

WORK HISTORY

We are total 4 in numbers and divided 2 in pairs.

Pair1 – Sayan Brahma(DRIVER) , Akwasi a Obeng(NAVIGATOR)

Pair2 – Vasmshi Kumar Bogaju(DRIVER) , Achal Pragneshkumar vyas(NAVIGATOR)

Each of the drivers of the pairs -

- Cloned the Cpp-boiler plate repository and build using travis and checked coverage using coveralls and the build status was “passing” and coverage was 0.
- Created the UML Diagrams and activity charts , header file which is a stub for the class and the test cases.
- Pushed these changes in respective pair’s Driver’s github and named the repository as enpm808x_pid_pair*.

Switched roles in each pairs i.e., driver of each pair becomes navigator and the navigator becomes the driver

The new drivers of each pair -

- Forked the other pair’s previous driver’s repository which contains the UML Diagrams and activity charts , header file which is a stub for the class and the test cases.
- Created the main files i.e., a file which defines all the functions and constructors of the class and a main function file which executes the whole project in the desired way I.e., if pair 1 has designed the structure where they take the user input of kp, ki, kd, dt, setvalue and current velocity where as the pair 2 has all the parameters predefined and only takes setvalue and currentvelocity as user input.
- Updated the readme file by adding the pair 2 switched roles.
- Checked the build in travis and the coverage in the coveralls and changed the codes until all the test cases passed.

Did group discussions about the implementation as per the plan.

After the changes were discussed and verified then the new drivers made the pull request to the other pair’s old drivers.

The old drivers merged the changes and checked the build and coverage.

We sat in groups and did minor changes based on the specifications mentioned in the question i.e., cppcheck, cpplint and some other changes specially the commenting parts. Due to which there are some frequent pull requests done between the groups.

Before the fork part both the groups worked separately and after forking and code addition, we did a group discussion and the pairs did a pull request and the respective pairs merged. After merging the final build and coverage is checked, and some more pull request and merging has been done – only to meet the styling and comment requirement without harming the structure of the assignment.

Some test cases which the respective pairs would like to add are:

pair1 – Implement PI controller i.e., put the kd = 0

pair2 – Implement PD controller i.e., put the ki = 0

Travis build and coveralls coverage history:

- After clonning the cpp-boiler plate repository the build was successful and coverage was 0.
- After updating the Header files the build was successful and coverage was 0.

- After adding the test case file the build was unsuccessful and coverage was 0.

1

- After this the pair2's (old navigator switched to driver) forked, added the main files and checked the build and coverage- it was successful and 95% respectively.
- Pair2's (old navigator switched to drive) made a pull request to the pair1's(old driver) after the build was successful and the coverage was 95%.
- Pair2's (old navigator switched to drive) suggested that one of the constructor overloading is redundant and does not serve any purpose and hinders with the coverage getting to 100, so this additional constructor is removed and the coverage became to 100.
- Now the pair1's(old driver) accepted the pull request and merged it with his repository and finalized.

2

- After this the pair1's (old navigator switched to driver) forked, added the main files and checked the build and coverage- it was successful and 100% respectively and did a pull request.
- Pair1's (old navigator switched to drive) made a pull request to the pair2's(old driver) the build was successful and the coverage was 100%.
- Now the pair2's(old driver) accepted the pull request and merged it with his repository and finalized.