

## 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](http://www.antlr.org).
- Select “Getting started with ANTLR v4” in Quick Start as shown below.

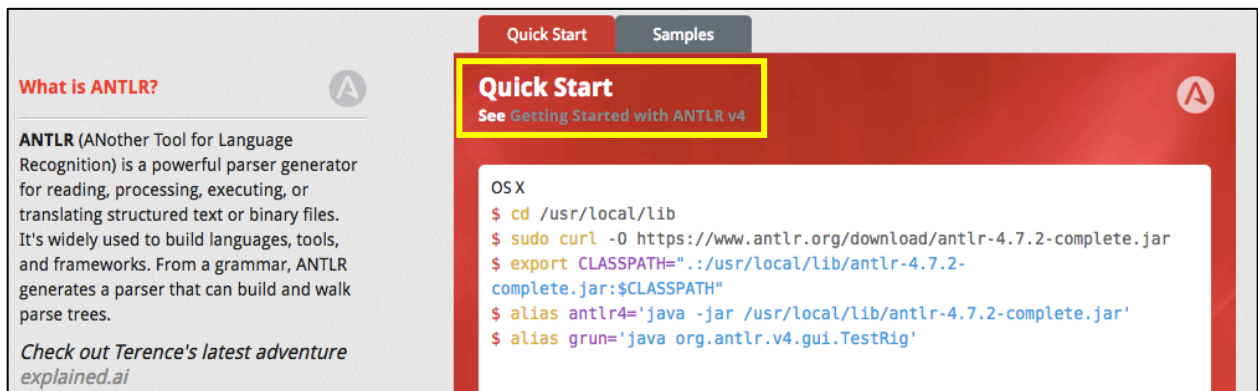


Figure 1 - Selecting Getting Started guide

- 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”
2. Latest version of the report (with a completed 3.a section) – upload to “step 0 report”