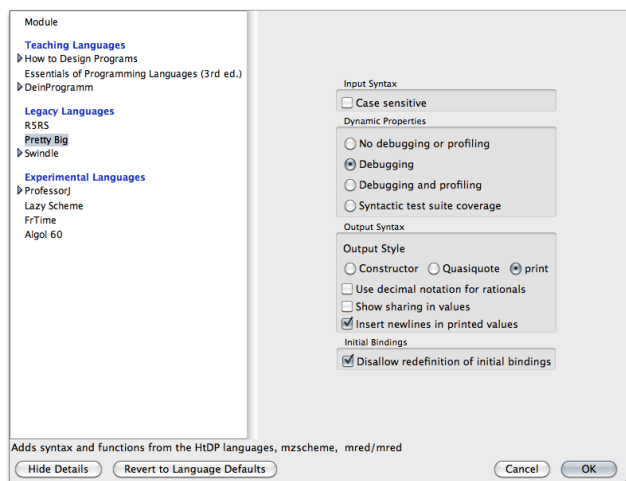


Introduction to Dr. Scheme

This book uses the freely available Scheme implementation in PLT Scheme or also commonly known as Dr. Scheme. This first chapter deals specifically with Dr. Scheme, its interface, and how to properly configure it for examples that you will encounter throughout this text.

You can freely download PLT Scheme from <http://www.plt-scheme.org> for all major operating systems currently in use. After you download and install the software you should properly set it up so that you can follow the examples presented in this book. Execute the program and once it is running choose '**Choose Language**' from the **Language** option in the menu bar.



Once you get the language option window select the '**Pretty Big**' language under '**Legacy Languages**'. After this is selected make sure you select the '**Show Details**' option, which will bring up configuration setting for the Pretty Big language. Please make sure the following selections are correct:

Case sensitive option should **NOT** be checked.

Dynamic Properties need to be set **TO** the Debugging option.

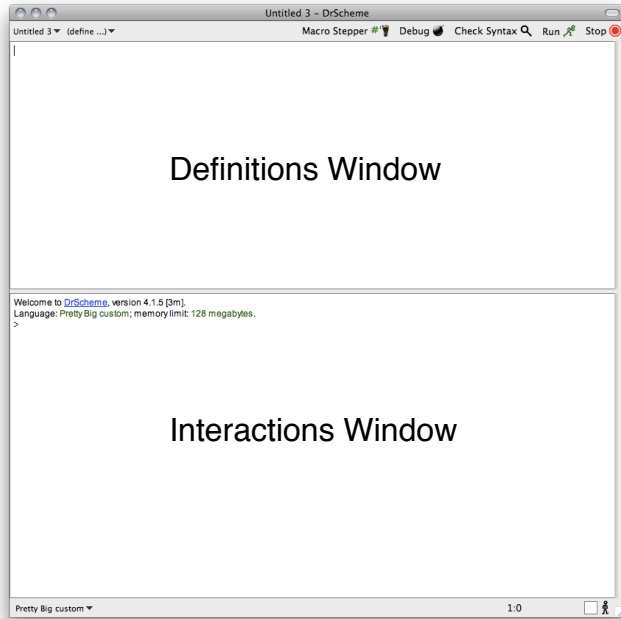
Print should be selected for Output Style.

Insert newlines in printed values should be selected.

Disallow redefinition of initial binding should be selected.

Once these setting match select the ok button to continue on. You should notice that on the main screen window you will see it divided horizontally into two windows. The top half is referred to as the **definitions window**, and this is where you will enter in procedures you would like to save and continue to use. Essentially it is a text editor for allowing you to tell Dr. Scheme a bunch of stuff at once. The bottom half is referred to as the **interactions window** and this is where you interact directly with Dr. Scheme. The interactions window is where you will ask Dr. Scheme to do something and it is where Dr. Scheme will answer you back at.

Learning How to Program ... Really!



Once you are done entering something into the definitions window you must click the '**Run**' button. This will let Dr. Scheme execute your instructions or learn what you have entered. Every time you make a change in the definitions window you must click '**Run**' before these effects will take place.

You save and open files just like most other programs you use on the computer, and it is available under the '**File**' menu option. Scheme files should have either a **.ss** or **.scm** file extension we will be using .scm throughout this text.

If your code becomes unresponsive and in an endless loop the user has the ability to preform a **user break** by selecting the '**Stop**' button. This interrupts the execution of the code and lets you edit and interact with Dr. Scheme again.

One of the biggest benefits of using Dr. Scheme is the readily available and easily searchable documentation. This is called the '**Help Desk**' and it is available under the '**Help**' menu option. This can be overwhelming to look at right from the start, however once you learn how to program this will become an invaluable tool for reference. Which is why it is being pointed out right from the beginning.

This concludes the basic introduction to the Dr. Scheme programming environment and now we will let you start using the program. This intro is not comprehensive but will suffice for the purposes of this text.