

# DATA FROM SENSORS

**Our customer is a specialist in wireless development.** The company provides hardware and software solutions worldwide. Also, they support technical implementation of connected business solutions and cover the area of IoT practices.

## About the project

The essence of the project is to collect data from sensors installed around the perimeter of a building. Their task is to measure the physical characteristics of communal objects (for example, temperature or humidity). Sensors transmit the collected data to the server where they are processed. Then, processed data is transmitted through applications to users: landlords and tenants.

## Challenge

For our customer it was necessary to organize the display of collected and processed data for landlords and tenants.

Therefore, the company set the task for us to develop special applications for displaying data to end users.

## Solution

For landlords, we developed a web application to display data in all premises. For tenants, we developed a mobile application. This was developed on the basis of two platforms - iOS and Android. Users can download it via a QR code, which is located on the premises of a residential building.

## Key features

### Web application:



displays the data in a table format



filters the data for the specified parameters



displays the operation of the sensor

### Mobile application:



can be installed using a QR code



displays the data of a sensor located in a particular apartment



when installing, unpacks the content of a particular landlord and customizes it, because the ID of each landlord is embodied in the QR code



can be reinstalled for a new building / room by scanning a new QR code



displays the sensor data:  
- physical indices of premises  
- graph of values for the selected time period



notifies the user about changes of the physical parameters of the room and recommends specific actions (for example, to ventilate the room or close the window)

## Technologies

### Web technologies:



Angular 2



Typescript



Javascript



NodeJs

EXPRESS

Express.js

### Mobile technologies:



Java Development Kit 7



Android Studio



Objective-C



Firebase Cloud Messaging