

CSCI 468 - Compilers

Project - Step 0

Setting up ANTLR

As mentioned in the class, we will use ANTLR, which is the industry standard scanner/parser generator for developing our compiler. In this step, you will concentrate on ANTLR installation and setup.

Following are the steps for setting up ANTLR in your computer (Unix/Windows).

- Go to www.antlr.org.
- Select “Getting started with ANTLR v4” in Quick Start as shown below.

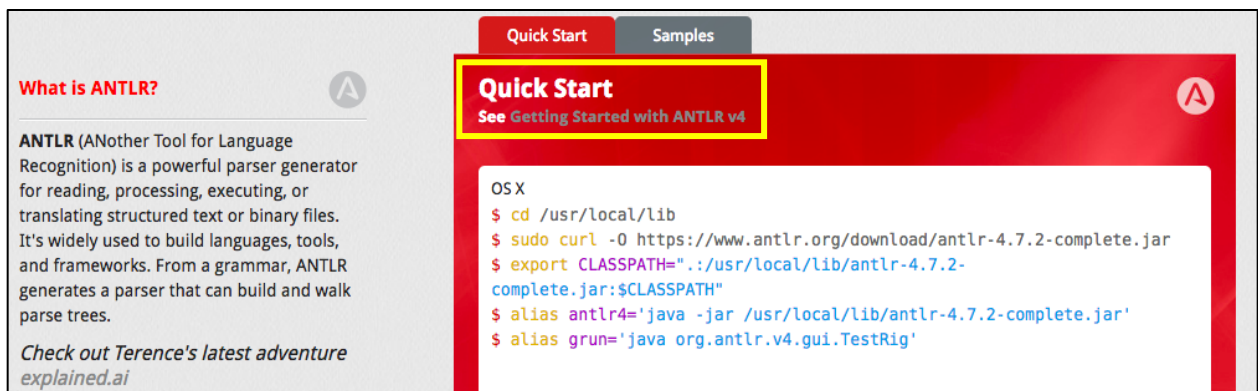


Figure 1 - Selecting Getting Started guide

- This will direct you to a complete *Getting Started* guide.
- Follow the steps given for downloading and installing ANTLR to your computer (Unix or Windows, depending on your OS)
 - Carefully check when adding the correct CLASSPATH in your computer (may not be the same as given in the steps).
- Test the installation by following the instructions given.

Following the installation process, go through the example given in the guide called “**A First Example**”. It is a simple example that helps you make sure everything is working properly and it also gives an idea on what needs to be done in the following steps of the project.

- Save the *Hello.g4* file in your computer.
- Go to the corresponding directory containing ‘.g4’ file and run ANTLR on it. Then follow the commands to test it.

Setting up your development environment

It is also recommended that you setup and use,

- An ANTLR plug-in with your preferred IDE (see here: <https://www.antlr.org/tools.html>)
- A version control software such as GitHub: <https://github.com/>
- A time tracking/ team management tool such as Toggle: <https://toggl.com/>
- A group communication channel as Slack: <https://slack.com/>

What to submit

You are required to submit

1. Completed *Hello.g4* file. – upload to “step 0 code” in Gradescope
2. Latest version of the technical report (section 4 of the portfolio) with a completed 3.a section – upload to “step 0 report” in Gradescope.

The report must be written using the provided overleaf latex template (see D2L → TOC → Project → Portfolio).

Make sure to add the names of all your group members at the time of uploading to Gradescope.