Installation

Get ESP-IDF

To build applications for the ESP32, you need the ESP-IDF software libraries provided by Espressif. To get ESP-IDF, navigate to your installation directory and clone the repository with git clone, following instructions:

```
cd ~/development/esp32
git clone --recursive https://github.com/espressif/esp-idf.git
```

ESP-IDF will be downloaded into ~/esp/development/esp32/esp-idf.

Set up the tools

Aside from the ESP-IDF, you also need to install the tools used by ESP-IDF, such as the compiler, debugger, Python packages, etc. The scripts below installs the compilation tools required by ESP-IDF inside the user home directory: **$HOME/.espressif** on Linux. If you wish to install the tools into a different directory, set the environment variable **IDF_TOOLS_PATH** before running the installation scripts. Make sure that your user account has sufficient permissions to read and write this path. If changing the IDF_TOOLS_PATH, make sure it is set to the same value every time the Install script (install.sh) and an Export script (export.sh) are executed.

```
cd ~/development/esp32/esp-idf
./install.sh
```

Set up the environment variables

The installed tools are not yet added to the PATH environment variable. To make the tools usable from the command line, some environment variables must be set. ESP-IDF provides another script which does that. In the terminal where you are going to use ESP-IDF, run:

```
. $HOME/esp/esp-idf/export.sh
```

Note the space between the leading dot and the path!

You can also automate this step, making ESP-IDF tools available in every terminal, by adding this line to your .profile or .bash_profile script.

From: