CMPE202 – Java2UMLParser – Report

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**Part I – Class Diagram**

Introduction

Project Java2UMLParser is a Java code parser that converts Java Source Code into a UML Class Diagram.

Programming language: Java

Tools: Intellij Ultimate 2017.1 (IU-171.3780.95)

JRE: 1.8.0\_112-release-736-b13 x86\_64

JVM: OpenJDK 64-Bit Server VM by JetBrains s.r.o

Libraries:

Java Grammar Parsers: javaparser-core-2.5.0.jar

UML Diagram Generators: <http://www.umlgraph.org>

Kanban board: <https://waffle.io/laura310/Java2UMLParser>

GitHub: <https://github.com/laura310/Java2UMLParser>

**Extra Credit (Max 20 points):**

* Integrate your UML Parser with a Cloud Scale Web Application by teaming up with one or two CMPE 281 students. **(5 points per student / max 10)**
* Extended your UML Parser to perform **dynamic analysis** of the Java Source code to generate a UML Sequence Diagram.  The UML Sequence Diagram must be generated by executing the Java Source Code. The Test Code will be executed from a Static Main class method in a ***Main.java*** class. (**10 points**)
  + Note: a sample Java Program for testing Sequence Diagram Generation is here:  [https://github.com/paulnguyen/cmpe202/tree/master/umlparser/uml-sequence-test (Links to an external site.)](https://github.com/paulnguyen/cmpe202/tree/master/umlparser/uml-sequence-test)

Source Code

Execution Screenshot

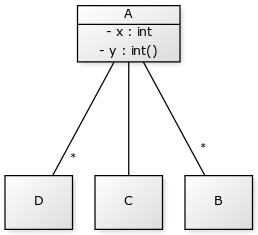
/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

* The parser must be executable on the command line with the following format:
  + **umlparser** <source folder> <output file name>
  + <source folder> is a folder name where all the .java source files will be
  + <output file name> is the name of the output image file you program will generate ( .jpg, .png or .pdf format)

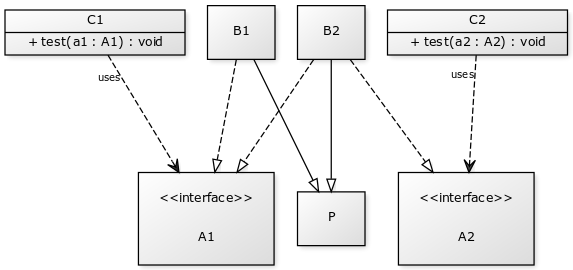
/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

Testing & Generated Diagram Pictures

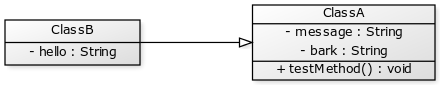
uml-parser-test-1: generated graph:



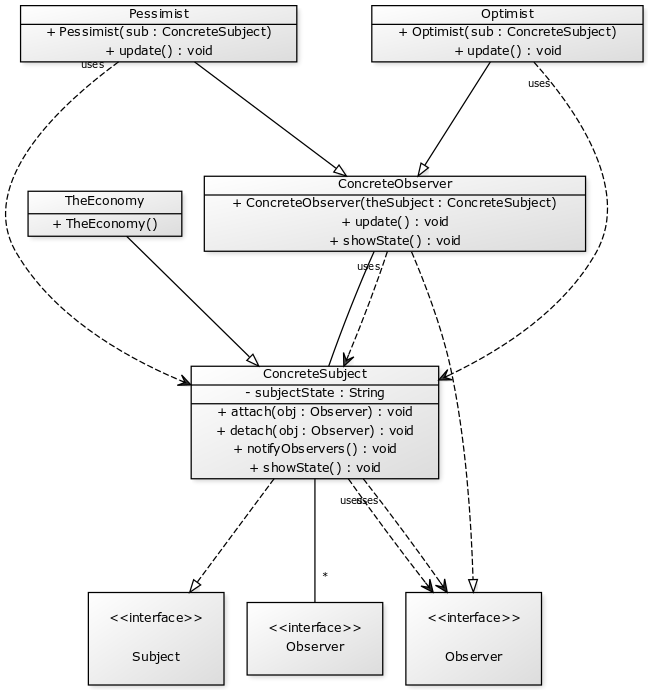
uml-parser-test-2: generated graph:



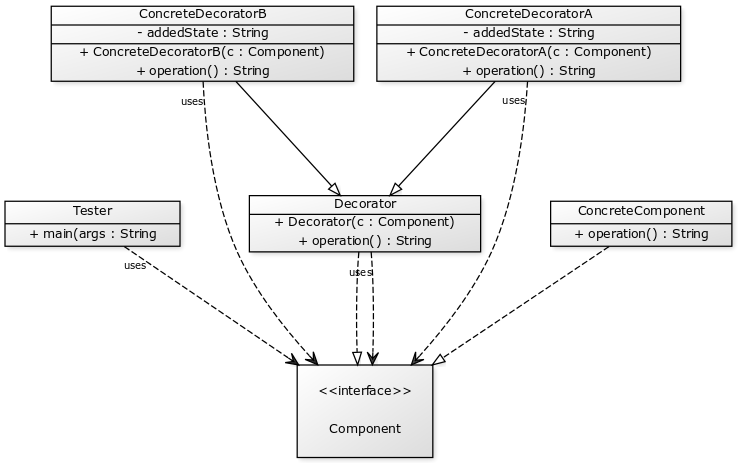
uml-parser-test-3: generated graph:



uml-parser-test-4: generated graph:



uml-parser-test-5: generated graph:



**Part II – Sequence Diagram**

Introduction

Source Code

Execution Screenshot

Testing & Generated Diagram Pictures