

Individual Project 1 Report

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November 2, 2021

1 Tests

1.1 `test_new_course()`

This tests that new courses are created properly in the main School object as well as within the Professor object that teaches the course. First it checks that there wasn't a new professor created because there is already a professor by the name "Jason". Then it checks that it was added to the School's and Professor's list of courses. If all these pass then the test passes.

1.1.1 Incorrect Fix

There was a super small error where the function to check the professors name wasn't actually called because I forgot to put the parentheses so it always evaluated as false and created duplicate professors. To fix I just added the parentheses to the function call.

1.2 `test_register_course()`

This tests that students are created and given courses properly. First we check that "Cole" doesn't exist then we add him to a course and check he's in it and that he exists. We test that adding a student to a course that doesn't exist doesn't work. We also check that you can't add a student if the course is full. We check the return code from all of these to be sure that it's what we expected.

1.3 `test_get_students_in_course()`

This test ensures the students in some course are kept track of as being in that course. We test that the number of students in the course is what we expect and we check each of the students and confirm they're in it as well as confirming a random student isn't in it. We then add a student to the course and make sure it updates.

1.4 test_get_year()

For this we are testing that the students year is updated accordingly when courses are added. To keep things simple it only takes a few courses be a Sophomore, Junior, etc. So we check that the student is a Sophomore like we expect and then we add 2 courses so they'll be a Junior and check that it worked.

1.5 test_delete_student()

This test makes sure when a student is deleted that they are deleted everywhere and things are updated accordingly. We check the status of the classes the student is in and then delete and make sure everything updated to what it should.

2 Class Diagram

