Manual (user documentation)

Installation guide:
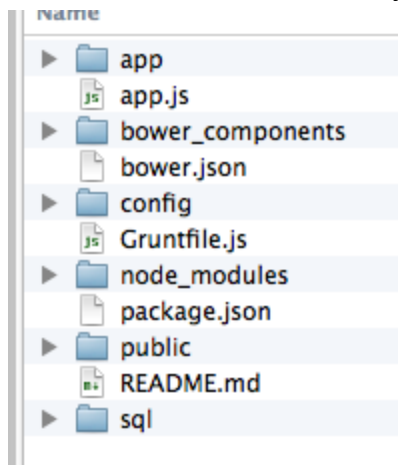
Terminal commands will be displayed like so:

```
$some terminal command
```

Requirements: Node JS, ImageMagick(http://www.imagemagick.org) or Graphics Magick (http://www.graphicsmagick.org), A Mysql Database with Support for Full-Text Search (Usually MYIsam), and a Server.
Optional, But Handy: NPM (https://www.npmjs.org), and Bower (http://bower.io).
The files in the root directory:

open up config/config.js
Edit the configuration you want to run at the top on line 3. **env = process.env.NODE_ENV || 'development';** Change development to your preferred setting. (Probably production). Next change the db configuration for the preferred setting.
it should be filled like so: **username:password@host/database**. These are your connection settings, so make sure they are correct!
Now that we have stuff setup to be put on the server we can begin! Upload the entire directory to the server, you can remove the contents of node_modules if you plan on installing NPM or have it installed already.
To install on a server you will need to root access, unless the server has the requirements. I will be setting up using a standard linux machine which has apt-get installed.

Some instructions here for installing node with npm:
https://github.com/joyent/node/wiki/Installing-Node.js-via-package-manager#ubuntu-mint
I will be using apt-get to install node and npm like so:

```
$sudo apt-get install npm
```

Once this is completed we can download the node_modules that we removed earlier.

```
$cd your_upload_directory
$npm install
```

When this is complete all of our dependencies server side will be included. Bower will have installed as well. Next we can make sure all of our Bower dependencies are up to date:

```
$bower install
```

Now we will need to install GraphicsMagick (or ImageMagick), ensure you have all supported file type libraries installed before hand (Example $sudo apt-get libjpg-dev).

```
$sudo add-apt-repository ppa:dhor/myway
$sudo apt-get update
$sudo apt-get install graphicsmagick
```

Next we will install one more library, which will be used to keep node js running at all times, if you do not have NPM installed skip this step.

```
$sudo npm install forever -g
```

Now that everything is installed on the server we need to setup the database that we linked to at the start of the installation guideline. In the folder sql, run the script :
> **setup_new.sql**

to initialize all tables needed by the application. The default admin account will be admin / admin, this can be changed in the SQL if needed or changed once the server is up and running. The admin can edit their password.

Everything should be ready to go now assuming everything went well.

```
$cd your_upload_directory
$sudo grunt
```

This will be running temporarily, check the log and see if everything is running without errors. If it is you can now access your web site in the browser, you will be redirected to the login screen where you can use admin / admin, unless you changed it within the sql. Items will be logged to your terminal as you login should an error occur (example if the database was not created properly, the terminal will display an error accessing a table or column).

Assuming everything is running normally return to your terminal window, CTRL C to close grunt.

If you do not have npm installed:

```
$sudo node app.js
```

If you have NPM and forever installed:

```
$sudo forever start app.js
```

This will start app.js, and run it until either a error which is continuous occurs (unable to just restart), or you run the command:

TO STOP THE SERVER:

```
$sudo forever stop app.js
```

Enjoy!

login/profile module:

Please sign in

Username

Username

Password

Password

Log in

You must be logged in to view the other modules. In order to login, enter a valid username and password in the login screen. Contact an administrator if you have issues logging in. In order to log out, press the logout tab at the top of the page.

You can edit your information by clicking on the profile tab. This will preload your current information that you may change. Once the desired changes have been made, click on the save button to save your changes.

