Egypt future work is digital

embedded systems professional track

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On-demand Traffic light control project

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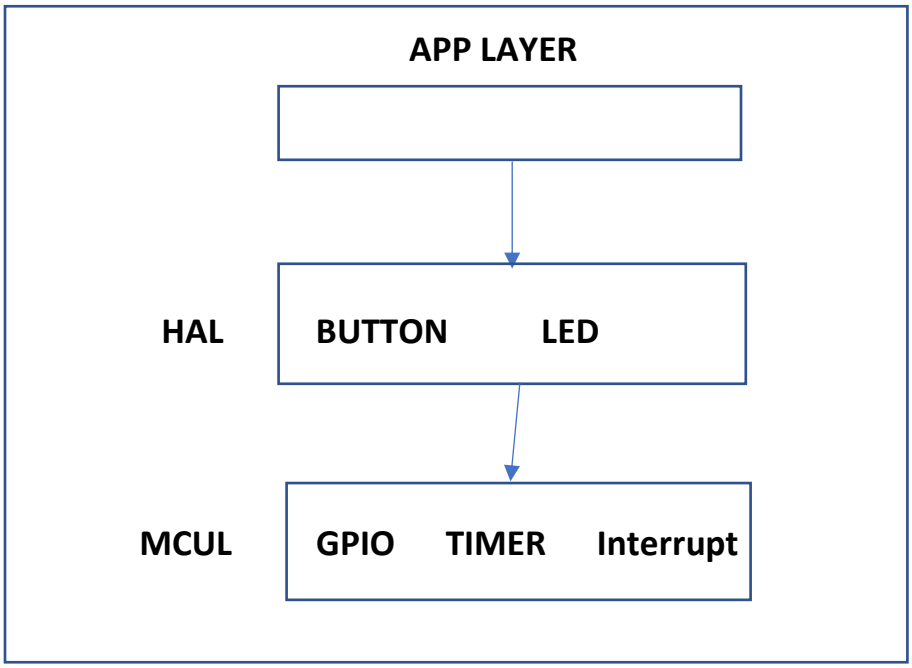
1- **System description:**

Traffic light control project aims to help pedestrians to cross the street and they are prioritized over the cars as in some countries,
So, if some of the pedestrians want to cross the street, he just can press on some button and wait for the green led to illuminate and cross the street safely.

