

The background features a complex network of thin, light-colored lines and small circles, forming a web-like structure. Overlaid on this are several triangles of various sizes and orientations, some of which are filled with a light yellow or orange color. The overall aesthetic is technical and modern.

ESP-IDF Components Library

Library of Sensors and Other Components

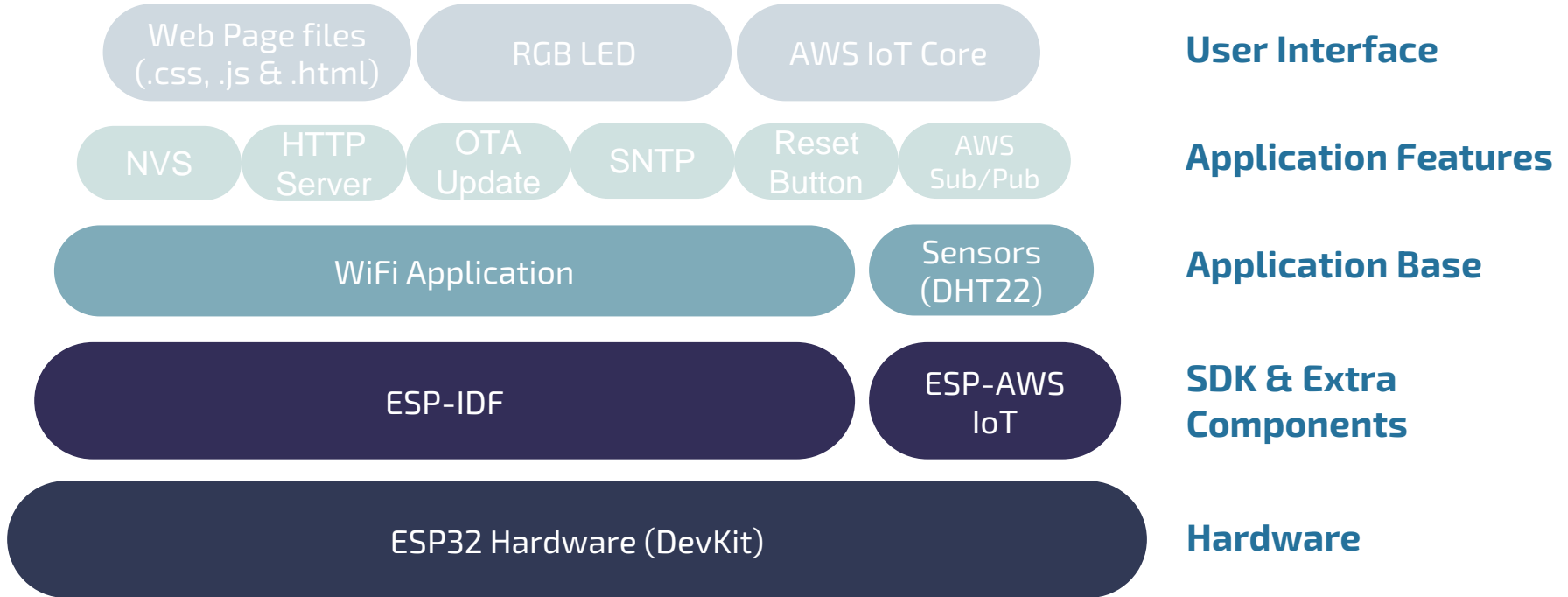
ESP-IDF Components Library

- Sensor Library Integration is Completely Optional
 - Lesson Plan
 - ESP-IDF Components Library Overview, Documentation and Examples
 - Project Structure
 - Integration Steps Preview
 - Demonstration
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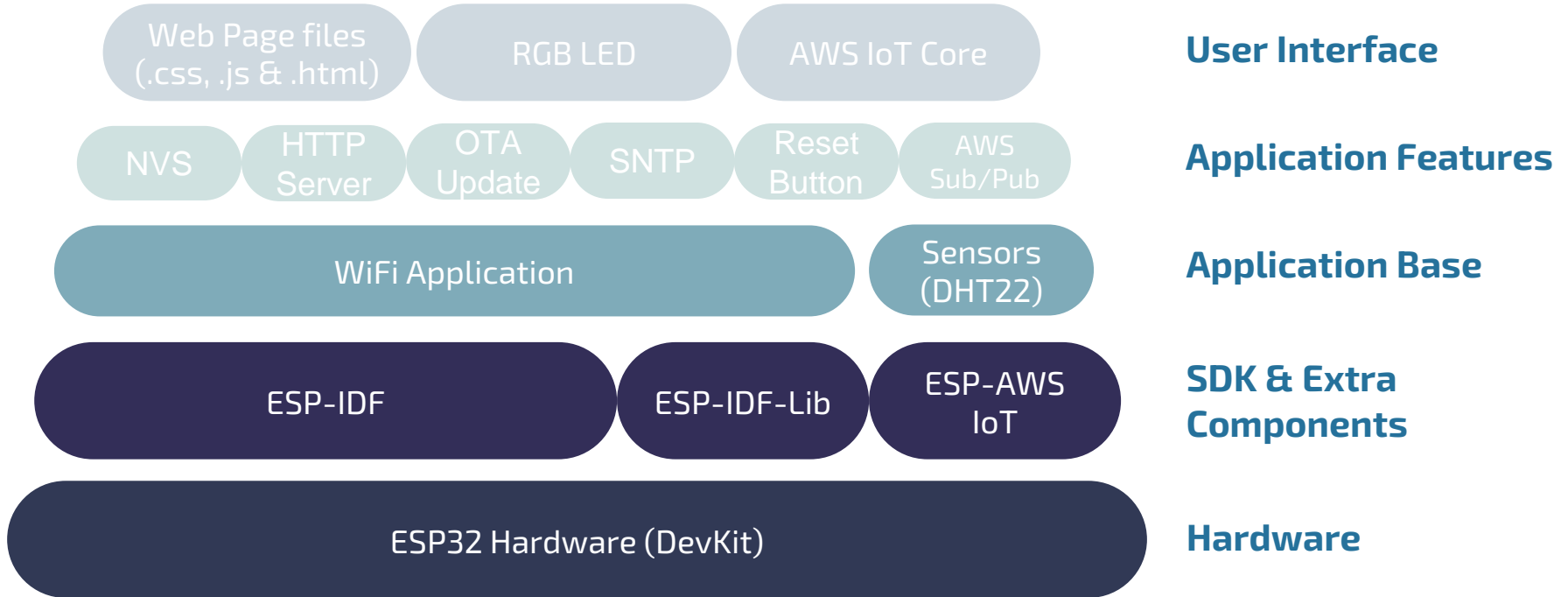
ESP-IDF Components Library Overview

- Component Library containing an abundance of drivers for sensors and more
 - Component Library → <https://github.com/UncleRus/esp-idf-lib>
 - Documentation → <https://esp-idf-lib.readthedocs.io/en/latest/>
complete documentation on various sensors and components
 - Examples → <https://github.com/UncleRus/esp-idf-lib/tree/master/examples>
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Application Project Structure



Application Project Structure Update



Integration Steps Preview

- Integrate Library

- create a new empty project, and open git bash in it.
- Clone ESP-IDF components/sensors library. from this repo:- <https://github.com/UncleRus/esp-idf-lib>
- Adjust the top-level CMakeLists.txt file to include the sensor library component.
`set(EXTRA_COMPONENT_DIRS "esp-idf-lib/components")`

- Integrate Example(s)

- Either use one of mine or choose one from the library.
 - Adjust the CMakeLists.txt file in the main folder to include the example files.
 - Add the 'Kconfig.projbuild' file from example to the 'main' folder.
 - Adjust application files (main.c, tasks_common.h).
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Examples Demonstration

- Demonstrate complete example(s) for easy adaptation for your own projects
 - [BME680](#)
 - ... More

The background is a light cream color with a complex geometric pattern. On the left side, there is a dense network of thin, light brown lines connecting small circular nodes, forming a web-like structure. Scattered across the entire background are numerous triangles of various sizes and orientations, some outlined in a thin light brown line and others in a slightly darker shade. In the upper right corner, there is a cluster of small, faint dots. A single, thin horizontal black line is positioned on the left side, below the main text.

Next Lesson