilization. The system encourages timely replacement and modernization of equipment which helps businesses to improve their competitiveness by reducing expenses on old and failing appliances.

Preventing dangerous situations

The real estate IoT system sends alerts when a piece of equipment functions outside of a particular pattern, allowing property managers to prevent breakdowns or to react quickly when an urgent repair is needed. Replacing equipment quickly increases the energy efficiency of the building, reduces the cost of invoices, and so improves tenants' satisfaction.

Creating invoices

Based on collected information for the specified time period, the tenants receive their rental fees and invoices for utility services. Centralized billing gives them a clear picture of consumption and payment, helping to reduce debts, improves payments, automates routine, and helps tenants to better understand their usage.

Applied Technologies

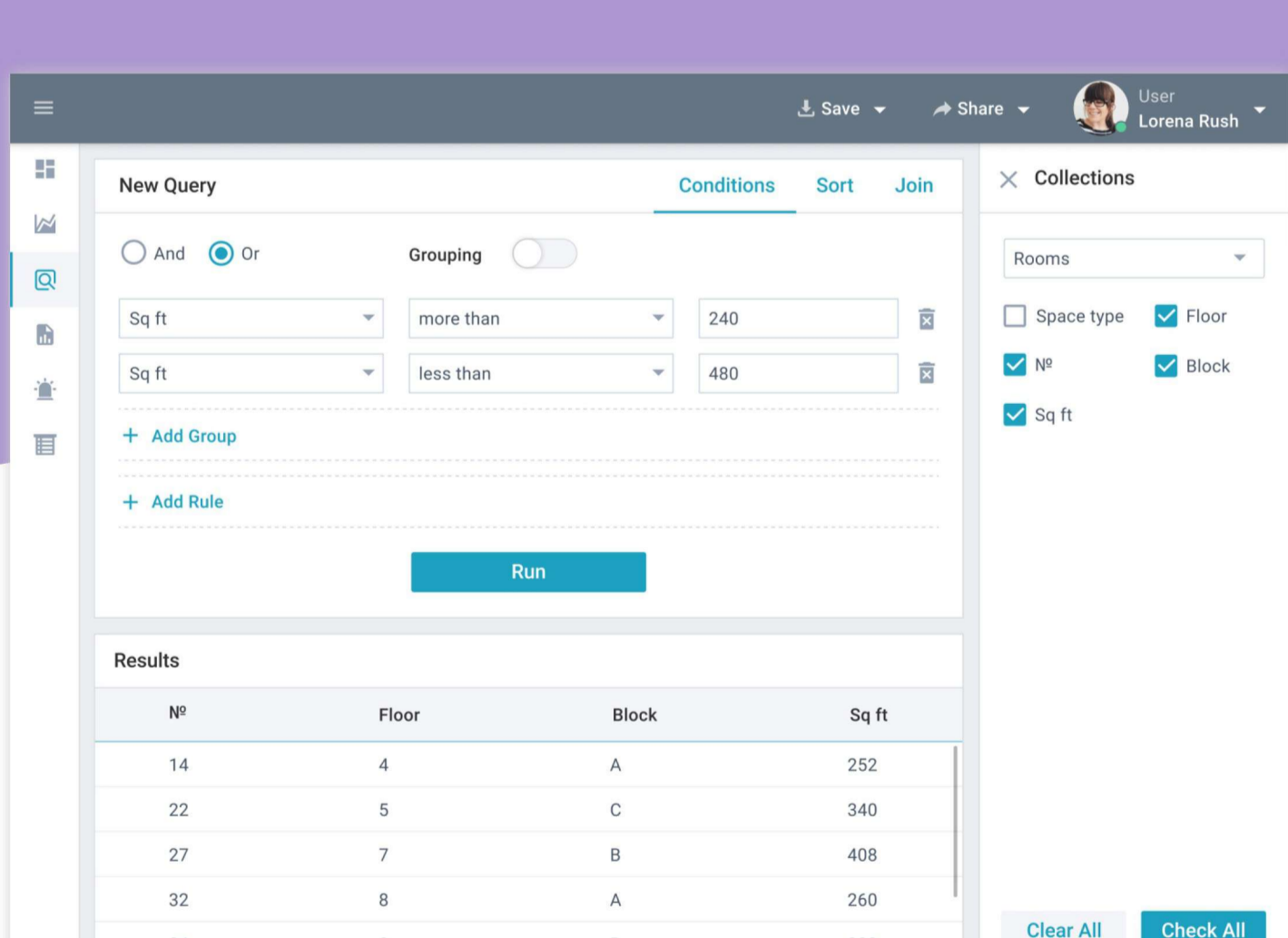


Duration

6 months

Estimated man-hours

2500



Result

XB Software developers created a user-friendly IoT-based monitoring system that allowed managers to:

- quickly respond to equipment breakdowns and prevent dangerous situations
- gather and analyze data for efficient decision making
- receive payments more regularly and on time, reduce debts for utility services
- increase positive decisions from tenants after the first inspection and acquaintance with additional information on energy reports

Contact us today, and we'll turn your ideas into successful projects.