Quick Access Mobile Domoticz Custom User Interface

by rwbl developed for personal use only

Objectives

To develop for personal use only, a Custom Web Frontend for the **Domoticz Home Automation System**

- control frequently used functions, like lights, thermostats, shutter/blinds, climate & key dates information.
- simple to use user interface with limited components, i.e. buttons, dropdowns, modal info pages.
- mainly accessed from mobile devices running Android or iOS.
- located on a Raspberry Pi running Domoticz 2020.2.
- created with HTML, JavaScript modules, CSS styles.
- interacting with Domoticz using JSON via <u>HTTP API requests</u>.
- flexible in maintaining Domoticz devices by using room plans & device properties to setup HTML interface.

Background

The application has been developed, based on a request to enable simple access to Domoticz from any device in a local network. Meant by simple access, is a user interface with limited components on a mobile device screen having large sized components, like text, buttons, dropdowns. Functions are grouped, separated by horizontal rules. Each function having similar layout depending its required components. The screen must be scrollable to select a function.

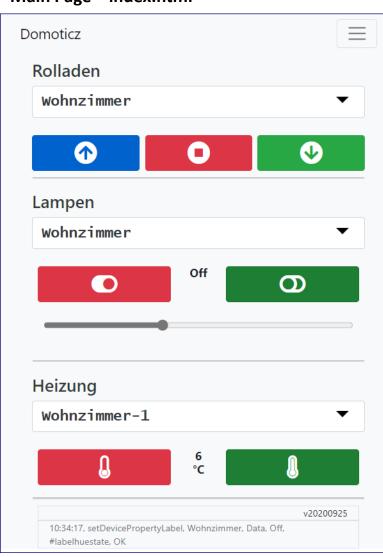
A function is used to control dedicated devices, like lights, thermostats, shutter/blinds and to inform about climate & key dates.

UI Windows 10

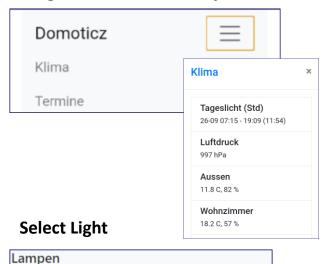
Main Page - index.html

- ☐ Burger Menu Climate, Key Dates
- ☐ Shutter/Blinds
 Up,
 Stop,
 Down
- On,
 Off,
 Level 0-100%

- ☐ Thermostats
 On (21°C),
 Off (6°C)
- ☐ Version & Debug Information



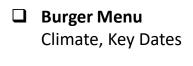
Burger Menu Climate, Key Dates





UI Mobile Device Android

Main Page - index.html



Shutter/Blinds

Up, Stop, Down

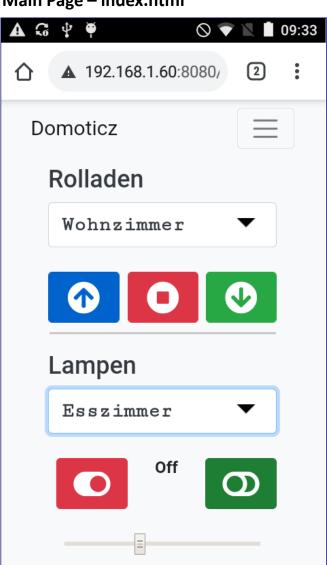
Lights

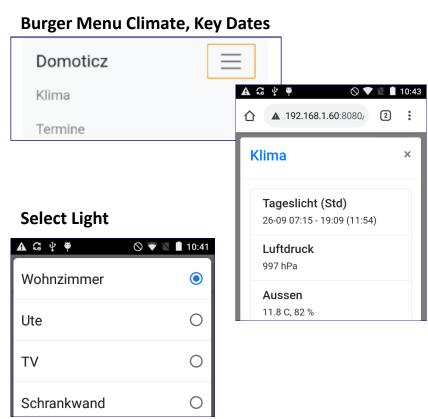
On, Off, Level 0-100%

NOT VISIBLE ON SCREENSHOT

☐ Thermostats On (21°C), Off (6°C)

