

Indoor Positioning of Cars in a Car Showroom



AT A GLANCE

- 2D/3D building maps
- indoor navigation within the area
- status information on the car
- navigation and filter function to the vehicle



PROBLEM DEFINITION

The site of a used car centre covers approx. 50,000 square metres and exhibits around 500 to 1,000 vehicles - it is difficult to keep track of all vehicles and their current location at all times. Both sellers and customers have difficulty finding vehicles that meet certain criteria (motorization, mileage, etc.). In addition to an overview of the locations, process flows are also to be optimized and precisely documented in order to enable an efficient organization. In addition, the service life of individual cars is to be measured because a longer service life reduces the sales price.

SOLUTION

In this application example we have three stakeholders who have different needs.

The operator receives a web interface with numerous information about the technical details and at the same time has an overview of the location of the respective vehicle. In addition, the status of a vehicle can be tracked within the repair/maintenance process, enabling a more efficient organization of maintenance procedures. The service life of individual cars can also be measured.

Customers can benefit from a navigation and filter function within an app. The search for the right vehicle can already begin at home: Selected models are saved in a watch list and can be inspected on site. Once at the used car center, the customer can use the app to display the route to the selected car.

TECHNICAL IMPLEMENTATION

In all vehicles of the Used Car Centre there are BLE beacons that send signals to the LoRa/BLE tags on the walls/lamps. The LoRa/BLE tags receive the Bluetooth signals from the beacons and send the data packets to the infsoft LocAware platform®. Employees and customers can access the data and view the location of the vehicle on a map via an app or web interface. The advantage of using LoRaWAN for data transfer is the problem-free and above all wireless installation of LoRa/BLE Tags in the infrastructure. There is no need for a power supply or individual connection via Ethernet or Wi-Fi. The hardware is battery-powered (> 1 year) and has a long range. Since no real-time information is required, LoRa's typical latency times of 30 seconds to 5 minutes are no problem.

Imprint

© infsoft GmbH 2017. This content is protected by copyright. All rights to content and design are with infsoft GmbH. You may not copy, republish, modify or transfer this work without prior written and agreed consent of infsoft. Our content is regularly edited and carefully checked. However, we do not accept any liability with respect to the correctness, completeness and current status of the information offered here. All mandatory legal details can be found under: www.infsoft.com/company/contact



infsoft GmbH Ingolstädter Str.

Ingolstädter Str. 13 85098 Großmehring Germany

Contact

Phone +49 8407 939 680 0 Fax +49 8407 939 680 12 contact@infsoft.com www.infsoft.com