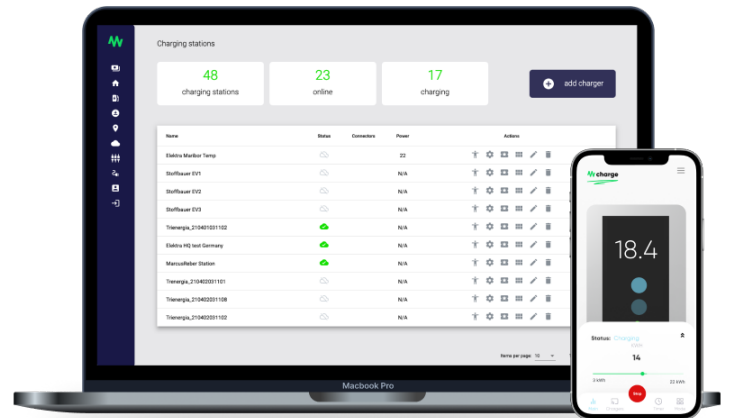# Wcharge
Case study

Project description:

Wcharge is an Angular web application that manages EV charging stations, charging sessions, and users. The mobile application is written in Nativescript for iOS and Android and provides users over Bluetooth or Wifi with real-time charging information from the EV charging station.

Client goals:

An interactive portal to operate an electric charging station fleet. Including management of electric vehicle charging stations, charging sessions, users, networks, and other dependencies.

A mobile application interacts with an electric charging station over Bluetooth and Wi-Fi. Therefore, the application must support user login, charging sessions, and complete management of a charging station over Bluetooth and Wi-Fi protocols.

Technology stack:

Angular, NativeScript, TypeScript, Bluetooth, REST API.

Tech concept:

The web portal framework is Angular, which interacts with a REST API backend service. The mobile application is written on the NativeScript and Angular framework for iOS and Android.

Bluetooth protocol is implemented on a NativeScript module and utilizes Angular subscriptions to handle the data exchange. The application automatically detects the optimal connectivity mode for a specific product in terms of Wifi or Bluetooth and supports the same level of functionality regardless of the network layer.