

## Success Story: Mobile App to remotely control pools



*We developed a unique mobile application to control various pool configurations, improving the user experience and driving the digital transformation of Waterway Plastics.*

### About Waterway

**Waterway Plastics** is a company dedicated to **design, manufacture and market bath, pool and spa products**. Its most representative products are its pool control systems, which are capable of controlling all aspects of a pool from a centralized device.

### Challenge

**Rootstack** was trusted by **Waterway** to develop a mobile application to:

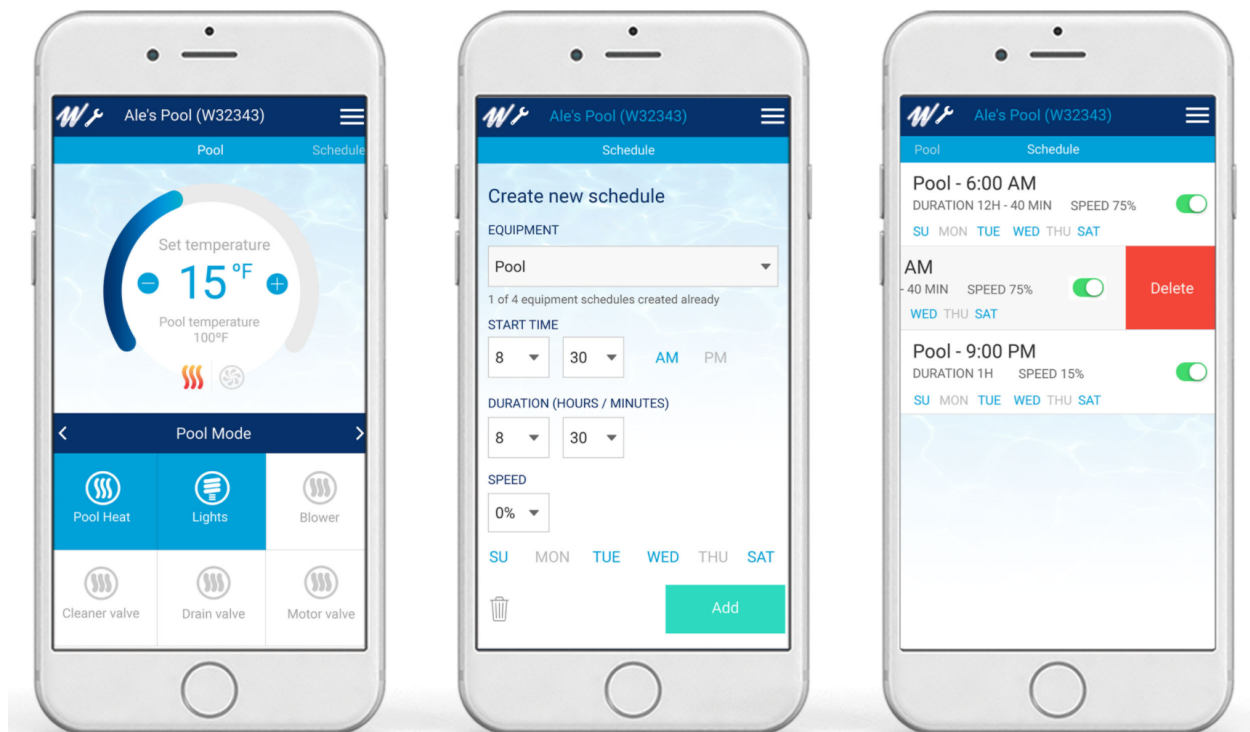
1. Authenticate with a Waterway user API.
2. Add devices that will automatically set a configuration on the mobile application for future connections, such as Chromecast.
3. Be able to interact with multiple devices (pools).
4. Interact with the pool with the ability to change: lights, valves, temperature and other settings.
5. Create and assign schedules to outputs of the pool device.

### Our solutions

**Rootstack** developed a **mobile application** for Waterway that provides **real-time communication between pool devices and the app** allowing to remotely interact and control aspects such as temperature, lights, modes and valves.

Its architecture is based on three main elements:

- **Waterway API:** The API is in charge of managing devices per user of Waterway. Users can create their accounts and add and configure devices to their user.
- **Pubnub:** We use Pubnub as a socket server where every time a mobile application is active, a new channel session is created. The channel is responsible for transmitting changes that happen on the mobile application or the pool device. Changes are sent using commands that interact directly with the Waterway hardware.
- **Mobile application:** The mobile application is responsible for interacting with the API and Pubnub so the pool hardware can do its job of interacting with the pool.



Some of its benefits include:

- End-users can interact with the pool hardware directly from their phones.
- Users can set up multiple devices on the mobile application. They can switch between one device or another and can change settings in real time on every one of them.
- Users can see device changes in real-time.
- It allows users to set start and end times for group activity, which means that the pool will automatically perform certain actions on its own.

**Waterway** partnered with **Rootstack** taking advantage of our **expertise developing mobile applications capable of connecting to hardware devices and interacting remotely** to offer an innovative product to the market.

## Technologies

