



Linux Technologies Services Installation & Settings

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WEB Projects

1- WordPress

- Installation of base components
- Https Server and Tuning (*NGINX et NGINX Plus, Gunicorn*)
- SSL (https) and Optimization
- PHP FPM 7.4
- CertBot (SSL)
- Databases settings (PostgreSQL, MySQL or MariaDB)
- initial WordPress Settings

2 – Django - Python

- Python – Django Installation
- Nginx, Gunicorn, Supervisor Installation
- Cron and Emailing services
- Databases Settings (MySQL, MariaDB and PostgreSQL)
- Optimization and cache
- Virtual Environment
- CertBot (SSL)

Services Offering

1- Linux (*Debian or Ubuntu*)

- Installation of base components
- Https Server and Tuning (*NGINX et NGINX Plus, Gunicorn*)
- SSL (https)
- Backup (*MSAzur, amazon S3 or other*)
- Databases (server and Client)
- Firewall (iptables Rules)
- Google PageSpeed Optimization
- AWS – EC2 settings (ECU, Disk, Memory, Network and Security)

2 - Extended system Technologies

- Search engine.
- Mailing (Servers) external Servers as MaxMind
- Asynchronous Servers
- WebSocket
- Imaging
- Virtual Environment
- Python and Django addons

Services Offering - 2

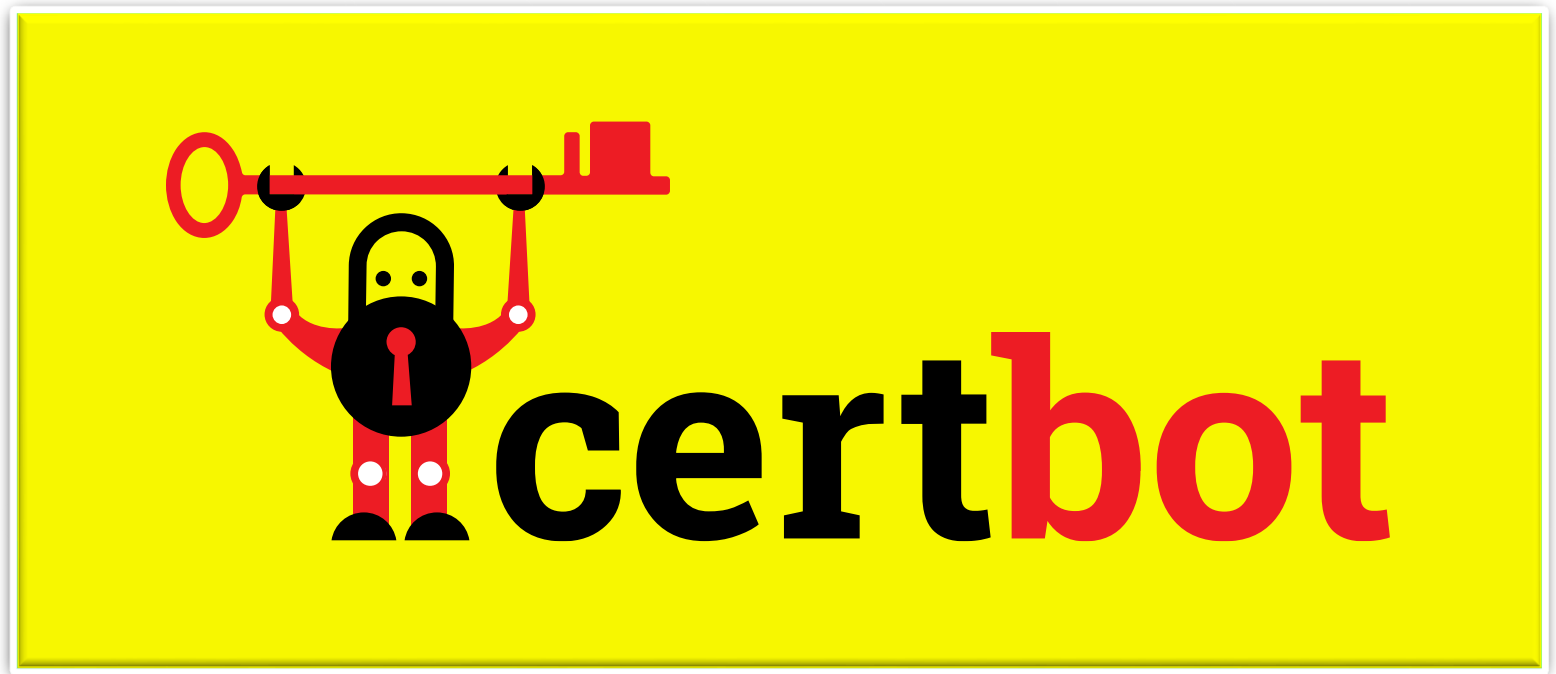
1- Versioning and VDEV (*Debian or Ubuntu*)

- Installation of GIT and SSH Key
- registering to Bug Tracker (unfuddle)
- VirtualENV Wrapper
- Setup Tools (PIP and PIP3)

2 - Extended servers

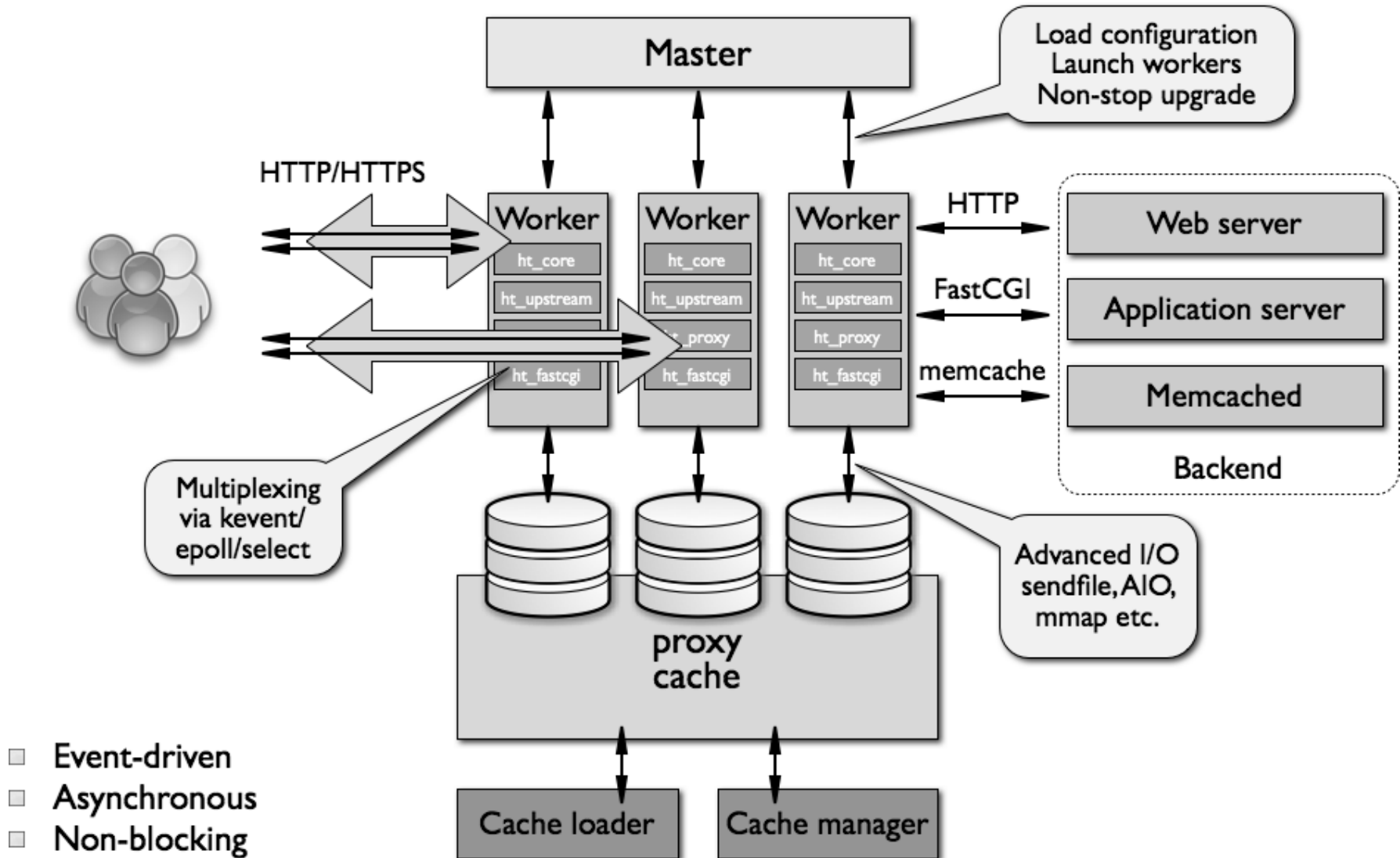
- ElasticSearch or SORL
- CRON JOB Background Linux services
- Cache system (Memcached)
- Supervisor Installation and settings
- UWSGI Servers (Gunicorn)
- Memached
- RabbitMq

HTTPS – SSL - Perm Keys

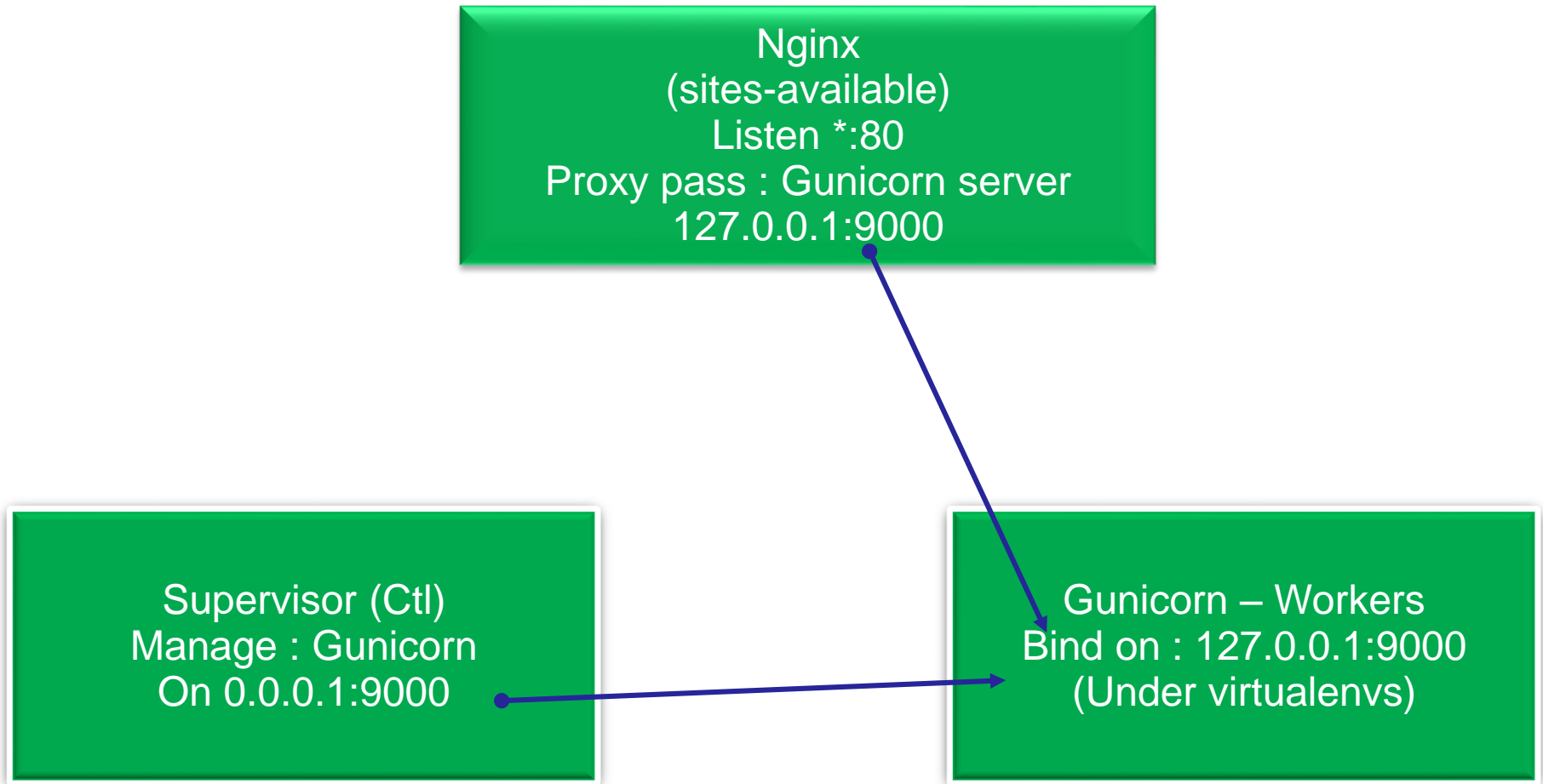


Features & Functionalities

NGINX architecture



Architecture Nginx/Gunicorn/Supervisor



<http://senko.net/en/django-nginx-gunicorn/>

Features and Functionalities (1)

