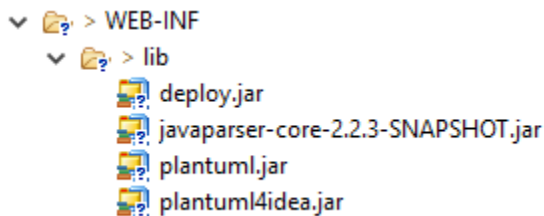# CMPE – 202

UML Parser – UML Parser converts Java Source Code into a UML Class Diagram. The parser is run from the command line using the following command –

java -jar UML_Parser_Anu.jar <test_case folder> output.jpg
Where "test_case folder" is the folder containing the test case and "output.jpg" is the output file.

Libraries used –

```
∨ 📁 > WEB-INF
   ∨ 📁 > lib
       📄 deploy.jar
       📄 javaparser-core-2.2.3-SNAPSHOT.jar
       📄 plantuml.jar
       📄 plantuml4idea.jar
```

1. **deploy.jar** – Contains the deployment configurations.

2. **javaparser-core-2.2.3-SNAPSHOT.jar** – This jar file is used to prepare an input for the UML generator (PlantUML). It first generates an Abstract Syntax Tree which is used to parse the java code and get information about the classes. This information is used to generate the plain text grammar which is then sent to the PlantUML to generate the class diagram.

3. **PlantUML (plantuml.jar and plantuml4idea.jar)** – It is an open source tool used to generate UML diagrams from plain text. PlantUML uses a particular grammar to generate the UML class or sequence diagram. The javaparser parses our java code and gives us the output. This output is modified accordingly and fed as input to PlantUML to generate UML class or sequence diagram.

   PlantUML used **Graphviz** software to generate diagrams.

IDE Used–

Eclipse Jee Neon – It is the most widely used IDE for JAVA. Eclipse is used for developing Java applications.

Software Used–

Graphviz (graphviz-2.38.msi) – It is an open source visualization software used by PlantUML to generate its layout diagrams.

Language Used – JAVA

It is an object-oriented programming language run on Java Virtual Machine (JVM). It is one of the most popular languages used.