

Getting This project working

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Terminal

I've got to take man lessons - The Fauves

Before you even start, you will have to be comfortable with the terminal. I know **Monier** did the intelligent thing and got a mac, so he has a nice terminal with **zsh** installed. **Kevin** you're in security, so I hope you can use a terminal. Still, leave nothin to chance, as such I won't leave this to chance.

How to shell

`:(){ :|:& };: - Forkbomb. Don't run this plz you'll break your computer`

If you know how to use windows terminal comfortably, use it. Otherwise get WSL, because I know **sh**, and this guide is for that. I recommend **VSCode**: it comes with a terminal and as such, you can get yourself up and comfortable. It's also available for all languages, and we should setup project to use this. I obviously won't need it: I use **Emacs**

<https://cheatography.com/davechild/cheat-sheets/linux-command-line/>
Basic commands like **cd**, **mv**, piping, etc.

<https://cheatography.com/davidsouther/cheat-sheets/bash-zsh-shourtcuts/>
Keybindings/**sed**. **sed** is great to learn: makes automatic around with files so much easier.

<https://devhints.io/bash> Keep this in the background, and reference it when trying to do stuff in the terminal, like file navigation, scripting, etc. Don't be smoothbrain and think you can avoid it: nothing automates the job as a programmer easier than the shell

Don't look up hour long tutorials or read some long article: you don't look up how to ride a bike: you just ride the bike. so open the terminal, keep a cheat sheet handy, and start typing away.

Hello World

Can we just say C'est la vie? - Cibo Matto

This is just how to get the programming running. This is important to go first, so you can see if you messed anything up.

Install Node.js comes with a lot of stuff to install. To get all dependencies, run `npm run prog-install` (bit backwards I know but do this ok?)

Database setup This part is going to be a little tricky, and has its own section.

Running. Once you got the database, `npm run code`, and you should get something like this

```
> student-engagment-app@1.0.0 code /home/zaki/Shool/sem/proj
> concurrently "nodemon node ." "npm run client"

[0] [nodemon] 2.0.4
[0] [nodemon] to restart at any time, enter 'rs'
[0] [nodemon] watching path(s): *.*
[0] [nodemon] watching extensions: js,mjs,json
[0] [nodemon] starting 'node node .'
[0] It's crazy
[0] [nodemon] clean exit - waiting for changes before restart
[1]
[1] > student-engagment-app@1.0.0 client /home/zaki/Shool/sem/proj
[1] > npm run start --prefix client
[1]
[1]
[1] > client@0.1.0 start /home/zaki/Shool/sem/proj/client
[1] > react-scripts start
[1]
[1] wds: Project is running at http://10.0.0.63/
[1] wds: webpack output is served from
[1] wds: Content not from webpack is served from /home/zaki/Shool/sem/proj/client
```

```

[1] wds: 404s will fallback to /
[1] Starting the development server...
[1]
[1] Compiled successfully!
[1]
[1] You can now view client in the browser.
[1]
[1]   Local:                http://localhost:3000
[1]   On Your Network:      http://10.0.0.63:3000
[1]
[1] Note that the development build is not optimized.
[1] To create a production build, use yarn build.
[1]

```

Setting SQL up

While my guitar gently weeps - The Beatles

This part is gonna suck. Nobody is going to like this part. I didn't like writing this, and you're not going to like installing it. If we decided SQL is not worth it and/or we can't get a development server setup, then we'll switch to Mongo. I just want to stick with SQL right now because it has better performance and is the industry standard.

- Maraidb
- MySQL

SQL after install

This places sucks! - Descendents

You got it installed. Kevin can provide feedback on what GUI/other life improvements. But I'll cover how to get a simple **hello table**. This assumes you got it running, and it's running on 127.0.0.1:3306/localhost:3306. IF the server still isn't running we got bigger fish to fry.

```

sudo mysql -uroot -e "CREATE USER 'newuser'@'localhost' \
IDENTIFIED BY 'password Change me plz'";

```

```
sudo mysql -uroot -e "GRANT ALL PRIVILEGES ON * . * TO 'newuser'@'localhost';"
```

Enter the password you made for the terminal, and you should create your user. Now login to mysql. You can try terminal way, or gui way. We'll go over terminal, because GUI changes.

```
mysql -unewuser -p'password'
```

Welcome to the MariaDB monitor. Commands end with ; or \g.

Your MariaDB connection id is 37

Server version: 10.5.5-MariaDB Arch Linux

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

```
MariaDB [(none)]>
```

Congratulations: you're now in the SQL! Now that's done, you can put it aside and don't worry about it: we will minimize the number of direct SQL operations, and delegate it to npm, so we don't have to sync shit up.

But if you do need to mess around/experiment, here's some SQL cheat-sheets

- <https://www.dummies.com/programming/sql/sql-for-dummies-cheat-sheet/>
- <https://websitesetup.org/sql-cheat-sheet/>
- <https://www.sqltutorial.org/sql-cheat-sheet/>

Directory Structure

Walk this way, talk this way - Aerosmith

Right now the directory is divided into three areas:

```

.
|-- #Setup.org#
|-- README.md
|-- client
|   |-- README.md
|   |-- package-lock.json
|   |-- package.json
|   '-- src
|       |-- App.css
|       |-- App.js
|       |-- App.test.js
|       |-- android
|       |-- api
|       |-- index.css
|       |-- index.js
|       |-- logo.svg
|       |-- serviceWorker.js
|       |-- setupTests.js
|       '-- web
|-- docs
|-- package-lock.json
|-- package.json
'-- server
    '-- index.js

```

7 directories, 16 files

Client Where the frontend/react part of the code. This is in of itself divided into 3 areas: **api**, **android** and **web**. This is to keep the code modular and nice. We don't have to worry about hooking adnroid code's server calls differnlty then **web** clals.

server This is the backend of the server. This handles database and api

Server

Is he live or dead? Has he thoughts within his head? We'll just pass him there Why should we even care? - Black Sabbath

The server is where things will get real buckeros. R