

Test Plan and Strategy

- This project has been subjected to automated testing utilising a java file.is
- Major input validation is covered by this automated testing. The automated testing approach is more convenient than manual testing.
- All method of the Dependency Manager Class is being tested with their respective parameters.
- The test cases listed below have been tested and documented.
 - Test scenarios for input validation
 - Cases of boundary testing
 - Test scenarios for control flow

Test Cases

Input validation tests. *(Generally, tests on bad input data for which you shouldn't crash)*

Method 1: boolean addClass(String className)

- Name is null
- Name is empty

Method 2: boolean addClass(String className, Set<String> dependencies)

- Name is null
- Name is empty
- Set is null
- Set is empty

Boundary Cases. *(Tests at the edge of inputs or problem structures)*

Family Tree Management

Method 1: boolean addClass(String className)

- 1 character name

Method 2: boolean addClass(String className, Set<String> dependencies)

- 1 character name
- 1 charcater dependencies

Control Flow Test Cases (Tests of the core operations)

Family Tree Management

Method 1: boolean addClass(String className)

- Class is added when no Class exists
- Class is added when 1 Class exists
- Class is added when multiple Class exist

Method 2: Boolean addClass(String className, Set<String> dependencies)

- Dependencies is added for class when no dependencies recorded