

SYSTEM OVERVIEW

The Ratchetjaw Employee Information System (EIS) is a database that stores employment related information for an enterprise and its employees. The system is very flexible and can be used in a number of companies ranging from a small business to a large corporation. There is no proprietary software used and the system is within the public domain so it is free to those who may find it useful. The developer holds no liability for loss or misuse of data.

Many years of working with and developing systems per client requests have lead us at Ratchetjaw Technologies to incorporate some of the more asked for features such as our unique 'instant gratification' control panel providing the user with instant feedback from the database on the screen for all database actions. Another feature is the ability to keep job history allowing employers to track their employees' progress in their careers. There are others as well...to find them USE THE SYSTEM.

There is an online demo version of the system at <http://rje.dynu.net>.

LAMP STACK

A LAMP stack is a software platform that is very popular among companies such as Amazon.com and Walmart . This is also the platform that this system uses. LAMP is Linux-Apache-MariaDB-PHP.

Linux -- There are a couple of different options for getting the Linux system. One of these is a dedicated Linux server or computer. There is also the possibility of a multi-boot system which can boot into Linux and Windows or any other operating system. Perhaps a more popular way of doing this is setting up a virtual machine within Windows. This is a very popular alternative among Windows users, as it allows you to run Linux within your Windows system. There are also several different Linux distributions - each one having its own look and feel. One that works nicely in a virtual machine and has a similar look and feel as Windows is XUBUNTU. To get started download and install virtualbox into your Windows system just as you would install any other Windows program.

<https://www.virtualbox.org/>

And also download the Xubuntu ISO file at

<https://xubuntu.org/>

There are several online tutorials to help set up a virtual machine - here is one that may be a little dated but it will serve our purpose here. After you install your Linux distribution into the virtual machine you will need to install guest additions. To do this you will need to prepare the

kernel so when you reach the section on installing guest additions skip down to the section that says **problems installing guest additions** and begin there.

<http://www.fixedbyvonnie.com/2015/07/how-to-setup-xubuntu-linux-in-virtualbox-step-by-step/>

A huge array of software it is now available to you. Install some by finishing the lamp platform, but first install two pieces of software that you will need later:

```
sudo apt install git
```

```
sudo apt install taskel
```

There are several tutorials on the internet that will help you install the lamp platform here's one:

<https://linuxconfig.org/how-to-install-lamp-ubuntu-18-04-bionic-beaver-linux-apache-mysql-php>

When you reach the section entitled optional lamp setup you are done for our purposes.

INSTALL OUR SYSTEM

Once you have a lamp stack, you are ready to install the Ratchetjaw system. First of all open your terminal and navigate to the directory where you want to install our system. A typical place to install the system is at your document root ,eg /var/www So you'll type in

```
cd /var/www
```

Once there, you can confirm by typing

```
pwd
```

You can then clone the system from GitHub by typing in

```
git clone https://github.com/ratchetjaw/Employee-Information-System.git
```

Now we need to create our database. change directories into the database directory.

```
cd Employee-Information-System/database
```

Now login to MySQL/MariaDB:

```
sudo mysql
```

Next you need to create the database objects. At the mysql prompt type

```
SOURCE objects.sql;
```

The SOURCE command will run the script to create your database. Once created type following to exit SQL and return to Linux prompt:

```
exit;
```

in this final step you will create a command to launch the PHP test server and then point the included Firefox browser to localhost Port 8000.

You should now be in the database directory on the terminal. Go up one directory level by typing

```
cd ..
```

Now change into the shell directory by typing

```
cd shell
```

Copy the file eis.sh to the directory /usr/local/bin. This will put your new command in the path where Linux will find it. Enter the following command into the terminal.

```
sudo cp eis.sh /usr/local/bin
```

Modify the permissions and allow the shell to execute the command by typing

```
sudo chmod 755 eis.sh
```

Now fire up Firefox and enter localhost:8000 into the address bar and you should see your system in the browser.

A WORD OF CAUTION

Now you can manipulate your database anyway you want or need to using SQL. Be mindful of dependencies if you delete any data from it. A dependency would be where one record is dependent on the information in another table, for example consider the job segments of an employee. This record depends on data from many different tables and if the information from these tables is deleted the database will not be able to construct the job segment and may become corrupted.

ON A MORE PERSONAL NOTE

Many people across the country and around the world are touched by neurological disease. These diseases include amyotrophic lateral sclerosis, multiple sclerosis, Parkinson's, Huntington's chorea and others including the ataxias. One organization striving to improve the lives of those affected with these diseases is the National Ataxia Foundation. Please consider supporting them in their efforts to improve the lives of those affected with these diseases by making a donation at

<https://ataxia.org/donate/>