ESP-based development boards are affordable and powerful devices with a wide range of applications. However, their programming is quite complex, which limits the pool of potential users. This thesis deals with the design and implementation of a web application and a library built on ESP-IDF that jointly connect ESP board programmers with end users. Through the web interface, programmers can publish their firmware and its configuration form, which allows them to declare variables whose values can be set when the firmware is flashed onto the board. Development board users can register their boards, search for available firmware, configure it using the configuration form, and upload the firmware with the configuration remotely to their boards using the OTA (Over-The-Air) mechanism, without the need to install and program anything. The connection between a board and the web application is provided by the companion library that automatically connects to the Wi-Fi network, communicates with the web application using MQTT and performs OTA updates.