Zoe 0.3 User Manual

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November 4, 2013

1 Installation Instructions

Please note that these instructions are tailored to installing zoe on a UNIX-like system such as Mac OS X or Linux. Windows installation will have some small differences.

- Glasgow Haskell Compiler (GHC) (http://www.haskell.org/ghc/) is required for installation

- The zoe-core.hs, zc.hs, and zi.hs files all have to be compiled with GHC by executing: `ghc -o filename filename.hs`. Alternatively, if Zoe is being installed on a POSIX compliant system with a BASH terminal then the supplied build_zoe.sh script can be used to create all of the necessary executables.

- The zoe-core, zc, and zi executables have to be added to the system PATH

- ZPOST.zoe and ZRTE.hs have to be in the same directory as the zoe source file that is being compiled or in the directory which zi is being run in.

Please note that the line endings for zoe source files have to match the default of the host OS. On UNIX like systems this has to be in the `LF` style and on Windows it has to be in the `CR+LF`. If the line endings are not of the right type they can be fixed using the `dos2unix` command on UNIX-like systems.

2 The Zoe Compiler (zc)

The command-line usage of zc is `zc zoe-file-name` (note that the file name passed does not include its extension).

3 The Zoe Interpreter (zi)

The command-line usage of zi is `zi optional-modules` where the optional modules are the names of previously compiled modules which contain functions to be used while in zi.

3.1 Zoe Interpreter Commands

While using zi, a command can be invoked by starting the input with a colon. The commands and what they do are as follows:'

- :quit/:q - Quit the interpreter.

- :debug - Run in debug mode.

- :help - List commands.

- :last/:l - Run last command.

3.2 Enabling Editable Buffer Input/Command Recall

Within the command prompt for Microsoft Windows, command recall and the ability to move the cursor within the input buffer is built in. However within BASH this is not the case, so for convenience when running zi on Mac OS X (or other *nix style systems) intall `rlwrap` (readline wrapper—allows for command scrolling and recall—http://freecode.com/projects/rlwrap) using a package manager (brew, apt-get, yum, etc). Then run zi with rlwrap as follows:

```
rlwrap −cr zi
```