- **Login and Signup riche extension:**
 - Extended signup with extra Information
 - Geocode your address to have a strong user experience
 - Map localization
 - Strong password control
 - Google Captcha + Login with LinkedIn and Facebook
 - Linked API Signing / Signup
- **Admin Tools :**
 - Manage all your SQL Tables
 - Fix quickly Database errors
 - Manage Cron Jobs (*Linux Crontab automation*)
 - Manage Emails, Logging, Messages queued, SMTP Mailer, SendGrid
 - Manage all Web HTML Page Title, Label, Button, Color, Basic Layout
 - Manage Static Content (about, presentation, Label, Pitch)
 - Manage Translation (*English, French, Spanish, Italian, German, Russia,*)
 - Manage error Messages
 - Manage all your System web parameters
 - Manage Google settings
 - Manage SEO settings

Features and Functionalities (2)

- **Extended Search :**
 - Haystack engine (*Django*), implement Facing, suggested, autocomplete
 - Extended search by Numerous Criteria's including Feedback and skills
 - Radius extended search with Geo Location (*Lat/Long*)
 - Elasticsearch and Java implementation
- **Google MAP API :**
 - Markers
 - Geocode address
 - Address Geo autocomplete
- **Mailer (*asynchronous and Management*) :**
 - Queuing, Duplicated, Scheduler, Campaign
- **Application static/Label management :**
 - Title, Label, Button
- **Extended and Rich Record Updates :**
 - Multi parameters Tables
 - Autocomplete
 - No more static string inside code
 - Dynamic dropdown (Updated by Django admin tool)

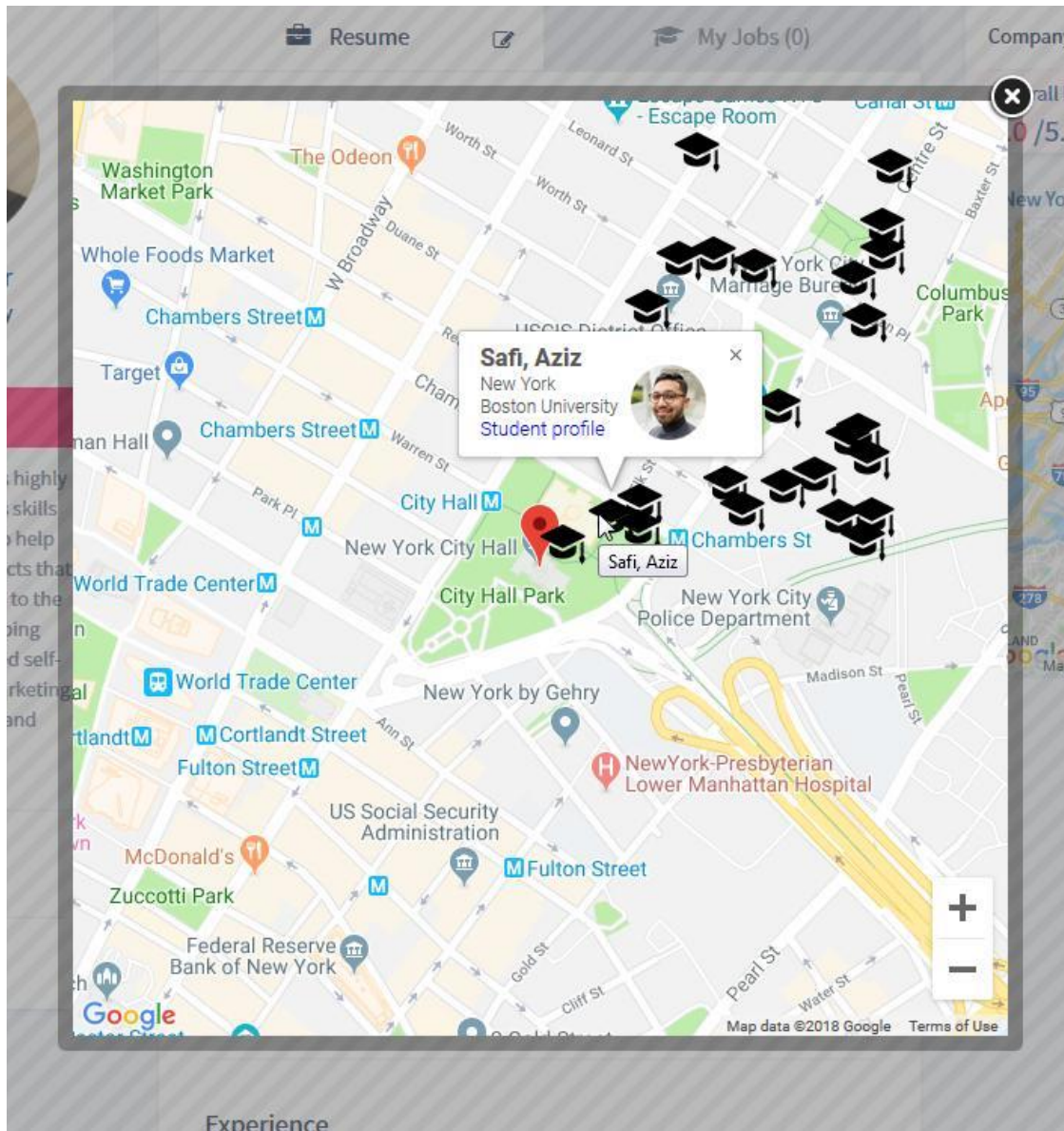
Features and Functionalities (3)