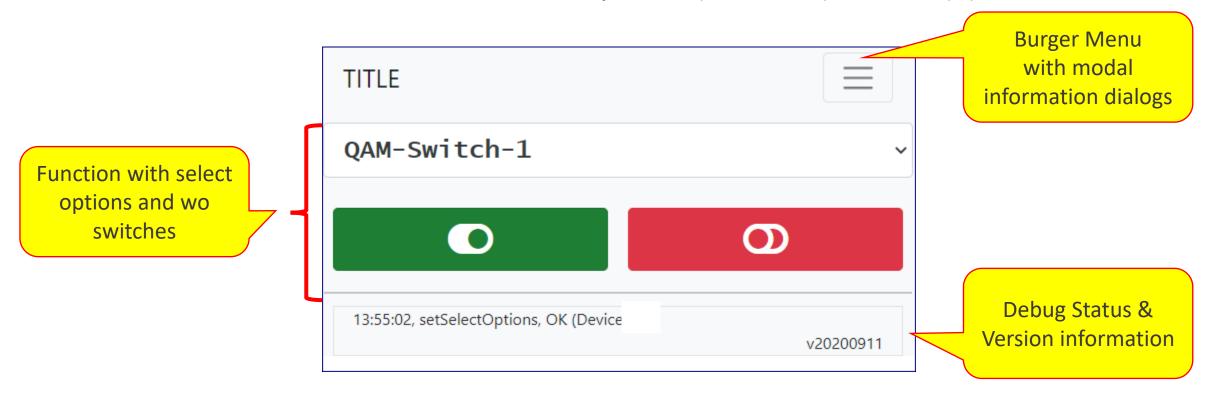
☐ Version & Debug Information





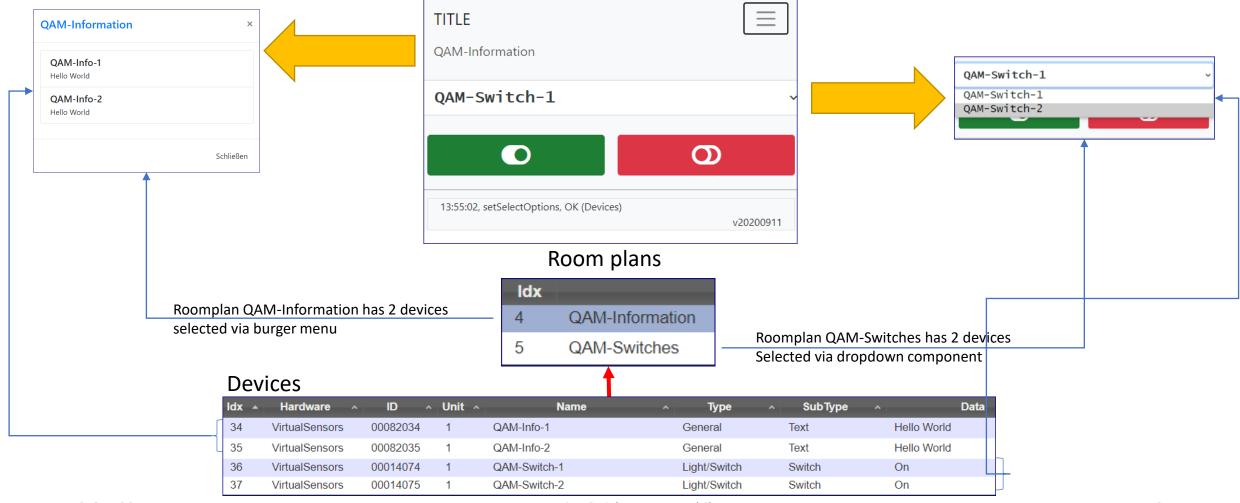
Domoticz Customized Web UI access from any browser with focus on mobile device usage.

The HTML file is located on the Domoticz system and opened with http://domoticz-ip/qam/basic.html