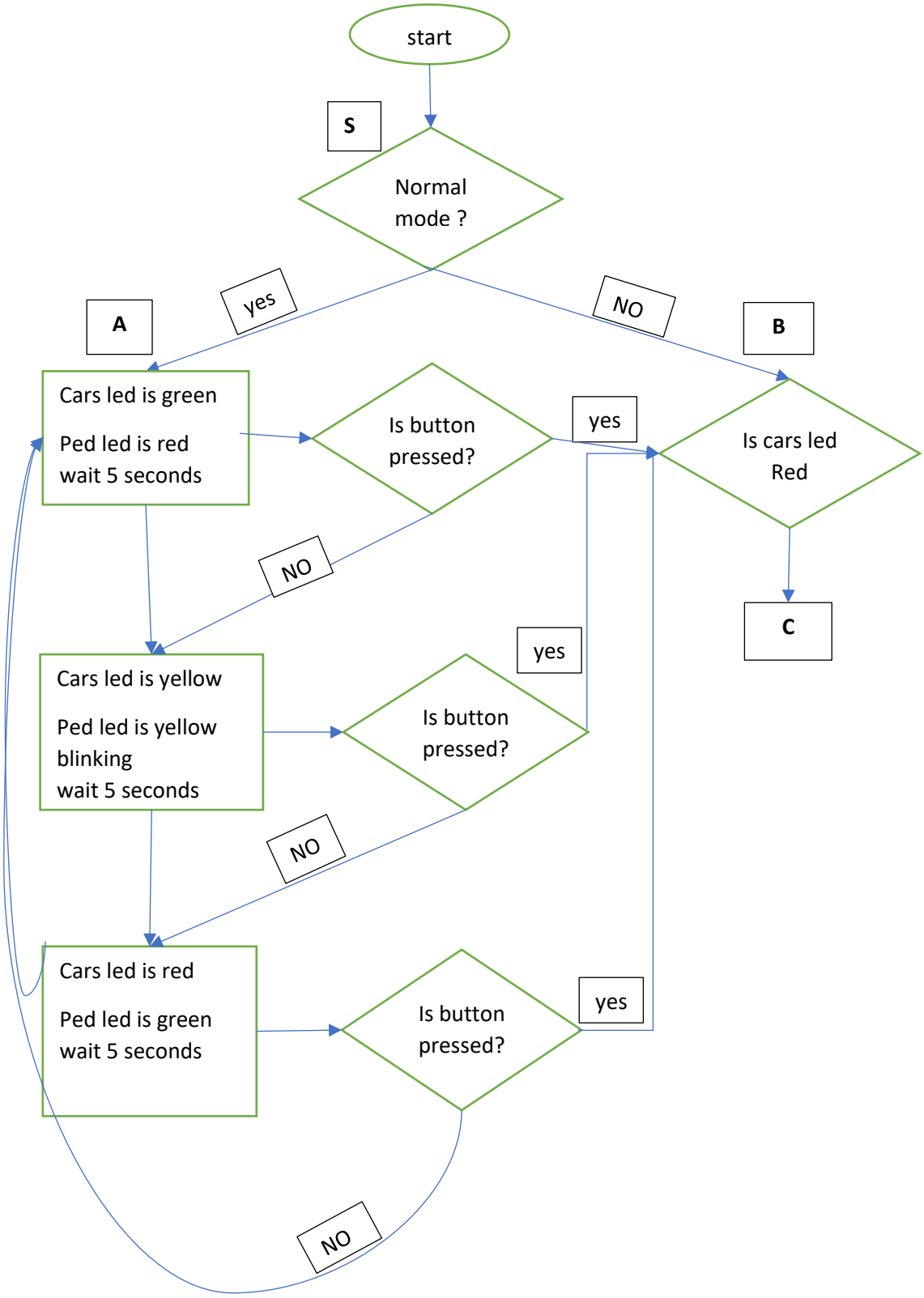
2- **System design:**

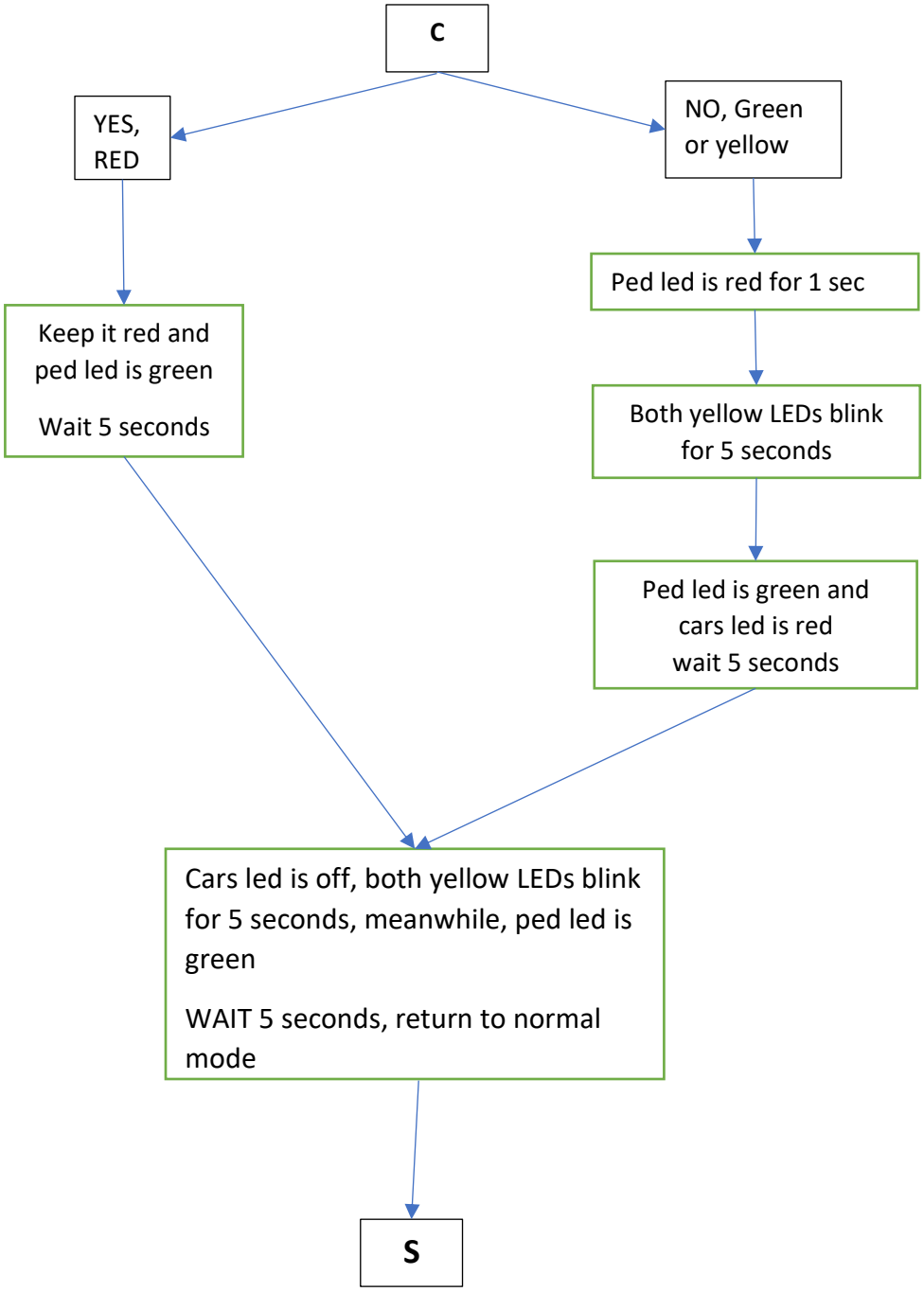
This system will follow layered architecture model



Each layer functions can only call functions of its lower layer.

