Project Part 6

Title: Gas Mileage Tracker

Vision Statement: To inform drivers of their cars gas mileage, and make them think before they drive.

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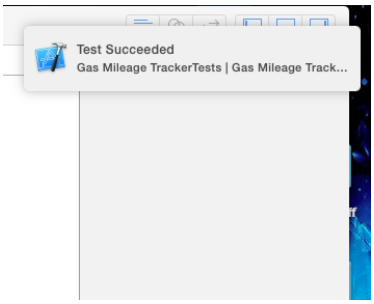
VCS Link: https://github.com/jabr9983/Gas_Mileage_Tracker.git

Automated Test Cases:
We wrote our automated tests in Xcode. To run our tests all you need to do is open our project in Xcode and then click on the "Project" drop down menu and then click "Test". The first time you run the tests it will take a little while because the ios simulator can be slow. But if you keep the build open when you re-run the tests it is fairly quick.

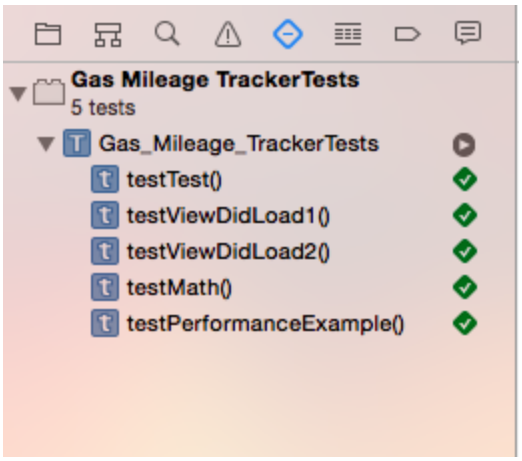
Here is a picture of some of our test code:

```
class Gas_Mileage_TrackerTests: XCTestCase {

    override func setUp() {
        super.setUp()
        // Put setup code here. This method is called before the invocation of each test method in the class.
    }

    override func tearDown() {
        // Put teardown code here. This method is called after the invocation of each test method in the class.
        super.tearDown()
    }

    func testTest() {
        // This is an example of a functional test case.
        XCTAssert(true, "Pass")
    }
    func testViewDidLoad1()

    {

        let v = FirstViewController()
        XCTAssertNotNil(v.view, "View Did Not load")
    }

    func testViewDidLoad2()
    {

        let v = SecondViewController()
        XCTAssertNotNil(v.view, "View Did Not load")
    }
    func testMath()
    {
        var answer : Float32!
        answer = 2.00
        let obj = FirstViewController()
        obj.gallonsTotal = 10;
        obj.milesDriven = 20;
        obj.calculategasmileage()
        XCTAssertEqual(obj.calculation, answer, "Incorect Value ")
    }
```

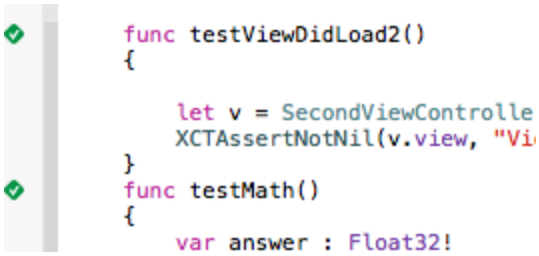
After you click "Test" this will pop up on the top right of your screen:



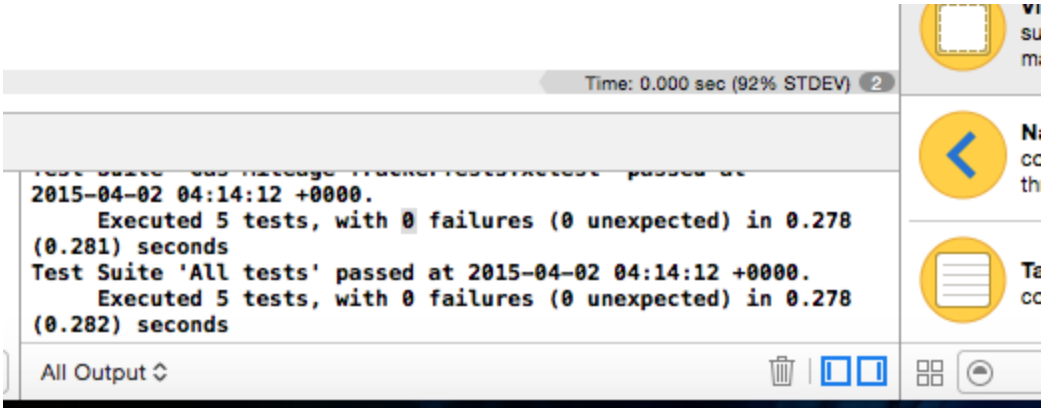
If you click on the blue symbol in this next picture on the top left of your screen it will list all of your tests as well as a green dot indicating which ones passed:



If you look as the test code after running it the green dots indicate a successful test



Finally if you look at the bottom right you can see a more detailed description of the tests running



For saving load time we currently have it only running one test on the equation called testMath. Any other automated math tests would be the exact same code with different numbers. The testViewLoad functions are testing the 2 pages we have in the app and the test sees if they are loaded correctly. The testTest is a test for the test code, one that will pass every time so you know the test code is working. The testPreformanceExample is a default test function and if you go into the test file xcode will give you numbers on the apps performance. testTest is also a default function in the test file.

User Acceptance Testing:

Test ID:01	Test Name:Open app

Step	Test Steps	Test Data	Expected Result	Actual Result	Status(Pass /Fail)	Notes
1	Click on app		You should see a loading screen and then be taken to the data entry page			

Test ID:02	Test Name:Page Change1

Step	Test Steps	Test Data	Expected Result	Actual Result	Status(Pass /Fail)	Notes
1	Start on the “First” page.		See first Page			
2	Click on the button “Second” button at the bottom.		See second page.			

Test ID:03	Test Name:Page Change 2

Step	Test Steps	Test Data	Expected Result	Actual Result	Status(Pass /Fail)	Notes
1	Start on the “Second” page.		See second page.			
2	Click on the button “First” button at the bottom.		See first Page			

Test ID:04	Test Name:Keep Values

Step	Test Steps	Test Data	Expected Result	Actual Result	Status(Pass /Fail)	Notes
1	On the first page enter the number 5 into the first box.	5	You should see the “5” in the first box			
2	Click on the button “Second” button at the bottom.		See the second page.			
3	Click on the button “First” button at the bottom.		You should see the first page again and the “5” should still be in the first box			

Test ID:05	Test Name: Calculate

Step	Test Steps	Test Data	Expected Result	Actual Result	Status(Pass /Fail)	Notes
1	On first page enter “20” into the first box	20	20 in first box.			
2	On first page enter “10” to second box.	10	10 in second box.			
3	Press Calculate		2			