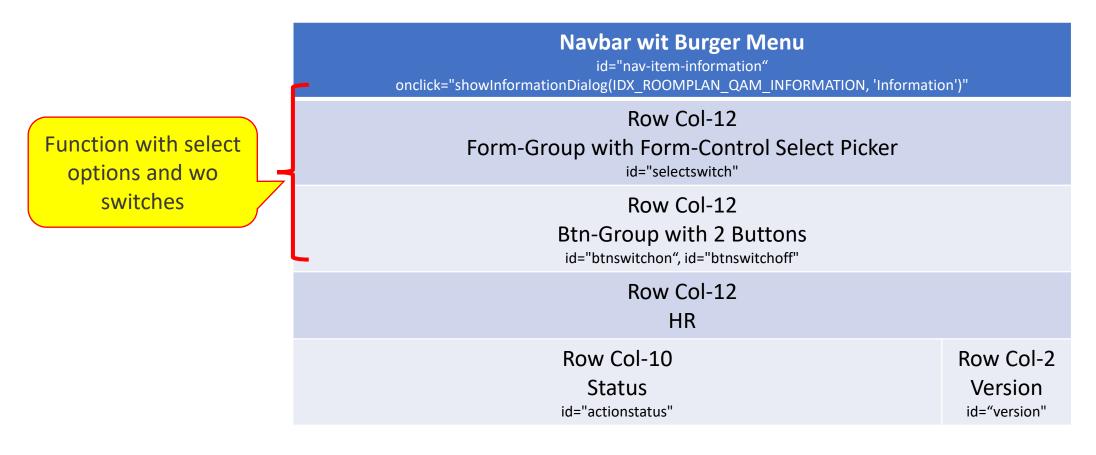
The Burger Menu Dialogs and Functions use Domoticz Devices build from dedicated Domoticz room plans:

Flexible plan & device management (add, change, delete, rename), Configuration in Domoticz and not in QAM, Device control via HTTP API REST Requests, Automation Event dzVents handle changes in cases

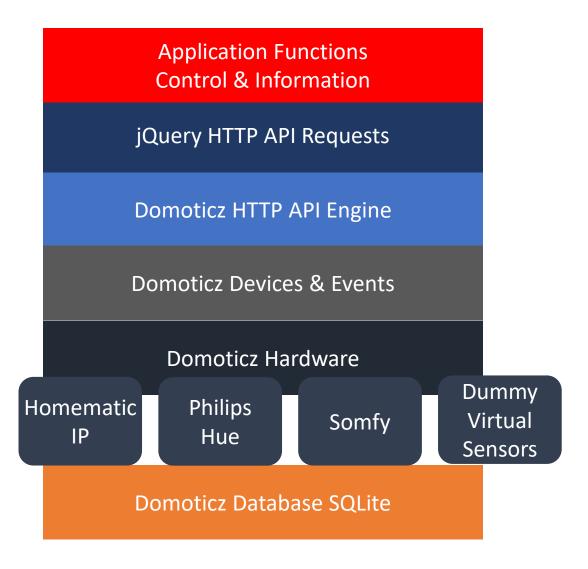


HTML Layout

HTML layout using Bootstrap 12 Column Grid with Fluid Containers

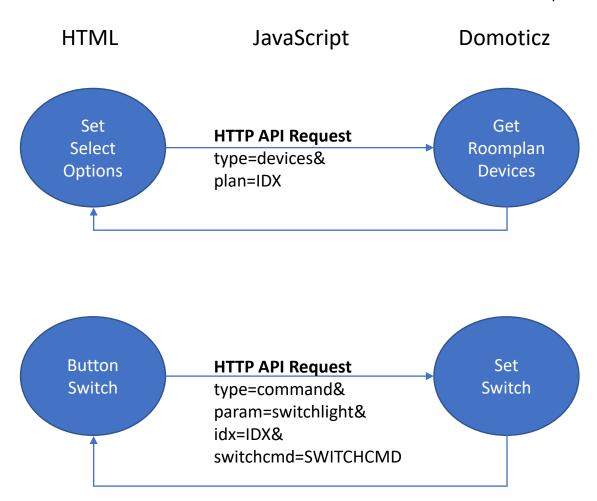


Overview Communication



HTTP API Requests

URL: http://domoticz-ip:port/json.htm?...



JavaScript Example Switching a Device

```
Switch On, Off
    Example: switchDevive(URL SWITCH DEVICE, "selectswitch", "On")
function switchDevice (requestUrl, selectorSwitch, switchCmd)
    // Select the deviceidx
    deviceIdx = $(selectorSwitch).val();
    deviceName = $(selectorSwitch).find('option:selected').text();
    requestUrl = requestUrl.replace("#IDX#", deviceIdx).replace("#SWITCHCMD#", switchCmd);
    console.log("switchDevice: " + requestUrl);
    $.getJSON(
        requestUrl,
            format: "json"
        function (data)
            // Expect JSON result: {"status" : "OK", "title" : "SwitchLight"}
            if (typeof data != 'undefined')
                setStatus("switchDevice, " + deviceName + ", " + switchCmd + ", " + data.status);
            else
                setStatus("switchDevice, " + deviceName + ", " + switchCmd + ", " + MSG_ERR_GETJSON);
   );
```