I18N.md 2024-10-13

WLED Localization

The scripts and files in the wled00/I18N folder support static localization of the WLED program. The files in wled00/src will be cached in I18N and then replaced with the localizated versions. After that, the usual npm build scripts etc. is used.

The flow supported by the scripts is to perform internationalization by populating the I18N folder structure with the files requiring localization, and creating templatized files and a phrase index file. The phrase file can then be translated into any language supported by Google Translate, and then applied back to the templatized files to create the localized files.

The intermediate JSON files can be tweaked as required.

Steps for internationalization

1. Scope: Get list of files to be internationalized and localized.

Script: insert the writeHtmlGzipped() and writeChunks() lines from cdata.js into the script list.js. This replaces the two functions so they simply output the filenames.

JSON Output: I18N/src/list.json

- 2. Templatize:
 - 1. Save a copy of the original files in I18N/src/original
 - 2. Replace the text in HTML tags and @title attributes with placeholders of the form \${nnn:originaltext} and save the templatized files in I18N/src/data Script: scanner.py JSON Output: data.json

Steps for localization

1. Create the translated phrase index.

Script: L12N.py

JSON Output: I18N/langs/{lang}.json

2. Apply the translated phrase index, and save the result in the original file locations.

Script: applyLang.py

Finally, use the usual UI build process (npm build).

Required Libraries

The scripts use python3 and the libraries beautifulsoup4 and a working version of googletrans (I used 3.1.0a0)