

CPSC 501 – Assignment 2

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Overview

[ObjectInspector](#) is a reflective object inspector. It performs complete object inspection at a runtime. `Inspector` handles the object inspection. General project setup is described in project [README.md](#). Project can also be found on GitLab [artem.golovin/ObjectInspector](#)

Refactoring

Some refactoring was done to the project after the working version was implemented. The following is the list of commits with description of what refactoring was done

Implement `InspectorResult` to store inspected information; Implement `FieldPair` to make it easier to test object inspection [e9870e19](#), [d6a2812c](#)

It was necessary to implement some sort of storage for object inspection in order to test the `Inspector#inspect(Object, boolean)` properly. [InspectorResult](#) contains different `HashMap`s to store inspected information about object. Using that class, we can test the `inspect` method without having to compare outputs.

Use `IndentedOutput` interface and use custom `forEach` to iterate array ([645bfdce](#))

Since the output needs to be indented in order to make it easier to read and to say which values are nested, [IndentedOutput](#) and method [indentOutput](#) helps to achieve that result. Originally, indentation was calculated per each `inspect` method. To remove duplicated code, [indentOutput](#) method was added.

Extract value inspection into its own method ([c039ea3e](#))

`inspectArray` and `inspectField` were performing the same tasks, therefore to eliminate redundant code, `inspectValues` method was added.

Git Log

Commit	Author	Description
5ec816d	Artem Golovin	Initial commit
788ddb	Artem Golovin	Add option to output inspection results in std out
c84133d	Artem Golovin	Implement <code>inspectSuperclass</code> method and add function for padded output
bff1f6f	Artem Golovin	Implement <code>inspectInterfaces</code> method
67279bd	Artem Golovin	Implement <code>inspectConstructor</code> method
5a3c07a	Artem Golovin	Implement <code>inspectMethod</code> method
7f2db0a	Artem Golovin	Implement <code>inspectFields</code> and <code>inspectArray</code>
deb1f1d	Artem Golovin	Add basic README, move test classes to data package and create inspector package
afce1c3	Artem Golovin	Add step to inspect array object
2ad8560	Artem Golovin	rename value to <code>referenceValue</code> for ref objects
521bf14	Artem Golovin	Change newline characters
7db97f7	Artem Golovin	Add util join method and rename Console to Utils
3ab0166	Artem Golovin	Store inspected objects in HashMap's for testing and add simple tests
540bb7a	awave1	Inspect methods and fields when inspecting interfaces instead of inspecting class
b73d7e6	Artem Golovin	add different hashmaps to store inspection data
e9870e1	awave1	Add <code>InspectorResult</code> object to store results of object inspection
d6a2812	awave1	Create <code>FieldPair</code> class to store field information for <code>InspectorResult</code>
3cf2305	awave1	Add tests for inspection with inheritance
992eda3	Artem Golovin	add primitive variables to tests
d87c9a6	Artem Golovin	Test recursive inspection on <code>ClassWithOneParent</code>
2cc0213	Artem Golovin	Test method inspection and fix bug to include private/protected methods
6033cc0	Artem Golovin	Add <code>SomeInterface</code> interface for tests
992de84	Artem Golovin	Turn off std output when running tests

c039ea3	Artem Golovin	Add array tests and move inspectValues to its own method to prevent duplicate code
5a60494	Artem Golovin	Include object inspection before inspecting array objects
5e47e8d	Artem Golovin	Move leftpad methods to Console util class
66343ed	Artem Golovin	add primitive args handling
645bfdc	Artem Golovin	Use IndentedOutput interface and use custom forEach to iterate array objects
c0fa48b	Artem Golovin	Add tests for class with constructors and fix addConstructor method
bff6ce3	Artem Golovin	Turn off std output for unit tests
2ce2c5c	Artem Golovin	Fix cli args and make directories to store scripts
ec35706	Artem Golovin	Implement simple dynamic inspector loader
f156f9b	Artem Golovin	Move class loading into InspectorLoader
04db097	Artem Golovin	use java 1.8
5d8eaeef	Artem Golovin	update scripts for java 1.8
9e0bc12	Artem Golovin	set recursive to true by default
ef755fe	Artem Golovin	Finish refactoring.pdf
e8744de	Artem Golovin	better handle exceptions for DynamicReflectiveInspector
b4194a0	Artem Golovin	Update README to include steps to run DynamicReflectiveInspector and update logs for refactoring doc
2b331bd	Artem Golovin	Update README.md
6dbdab8	Artem Golovin	Update README.md
4b8ccbb	Artem Golovin	update refactoring.pdf
489463f	Artem Golovin	Update README.md
146c4b8	Artem Golovin	Fix nexted interfaces
07c3ed8	Artem Golovin	Merge branch 'master' of github.com:awave1/ObjectInspector