- **Google Map search :**
 - API search within a MAP, Radius and Markers
- **Autocomplete :**
 - SQL Tables
 - Sophisticated and extended Autocomplete
- **Imaging :**
 - Extended Gallery
 - Asynchronous Upload
 - MultiUploader (Fine & Image) Database
 - Image cropping
 - Jpeg and video compressing
- **Review and Feedback**
 - Enable your users to rank and leave reviews
 - Search by Feedback and stars
- **Like and Favorite Functions :**
 - Add favorite Objects
 - Link to Facebook and LinkedIn

Features and Functionalities (4)

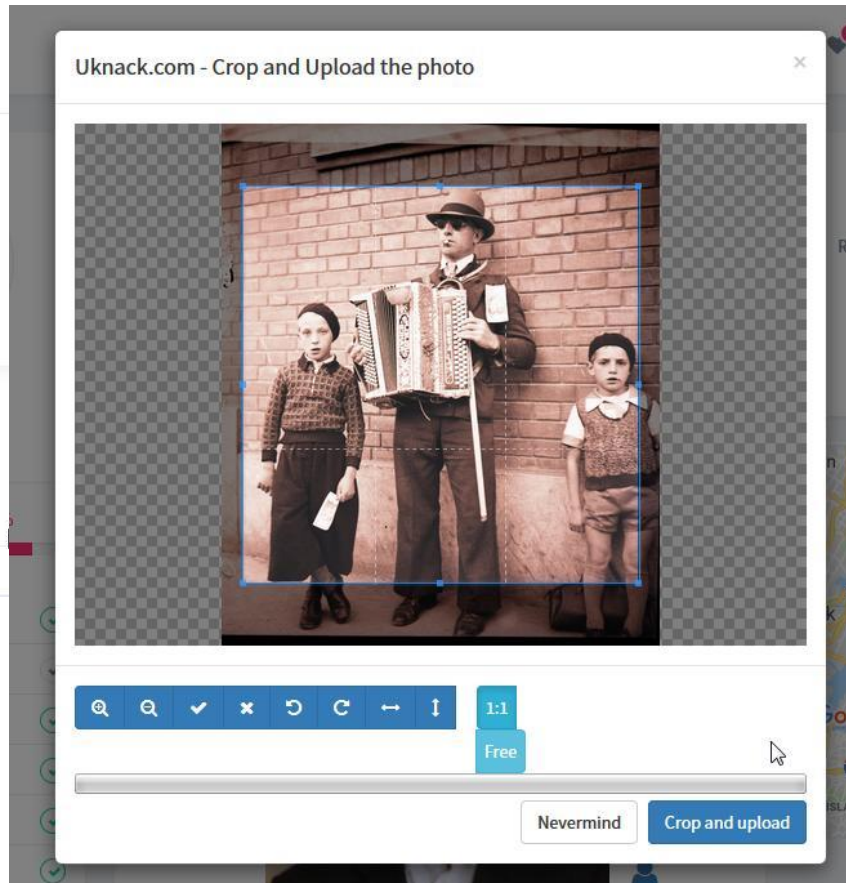
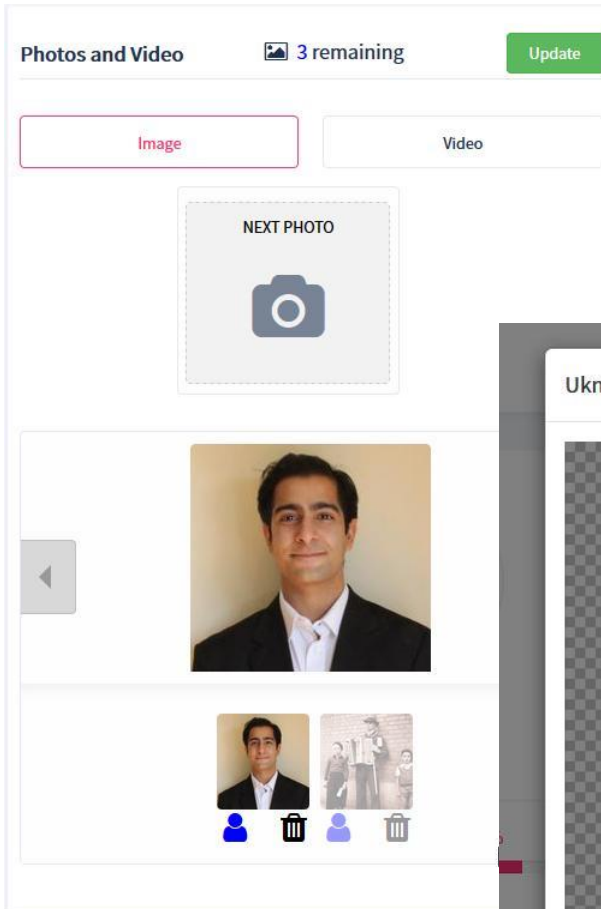
- **LinkedIn and Facebook API :**
 - Full social networks Integration
- **Keywords and Tags :**
 - Keywords Database
 - Tags, Skills Database reference
- **Rich Text Editor :**
 - Integrate Full Rich Text Editor
 - PDF Generation for Various Documents
- **No More Static inside the Code (*dropdown, checkbox, Radio Button*)**
 - Thanks to MySQL and Django Admin tool
 - All Static in Models or Forms are now managed from Admin
 - No use to reload Web application and Restart Linux Servers
- **Messaging and Online Chat:**
 - Internal Email system
 - Internal Chatting system
 - Online members directory
