**Integrating ANTLR with NetBeans 6.9**

Step 1. Download antlr-3.3-complete.jar from “antlr.org”.

Step 2. Create a new NetBeans project and in it create a subdirectory. In that subdirectory create an empty file. In this empty file write the grammar and save the file with “.g” extension.

Also write the main class having lexer and parser objects.

Step 3. Tell the NetBeans IDE about the subdirectory you have created by following the steps shown below:

Project Properties Source Add Folder “Select the Subdirectory you have created”.

Also select “JDK 6” in “Source/ Binary format”.

At last click “OK” button.

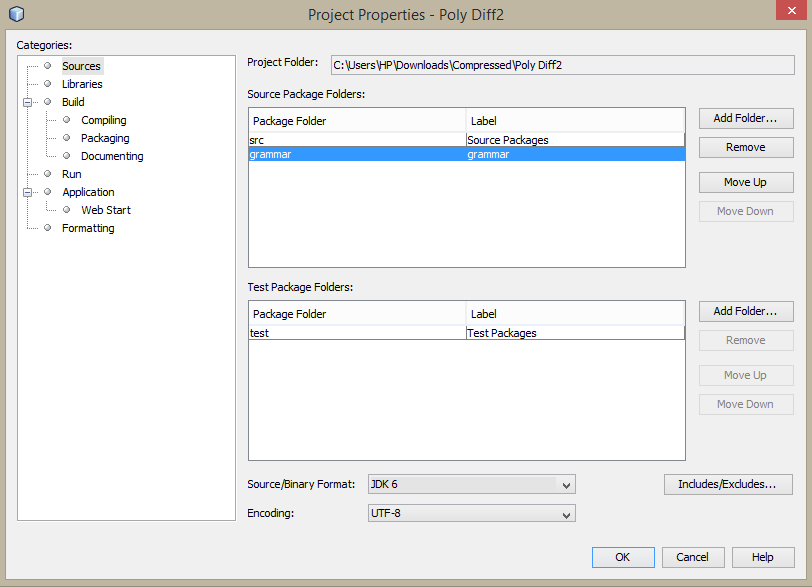


Figure 9.24 Telling IDE about the created subdirectory

Step 3. In order to build an application using components defined in the grammar, the ANTLR compiler has to be invoked to generate Java code, before compilation with your other classes. So for it we have to tell the NetBeans IDE about the ANTLR jar. For that follow the procedure given:

In the Project Properties dialog, and the Libraries category, on the Compile tab, use the Add JAR/Folder button to add the ANTLR "complete" JAR to the compile-time libraries. You do this by navigating to the location where you have installed it. ( Mine is C:\Users\HP\Downloads\Compressed\IRDEProject\antlr-3.3-complete.jar.). i.e.

Project Properties Libraries Add JAR/Folder Add ANTLR jar location OK.

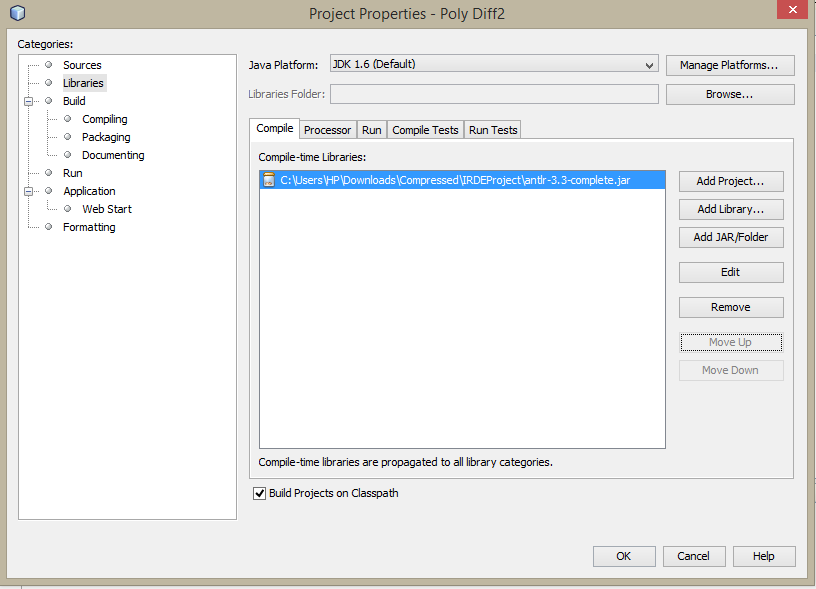


Figure 9.25 Telling IDE about the ANTLR jar

Step 4. Add a new file named build-antlr-impl.xml in the “nbproject” subdirectory in the project. This is a prebuilt file which contains the logic of the compile and build processes invoked by the IDE. The contents of this file is shown below:



