Installing the ProtoJ Project

Downloading from CVS Repository

The project repository is hosted on `waldorf.csc.calpoly.edu`. To create your copy of the project, execute the following CVS command from the directory in which you want to install the project:

```
cvs -d waldorf.csc.calpoly.edu:/users/faculty/gfisher/projects/CVS checkout protoj
```

Building and Running the Executable

The standard ProtoJ build uses the UNIX-based `make` utility. To use `make` on Windows, download the CYGWIN package, which includes `make` as part of the standard distribution.

There are two machine-specific definitions in the project Makefile, which define the paths of required project libraries. This means you need to use a machine-specific Makefile. There are three such make-files that are part of the standard project, for the Cal Poly machines `waldorf`, `falcon`, and `thyme`. To build on `waldorf`, for example, execute the following commands from the root of the `protoj` project directory:

```
cd implementation/source/java
ln -s Makefile-waldorf Makefile
make
```

The executable program is put in the following project directory:

```
implementation/executables/JVM
```

in the manifested JAR file named `protoj.jar`. To execute this file, use the command:

```
java -jar protoj.jar
```

The file's manifest makes it fully stand-alone, so it can be copied to any directory and executed in the same way. In Windows and MacOS, the `.jar` file is typically executable by double clicking on its Icon, assuming that Java-related OS settings are in effect.

To build on a some other machine, change the `Makefile` definition `LIB206` to the location of the directory that contains the CSC 206 library packages. Then download the library packages from waldorf to that directory. Also, change the `LIB206` definition in the `Makefile` in `protoj/implementation/executables`.

If you don't want to use make, you can install the ProtoJ source tree in your favorite IDE. The source tree is rooted in the following project directory:

```
protoj/implementation/source/java/protoj
```

This is the root of a standard Java package hierarchy.