

# UML PARSER

*Umlparser which converts java source code to UML Diagram*

## Details of libraries and tools used:

The provided jar file takes java source files in the given path , creates grammar which is passed to generatePNG() method that uses yuml to generate diagram in the given path folder.

Parser: In order to create grammar from provided JAVA source code, I used javaparser library.

<https://github.com/javaparser/javaparser>

This javaparser provides various methods, classes that parses the given java source code and provide the subunits in the given source code.

Diagram Generation: To generate image from the grammar generated by the project , I used yuml.

<http://yuml.me/diagram/scruffy/class/draw>

Yuml is an online free tool which helps to generate class diagrams and use case diagrams.

The method generatePNG() used in the project creates a httpURLConnection to the "http://yuml.me/diagram/scruffy/class/%2F%2F Cool Class Diagram," along with the generated grammar. Without internet connection the output image will not be generated.

## Usage:

### Requirements:

- Java to be installed in the system to run the jar file
- In order to create output image, internet connection is required.

### Command to run:

- The program expects the below arguments

- Path:
  - Full path of the folder which contains all the .java files .
  - Ex: “/Users/Madhu/Documents/foldername” ( specific to OS)
- Output filename:
  - The name of the output image file to be generated.
  - The file is created in the same location as given in Path.
  - The program creates given output file name with png extension, so it is not needed to include extension.

Example:

```
./umlparger.sh /Users/Madhu/Documents/Courses/202/submission/  
uml-parser-test-1 outputfilename
```

**Before running the above command change umlparger.sh to execution mode using `chmod +x umlparger.sh`**

<The above command creates outputfilename.png in /Users/Madhu/Documents/Courses/202/submission/uml-parser-test-1 folder >

**The jar (umlparger.jar) file and script to run (umlparger.sh) are provided in the Jarfile\_ScriptToRun folder. The source code is provided in UMLParserProject.zip.**

umlparger.sh file is provided in the folder which accepts the two arguments path and output filename and runs the jar file.

Jar file is created from the source code which includes all the required libraries.

**The output images of each testcase are provided in the OutputImages folder.**