3- System flow Chart

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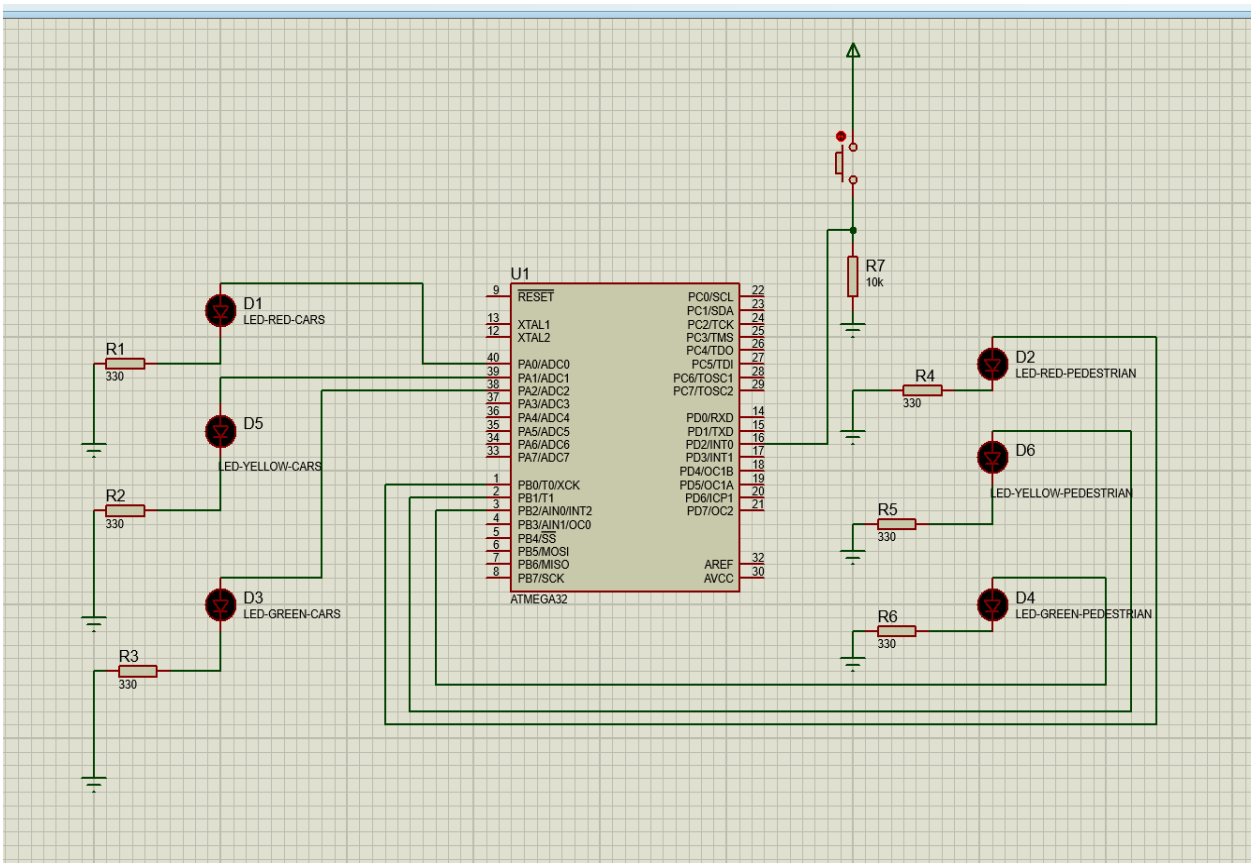
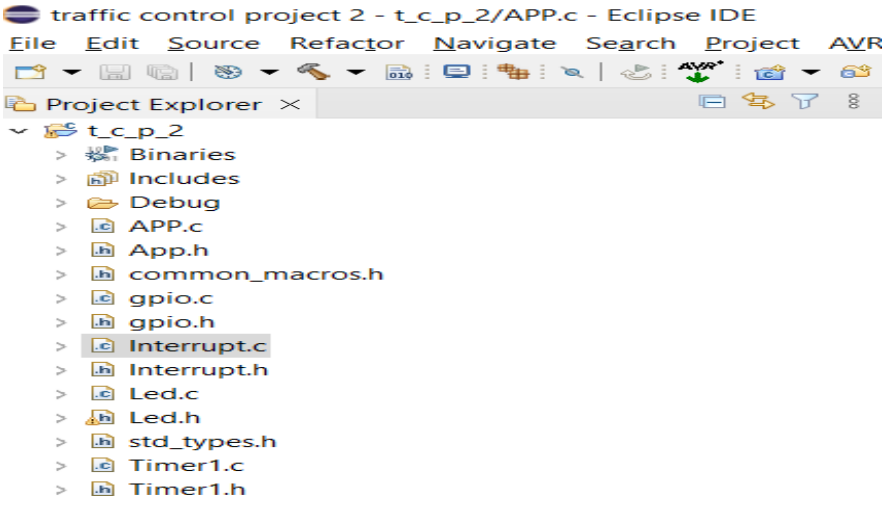
YES, RED
NO, Green or yellow
Keep it red and ped led is green
Wait 5 seconds
Ped led is red for 1 sec
Both yellow LEDs blink for 5 seconds
Ped led is green and cars led is red wait 5 seconds
Cars led is off, both yellow LEDs blink for 5 seconds, meanwhile, ped led is green
WAIT 5 seconds, return to normal mode
S

Schematic:



Project files: