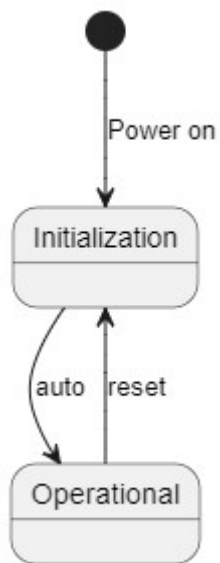
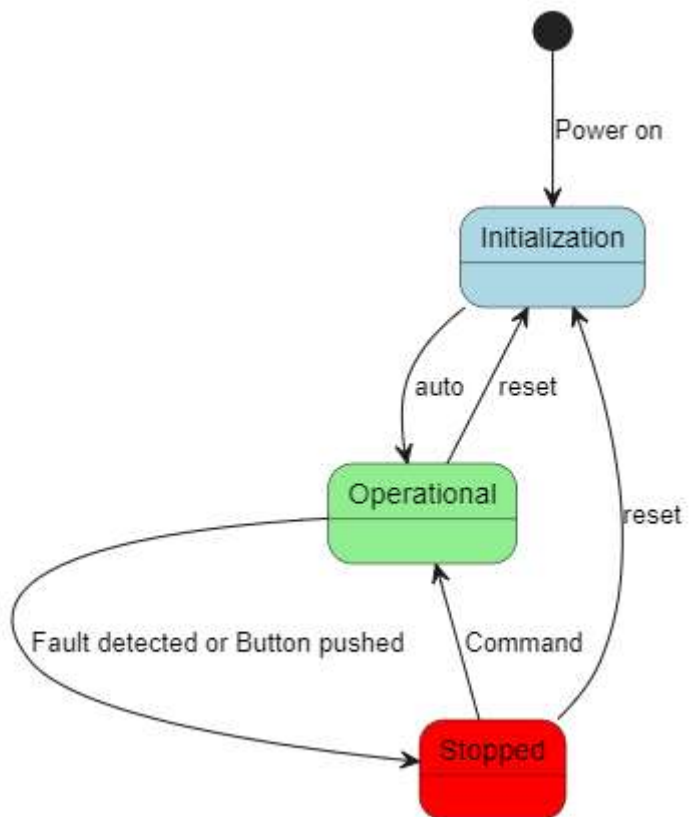


### Project 3: Dynamic controller behaviour

#### UML-Diagrams:

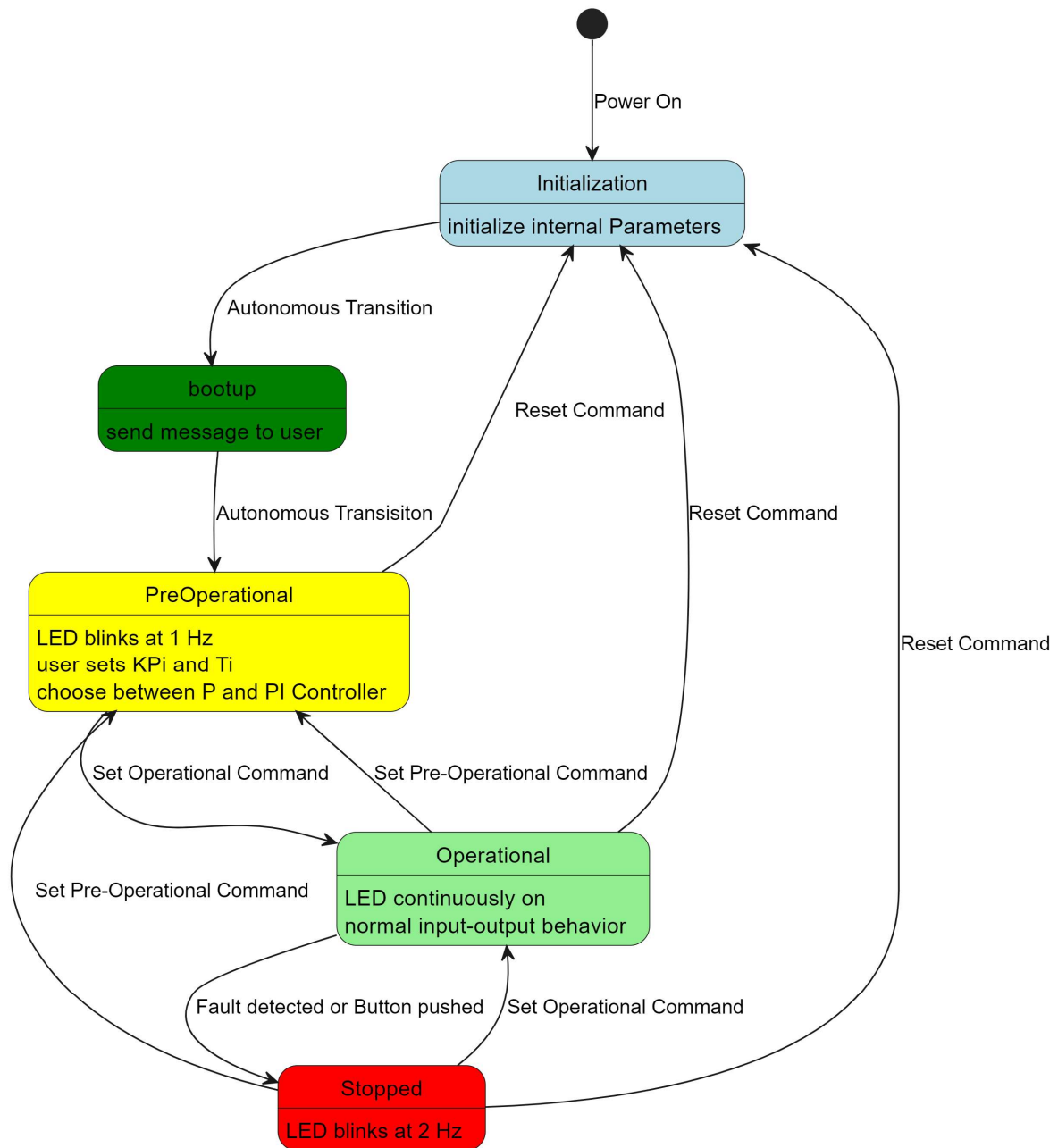


Part 1



Part 2

### Project 3: Dynamic controller behaviour



## Project 3: Dynamic controller behaviour

### Part 1:

see gitHub

### Part 2:

see gitHub

### Part 3:

Test results:

Failing:

```
Testing...
If you don't see any output for the first 10 secs, please reset board (press reset button)

test\test_main.cpp:21: test_normal_flow: Expected 0 Was 1      [FAILED]
test\test_main.cpp:38: test_alternate_flow: Expected 0 Was 1   [FAILED]
----- nanoatmega328:* [FAILED] Took 10.31 seconds -----

===== SUMMARY =====
Environment   Test    Status   Duration
-----
nanoatmega328 *    FAILED   00:00:10.314

----- nanoatmega328:* -----
test\test_main.cpp:21:test_normal_flow:FAIL: Expected 0 Was 1

test\test_main.cpp:38:test_alternate_flow:FAIL: Expected 0 Was 1

===== 2 test cases: 2 failed, 0 succeeded in 00:00:10.314 =====
```

After Implementation:

```
Testing...
If you don't see any output for the first 10 secs, please reset board (press reset button)

test\test_main.cpp:50: test_normal_flow [PASSED]
test\test_main.cpp:51: test_alternate_flow      [PASSED]
----- nanoatmega328:* [PASSED] Took 10.35 seconds -----

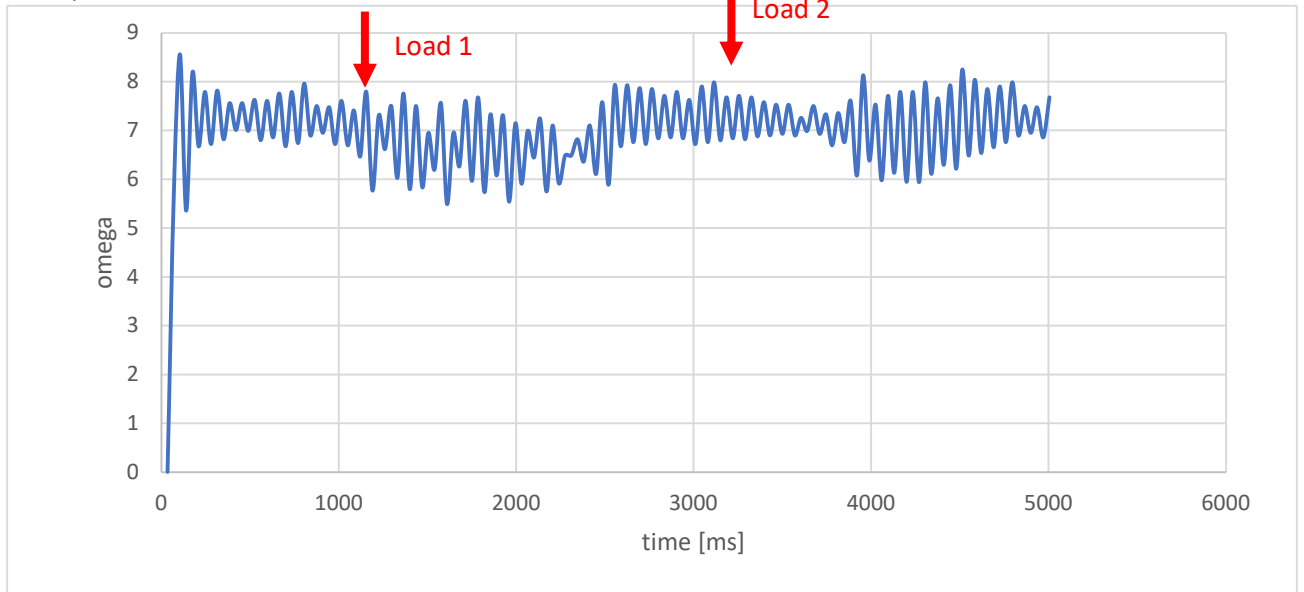
===== SUMMARY =====
Environment   Test    Status   Duration
-----
nanoatmega328 *    PASSED   00:00:10.353

===== 2 test cases: 2 succeeded in 00:00:10.353 =====
```

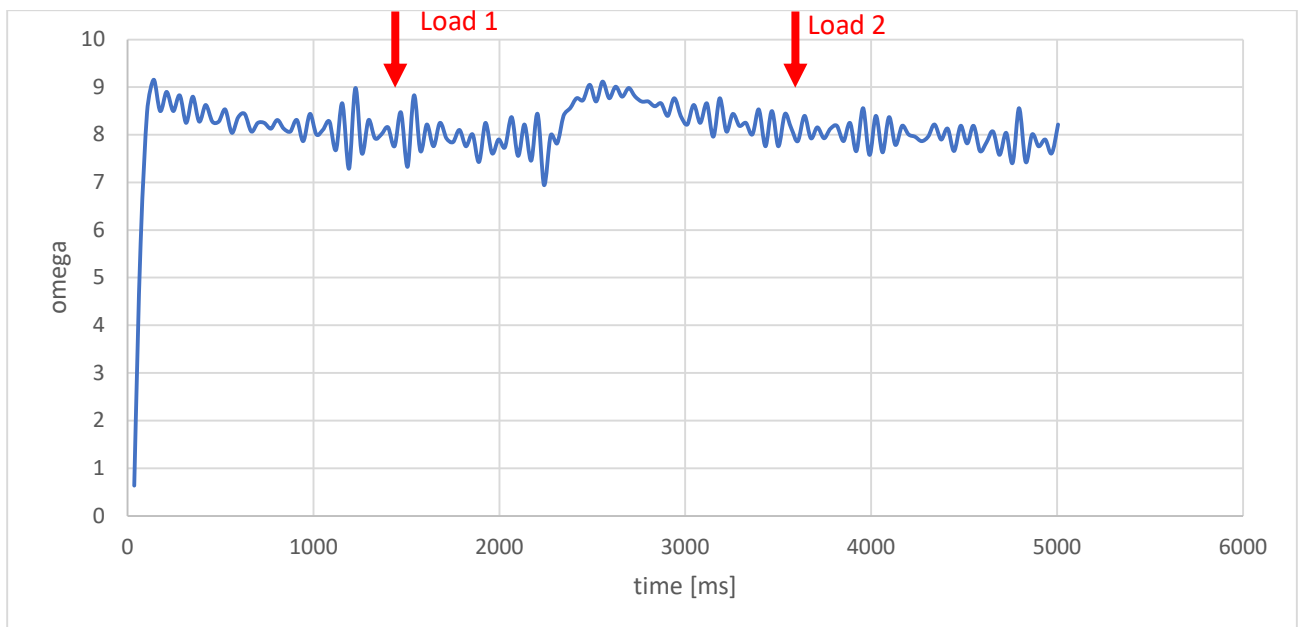
## Project 3: Dynamic controller behaviour

### **Part 4:**

Load performance of P Controller:

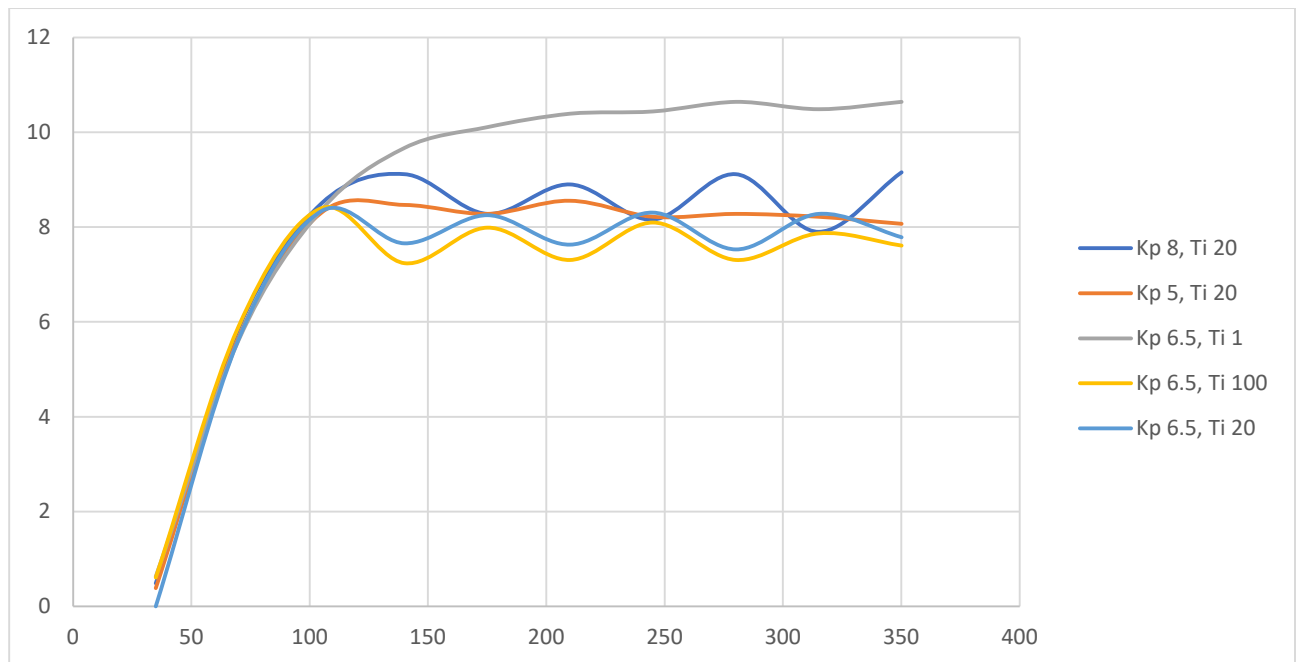


Load performance of PI Controller:



### Project 3: Dynamic controller behaviour

Step Response:



Video Link: <https://m.youtube.com/watch?v=K5wyBaYvYko>

Github: <https://github.com/Marlenexyz/EMBE-Group>