

Deliverable 2

Fat Mike's Pizza Joint - Testing Plan

The Testing Process:

1. Write Tests
2. Automate running tests
3. Collect Data
4. Log testing process
5. Compare to oracles
6. Prepare results for overview

Requirements Tractability: The following requirements will be traced and reported throughout the project as an HTML report

1. Reading test cases
2. Checking validity of test case's syntax
3. Executing test case
4. Exporting results of test case to HTML files
5. Creating HTML report
6. Open HTML in web browser automatically

Tested Items: *Driver.py - Handling imports, handling errors, reporting results from test case *TestCase.py - parsing test cases, parsing single lines, storing values

Testing Schedule:

- 03 October 2017 - Have initial five test cases
- 31 October 2017 - Initial build of testing framework with first five test cases
- 14 November 2017 - Complete Design and building of testing framework with twenty-five test cases

- 21 November 2017 - inject faults into code base
- 30 November 2017 - Present final report on automated testing framework

Test Recording Procedures:

- Echo results from test cases into HTML files
- Compile complete HTML report
- View complete HTML report in browser

Hardware and Software Requirements:

- Linux 32-bit/64-bit
- Python 3
- Web browser (i.e. Chromium, Firefox)

Constraints:

- Time: This project takes place over the course of one semester, therefore we must work to complete all of the work before the semester's end.
- Scheduling: Out of three group members, we must coordinate our schedules and create time to perform the necessary work
- Complexity: When working with another code base, we may run into unexpected complexity with a foreign code base that we did not expect.

System Tests:

- Out-of-scope for this project

First Five Test Cases: These test cases are for a method which take a path as a string, and it will parse the file, checking for correct syntax and creating an array of the fields if the syntax is valid.

- testCase00.yml: "testCases/brokenParseFiles/ConflictingSpecError.yml"
- testCase01.yml: "testCases/brokenParseFiles/InvalidSpecTypeError.yml"
- testCase02.yml: "testCases/brokenParseFiles/InvalidSubSpecError.yml"
- testCase03.yml: "testCases/brokenParseFiles/MissingSpecError.yml"
- testCase04.yml: "testCases/brokenParseFiles/NullFieldError1.yml"