Dear Kyle Michel,

It has been brought to my attention that developers at this company struggle to release their code. I believe this is due to a natural occurrence of code bugs, and faulty deployment scripts.

I know that I have brought up this suggestion in the past, but I have a strong inclination towards implementing CI/CD pipeline.

In our last discussion, you had mentioned that to configure a CI/CD for each customer would take too much work and time that the company can’t afford. Though I agree that the process of setting up a pipeline for each costumer would take time, it would be the best investment in the long run. Currently we release our code at the end of every sprint which means that we leave large portions of our testing and deployment to the last minute. This approach may cause excessive congestion that can be avoided by CI/CD pipeline. Once set up, a CI/CD pipeline has the benefit of automated tests, which are what make CI/CD’s so powerful.

Through properly written automated tests that are fast, and have good code coverage, the process of catching bugs and deploying code becomes more fluid. Developers will won’t need to continuously write new test to catch their bugs. They also won’t need to spend extra time writing faulty deployment scripts.

Automated test on CI/CD can consist of three types of testing that will allow for consistent bug findings throughout development during a sprint. By having unit tests, integration tests, and system tests on the pipeline a continuous flow of testing and deploying code can be implemented. Unit tests will continuously test ‘atomic’ aspects of code such as methods, functions and classes. As the application grows, integration test will begin to take effect in the pipeline, these will test run in an environment similar to production and comprise of testing modules interrelation are working as intended. Finally, at the end stage of the script, System test begin to take effect. These will test the system in an environment most similar to real production.

Throughout a sprint as code is being pushed, automated testing in the pipeline will continuously test and deploy code allowing for faster bug findings, and deployment.

Please consider moving towards such a platform, I would be more than happy to further discuss CI/CD.

Regards,

Avinoam Waizman.