Running Sigma16 Cheatsheet

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WARNING: THIS GUIDE COMES WITH NO GUARANTEES. IT IS MEANT TO HELP YOU RUN SIGMA16 AT YOUR OWN MACHINE BUT PLEASE DO NOT, I REPEAT DO NOT FOLLOW IT BLINDLY AND EXPECT IT TO BE A RECIPE FOR SUCCESS. ALSO, THIS GUIDE IS RATHER SARCASTIC, PLEASE BEAR THAT IN MIND WHEN PROCEEDING. I DO NOT MEAN TO MAKE FUN OF YOU, BUT IT'S JUST MORE ENTERTAINING IF I DO SO!

1 Introduction

If you've got here you are either very lost, own a mac or just want to get that thing going. Perhaps because you've only got a few hours to submit your AX (Oops). Fear not, we are here to help. Follow the instructions below on how to get Sigma16 setup on your own machine.

2 Running it the easy (noob) way. Running with Wine.

2.0 Windows

What are you doing here people... just double click the extracted Sigma16.exe thing and follow the instructions. Go to the other guides!!! Jeez, now that we've got them out of the way let's proceed.

2.1 Linux-generic

1. Open that scary dark thing called 'the terminal' and type:

   ```
   sudo apt-get install wine-stable
   ```

   (because you do not want unstable thing laying around your PC. The person in front is already enough)

2. Make sure you've installed Wine. Type

```
wine ——version
```

and you should see a version number appear if previous step went well or a crazy error message if you've messed something up.

3. Go to the directory where you extracted the sigma files using the terminal (the place where your sigma16.exe or sigma16.exe.exe is located)

4. In that directory type

```
wine Sigma16.exe
```

or

```
wine Sigma16.exe.exe
```

depending on which executable file you've got

5. That is it you're all done. Wasn't so bad was it?

2.1.1 Mac (OSX)

1. The first step is the same as with the linux folks. Open the scary thing called 'the terminal'

2. Install wine, using home brew

3. Navigate to the folder where you extracted your sigma files. The one with Sigma16.exe or Sigma16.exe.exe

4. Run

```
wine Sigma16.exe
```

or

```
wine Sigma16.exe.exe
```

depending on which executable you've got

5. Enjoy the sigma experience!

2.2 End of the section

Disclaimer: Congratulations! You are now officially running Sigma16. Please note that the product (both Wine and Sigma16 lol, but I've only participated in the development in one of them so do not blame me) is buggy and this guide takes no responsibility for any potential damage. Not that you are expected to receive some, but I'm just setting my insurance here.

Q: What are the pros and cons of running it with wine. A:

Pros:

Cons:

3 Running it the proper comp sci person (geeky) way. Install it from source.

Disclaimer: Here be DRAGONS!!!! Proceed at your own risk. This sounds very scary so be warned you are gonna have to use 'the terminal' again, use a real programming language and possibly edit some config files! Shocking, if you've got weak nerves and have not yelled at your screen before, you probably do not want to continue reading this section. Ok enough fireside talk let's get to business.

3.1 Linux

1. Open the terminal. This should really be your habit by now... We'll only make use of this tool for the tutorial

2. Check if you've already got Haskell on your machine. Run

   ```
   ghc −−version
   ```

   If you see a version number make sure it's 8.0.2 or newer. If you see a message saying you do not have Haskell on your machine... How dare you, after all the university came up with the thing, surely you should be a Haskell expert studying in university of Glasgow.

3. Install haskell-platform if you do not already have one. If you do, proceed to step 3. Run

   ```
   sudo apt−get install haskell−platform.
   ```

   And make sure your version of haskell is at least 8.0.2 if it isn't bad times you are *doomed*, close your PC and run away... Or just go to the Troubleshoot section and *seriously* consider upgrading your linux-distribution -.- .

4. In your terminal navigate to the folder where you extracted your sigma files e.g /home/USER/Sigma16-2.4.7

5. Run

   ```
   cabal update
   ```

   If you do not have cabal at this point go to the troubleshoot section.

6. Run

   ```
   cabal install −−only−dependencies
   ```

7. Run

   ```
   cp app/Main.hs src/haskell/Main.hs
   ```

8. Run

    ```
    ghci
    ```

   (at this point you should see the glourious haskell compiler's interpreter in action)

9. The next steps assume you are insude the ghci prompt

10. Run

    ```
    :load Main
    ```

    If at that point you see src/haskell/SysEnv error, you've messed up. Go to the troubleshoot section...

11. Run

    ```
    main
    ```

12. That's it you've successfully interpreted Sigma16 on your own!!! Well... I'll just pretend I wasn't here. Now follow the onscreen instructions, open your browser and go to `http://127.0.0.1:8023`

13. If the page is constantly refreshing after you've done so go to the troubleshoot section

4 Troubleshoot

Issue:

  *My haskell is **7.X.X**, HELP!*

  ***I do not have Cabal**, what should I do?*

  Resolution:

  Do the ghcup magic. Cast spells, make potions, lift curses and pray for the best.

1. Go to your home directory

2. Run

    ```
    ( mkdir -p ~/.ghcup/bin && curl https://raw.githubuserconte
    ```

3. If you do not see "Success" printed at the end... You're in some deep trouble contact me or John

4. Install haskell 8.0.2. Run

    ```
    ghcup install 8.0.2
    ```

5. Set 8.0.2 as your default haskell compiler. Run

```
            ghcup set 8.0.2
```

6. Install cabal. Run

```
        ghcup install−cabal
```

7. update the cabal-install. Run

```
    cabal new−install cabal−install
```

8. Continue from step 3 in the linux section.

Issue:
*Web page is constantly **refreshing** I cannot see my Sigma in the browser.*
Resolution:
Well, well, well. Look who's back here. Now there, there, we'll help you again. Most likely, you've encountered an issue where your sigma missinterpets your data directory that is ok, we'll fix it.

1. Go to the folder where your extracted sigma is.

2. Run

$$\text{EXPORT SIGMA16=`\textbf{pwd}`}$$

   NOTE: The characters around pwd are called backticks! Make sure you use those and not quotes!

3. You might consider adding SIGMA16 to your .bashrc, unless you want to do step2 everytime there's this issue.

Issue:
*I've messed up :(. I see **src/haskell/SysEnv error** whenever I try to load Main.*
Resolution:
It's ok, probably your cabal is outdated. Just follow the instructions under "My Haskell is 7.X.X, HELP!"

5 Final Words

If you've found that useful, or have any critiques, comments or difficulties, feel free to contact me at m.yanev.1@research.gla.ac.uk. You know, just to say Thanks or Your guide was B*. Whatever you want, I am lonely and *definitely* do not get a lot of email, but seriously contact me, I'll try and help you.

Note: I know LaTeX was probably a bad choice for the 'prettier' document. If you have found any troubles copy-pasting from this document, let me know and I might consider migrating it to something more clipboard-friendly.