Edit your profile, admin

Password

admin

Firstname

Admin First Name

Lastname

Admin Last Name

Address

Email

admin@email.com

Phone

5555555555

Save

user management module:

Add a new person

First Name	Last Name	Address	Email	Phone	New
Firstname	Lastname	Address	Email	Phone	New

Mind,Brilliant

Id	First Name	Last Name	Address	Email	Phone	Save
3	Brilliant	Mind	90210 CA	r@rsi.com	7778889999	Save

Username	Password	Type	Date Registered	Save	Remove
patient	patient	Patient	Sun Mar 30 2014 00:00:00 GMT+0	Save	Remove
radio	radio	Radiologist	Sun Mar 30 2014 00:00:00 GMT+0	Save	Remove
username	password	-- Select Type --	Date will be filled automatically		New

Doctors	Remove
phil, doctor	Remove Doctor

| Admin Last Name, Admin First N | Add Doctor to Patient |

This module allows a system administrator to enter or update the user information. To access this, you must be logged in as an administrator account and then click the Manage Users tab at the top of the page. Here you see that there is a list of every user in the system with their current information displayed. You can update this information by changing it and then pressing the save button. You can also add users to people by filling in the required information and then pressing the new button, or you can edit by updating their user information in the list and selecting save, or even remove a user by pressing the remove button. Here you can also add doctors to the patient by selecting a doctor from the list and clicking on the Add doctor to patient button. Finally, if you wish to add a new person, there is a blank form at the top where you can fill in the required information and select the new button beside it.

report generating module:

Generate report list

Since Date

[   ]

End Date

[   ]

Diagnosis

[   ]

Get reports

In this module you can get the list of all patients with a specified diagnosis for a given time period. For each patient, the list contains the name, address and phone number of the patient, and testing date of the first radiology record that contains the specified diagnosis. In order to access this you must be logged in as an administrator and click on the reports tab at the top of the page. Here you will see 3 possible input fields: start date, end date, and diagnosis. Input what you are looking for and then press the Get reports button to view your results.

Record list

First Name	Last Name	Address	Phone	Test Date
Aaron	Hank	102 Moonview Dr.	5555555555	Fri Mar 21 2014 00:00:00 GMT+0000 (UTC)
Brilliant	Mind	90210 CA	7778889999	Wed Mar 19 2014 00:00:00 GMT+0000 (UTC)
doctor	phil	tv	1231231234	Fri Mar 28 2014 00:00:00 GMT+0000 (UTC)

uploading module:

Add a new Radiology report

Patient Name

-- Select a Patient --

Doctors Name

-- Select A Doctor --

Prescribing Date

Test Date

Test Type

Description

Diagnosis

Choose Files   no files selected

Save

In this module radiologists can enter a radiology record, and to upload medical images into it from their local file system. In order to do this, be logged in as a radiologist account in the system then click on the Upload Images tab at the top of the page. Then select the patient and doctor from the lists available for the report. Enter the prescribing date, test date, type, description and diagnosis. To add images press the choose files box and upload images from your computer to the report. And finally, to add the report with the images press the Save button at the bottom of the page.

search module:

Search

Greater Than Date
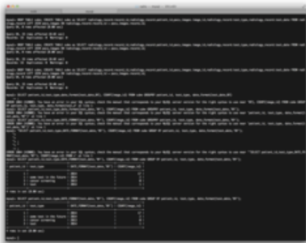
Less Than Date

Sort Using

Default

Keywords (Spaces between keys)

Get reports

This module can be used by all logged in users. However, what you can see depends on your permissions. A patient can only view his/her own records; a doctor can only view records of their patients; a radiologist can only review records conducted by oneself; and an administrator can view any records. In order to search for records, click on the Search tab at the top of the page, then input the information you want to search by. This includes dates, keywords (separated by spaces), and you can also choose a results sort (default ranking, ascending and descending). Then press the Get reports button at the bottom to view the search results.

Results

Patient	Doctor	Radiologist	Test Type	Prescribing Date	Test Date	Diagnosis	Description
Hank, Aaron	Admin Last Name, Admin First Name	phil, doctor	t	2014-2-21	2014-2-21	d	d

Medium   Full Size

data analysis module:

Analysis inputs

Group Dates By

Daily

Using Test Type ☐

Using Patient ☐

Generate Analysis

Generated analysis

Patient Id	Type	Date	Number of Images
2		2014-03-30	3
2	fake	2014-03-22	2
2	MRI	2014-03-28	1
2	t	2014-03-21	1
2	type	2014-03-30	25
3		2014-04-05	13
3	asdf	2014-03-19	3
4		2014-03-31	3
4		2014-04-05	6
4	sick?	2014-03-28	2

In this module you can choose to display the number of images for each patient , test type, and/or period of time. In order to do this you must be logged in as an administrator account. Then click on the analysis tab at the top of the page. Here you will see check boxes to control and how you want to see the number of images by, as well as the dates (such as daily, monthly, yearly). To see the analysis of the number of images press the generate analysis button at the bottom.