Figure 9.26 Adding build-antlr-impl.xml file

Step 5. In the Files tab of the IDE navigate to the project directory and open the file build.xml which is a prebuilt file. This file controls the build, but by default it delegates every action to nbproject/build-impl.xml. The file begins like this:

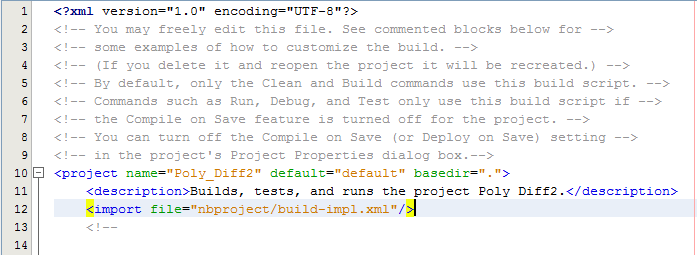


Figure 9.27 The build.xml file

We have to add extra 3 lines in this file to import the “build-antlr-impl.xml” file and its functions, we added in the previous step.

So add these lines and save the code.

The three lines are highlighted in the figure below:

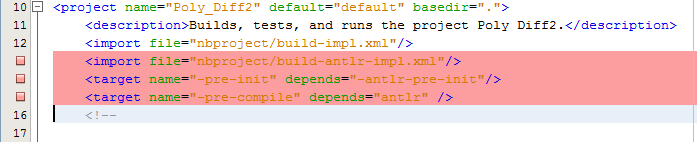


Figure 9.28 The build.xml edited file

Step 6. Simply clean and build the application now. Give build.xml focus in the editor. The Navigator panel should show a series of Ant targets. Right-click the "clean" target and select Run Target. This just deletes any build directories for a clean start.

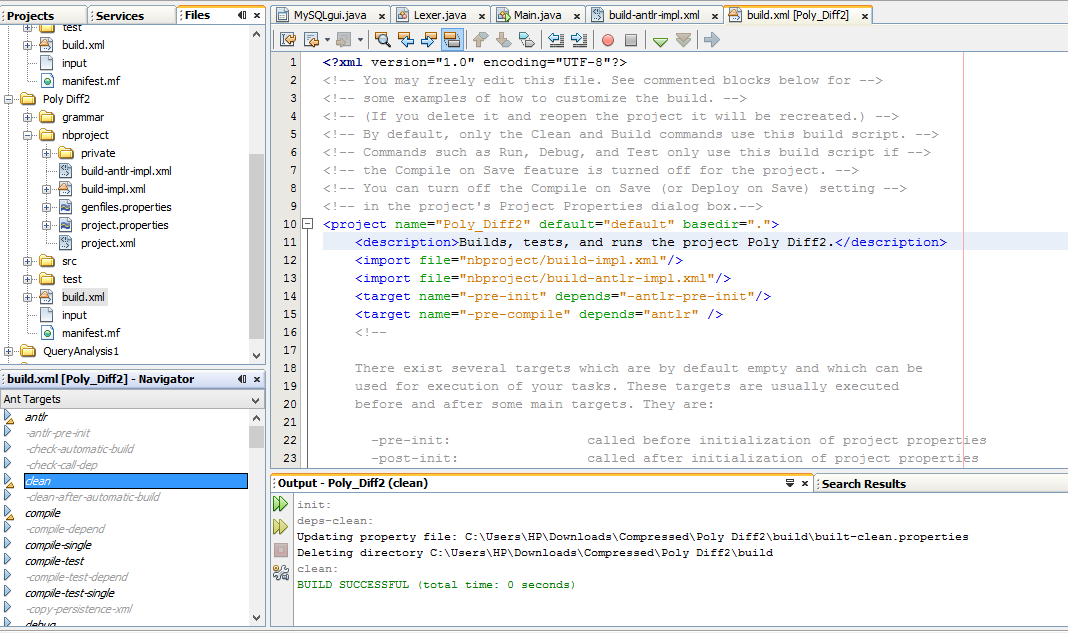


Figure 9.29 Cleaning the project

Step 7. To build the project now, Right-click the "antlr" target and select Run Target. This runs the ANTLR compiler to generate the Java code for the Lexer, Parser, and other modules. Now a new source root has appeared in the Projects tab, and called "Generated Sources (antlr-output)". This packages includes the Java source files that are generated by ANTLR.

Step 8. Now you can run the project and can take the input by creating an input file or making a GUI with netbeans and taking input from there.