

COP 4620

Project Step 0

Project Group Formation

As mentioned in the class, you are required to form groups of 2-3 students. You are not allowed to work on the project by yourself. Once you find project partner(s), you are expected to work with them for the entire semester.

Enroll your group on Canvas. Visit the "People" page and add members of your group to one of the empty "Project Groups". Use the vacant group with the least index. **Make sure to complete this step before submitting Step 0 code.**

Setting up ANTLR locally and on Osprey server

As mentioned in the class, we will use ANTLR, which is the industry standard scanner/parser generator for developing our compiler. The instructor will test your code on Osprey server. The exact same grading script will be provided for you to test yourself before submission.

In this step, you will concentrate on ANTLR installation and setup both locally (to develop your code) and on Osprey (to run the grading script by yourself).

Following are the steps for setting up ANTLR.

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

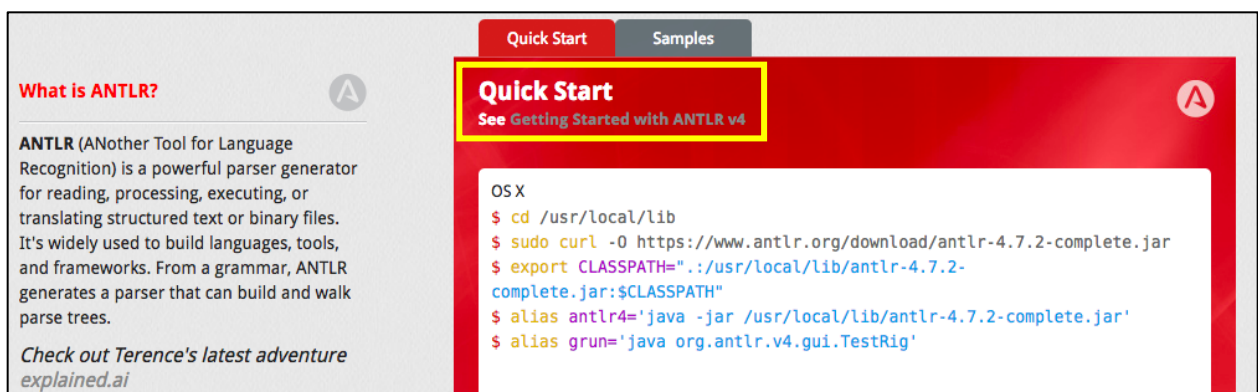


Figure 1 - Selecting Getting Started guide

- This will direct you to a complete *Getting Started* guide.
- Follow the steps given for downloading and installing ANTLR to your computer (follow the Unix instructions)
- 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 future assignments.

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

If you are having trouble installing, see here:

<https://github.com/antlr/antlr4/blob/master/doc/faq/installation.md>

See “Connecting to Server” section on the following web page to learn more about connecting to osprey: <https://www.unf.edu/its/services/Web-Personal.aspx>

Setting up your development environment

You are welcome to develop your code either on Osprey or your own machines. In your own machine, it is 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 such as Microsoft Teams: <https://www.microsoft.com/en-us/education/products/teams> or Slack: <https://slack.com/>

What to submit

You are required to submit (on Canvas)

- *Hello.g4* file that works correctly – submit to “Project Step 0”
- *Screenshot of osprey terminal* as evidence for you successfully running the example in the Getting started guide (“**A First Example**”).

Make sure to self sign-up to a “Project Group” on Canvas before submitting. You are required to work on the project in groups of 2-3 students. Once you choose partner(s), you are required to work with them for the rest of the semester.