**\_4WD Car\_**

**Layered architectureGraphical user interface

Description automatically generated with medium confidence**

Layers

1. Hardware

* This layer has hardware modules peripherals will act the system

1. Microcontroller abstraction layer (MCAL)

* This layer has the components will control peripherals inside MCU. We going to use DIO and Timers

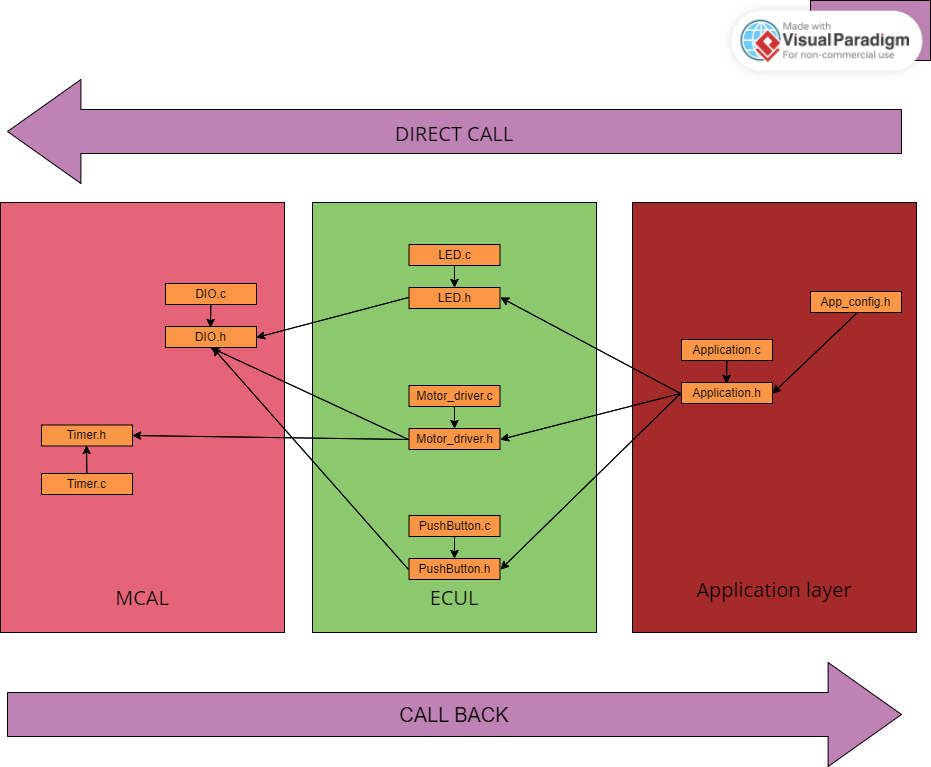
1. Electronic control unit layer (ECUL)

* This layer cares about modules and hardware outside MCU connected to it. Like push buttons, motor driver and LED

1. Application layer

* In this layer cares about software of system and how will act.

**System modules**



**The calling start from application layer until MCAL**

1. LED component call DIO component to control LEDs
2. Push Button component call DIO component to read signals form buttons
3. Motor driver call DIO and Timer components to control motors by pins and PWM signal