

Team Retrospective

COMP 3350 Summer 2022

Team 5

Before planning our approach to this final iteration, we discussed how we felt about our progress and processes so far. This retrospective focuses on testing, an aspect of our project we collectively believe was lacking in our Iteration 2 milestone.

The Problem:

While we felt confident about our manual testing and peer-review processes to catch code failures and other happy accidents, we realized that our automated unit tests were lacking. The low quality and coverage of our unit tests caused unexpected faults to go undetected. For example, we discovered a latent fault in our system that our TestAccessIngredients suite did not test for. This oversight highlights a lack of care towards our tests that we feel needs to be rectified.

How This Affects Our Project:

Insufficient testing has prevented us from uncovering latent faults in our system. Of course, this affects the system's usability, but also its rigidity to further changes. Furthermore, we have experienced a few points of high viscosity in our system that may have been avoided with a heavier emphasis on test-driven development, of which we have made only occasional use.

Over the last few days leading up to the iteration deadline the team developed the strategy that we would finish our features first, then write tests. This strategy led to bug-ridden code entering our development branch. Developing on top of untested code with existing bugs significantly slowed the development process for team members and led to incomplete, error-prone features being handed in.

Measuring Improvement:

We will be evaluating our improvement in the testing aspect of our project by targeting a 20% increase in code coverage, along with better PR practices to ensure no new code gets merged without tests.. Additionally, we are dedicating significantly greater resources towards testing, so it's a direct focal point rather than a side quest. Our goal is for our integration and acceptance tests to accurately outline sequences of real-world behaviours with our system, and reflect our vision and user stories. We will evaluate our success using our code coverage targets and by reflecting on the quality of our new tests to assess our satisfaction with our improvement.

– Team 5