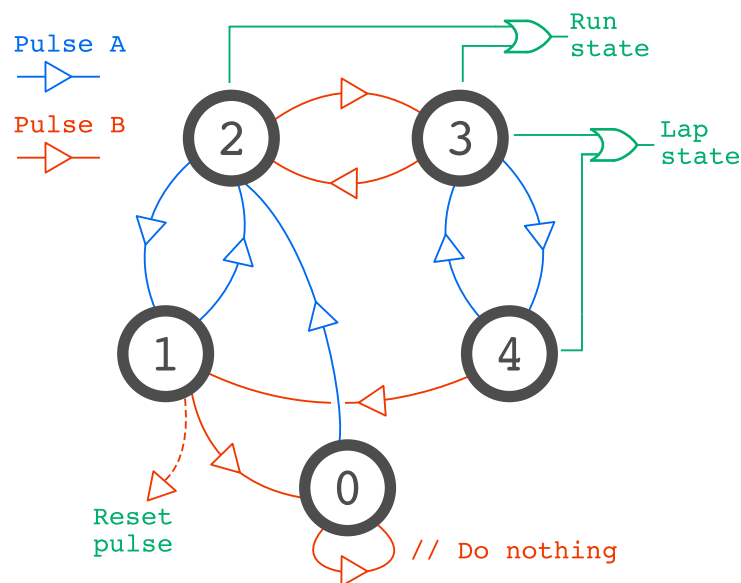


Lab Class 4
12.10.2021

- Implementation of a stopwatch with LCD display.

Problems

1. Implementation of the finite-state machine shown in the figure (do not consider the Run and Lap state outputs):
 - both **Pulse A**, **Pulse B** have to be provided by pushbuttons, each having its output “cleaned” by a monostable multivibrator;
 - the **state** has to be displayed by three LEDs,
 - the **reset pulse**, corresponding to the transition from state = 1 to state = 0, has to be displayed by a fourth LED.



2. Final implementation of a stopwatch with 1/100 s resolution, start/stop, lap/reset function, and LCD display.

At the end of each problem, show the result to the lecturer.

Upon eliminating the unuseful files (only *.v*, *.ucf*, *.xise* are necessary),
compress each working folder via
`tar czf labClass_4_<names>.tgz <Folder>`
and upload the resulting compressed file to the Moodle platform.