READ-ME

UML PARSER

The UMLParser is a tool, which parses the java code and generates **class diagram** from the java source code. The input to the tool is a folder, which contains the list of the java files, and the output is a class diagram image of png format. The tools and libraries used to design the UMLParser are given below:

LIBRARIES

a. **Javaparser 2.3.0 (javaparser-core-2.2.3-SNAPSHOT.jar)**

Javaparser is a lightweight, easy to use AST (Abstract Syntax Tree) generator, which helps to parse the java source code. It traverses the AST and retrieves the needed information about the properties of the classes and helps us to construct the input for the UML generator.

b. **PlantUML (plantuml.jar and plantuml4idea.jar)**

PlantUML is a component, which helps us to draw UML diagrams such as class diagram, sequence diagram, activity diagram and much more. There is a specific grammer for the tool to draw the diagram. The properties from javaparser are modified to fit the grammer to generate the required class diagram.

SOFTWARE

a. **Graphviz(graphviz-2.36.0.pkg)**

Graphviz is a visualization tool that is needed to support plantUML to draw the UML. It accepts simple text format and translates it into visuals to the required format.

IDE

a. **IntelliJ IDEA 14.0.3**

IntelliJ is an intelligent Java development environment for developing software. It helps to code effectively by offering quick suggestions and thus a productive and fast java IDE. It supports various tools and framework- specific coding assistance.

LANGUAGE

a. **Java**

It is a high-level programming language which supports object oriented concepts. It is also platform independent and robust. In java, the code is written in a plain text file and then stored with an extension .java. Then the file is compiled using javac compiler, which generates .class file. The .class file can be run on any platform like macos, Linux or Solaris.