 - WebSocket server implementation (Proxy and Nginx settings)

Google Map Markers



- Google Marker
- Drive Direction
- Time to Reach Customers
- Trip calculation

Image Upload and Cropping



- Image Resize
- Amazon S3
- Image Cropping
- Image Gallery

Autocomplete on Every Fields

All autocomplete will help users to enter quickly without any errors
Informations all generic informations. All autocomplete will be maintained
Thanks to dynamic SQL Table, under Django Admin Tool

Skills



Arjun Khullar

Keywords suggestion

- Financial Services
- RESTful Services
- Services
- SEO
- Servers
- Search Engine Marketing (SEM)
- Selenium
- Search Engine Optimization
- Paid Search Advertising
- Security

Internal Messaging & Online Chat

UserName	CHAT	OnLine	Location	Mode
pouzy03	7		Boston	
marong125			Boston	
Wieland.a			Boston	
sougata			Boston	
PriyanThurairatnam			Quezon City	
Orimagi			Boston	
The Art Of Fate			Boston	

FitReserve

Bitome

Rapid7 LLC

Jobs
 Students

6

 7
 Arnaud Kühlein ▾

UKNACK
INBOX (Unread)
SENT
CHAT

Inbox Messages

archived (0)

Filter Messages

Message Source

Message Status

Date Recieved

Text Search

All ▾

Any ▾

All ▾

1 - 1 of 1

Username	Contact Type	Subject	Date
Uknack	Uknack Student	Your Uknack Job Matches...	Jan 16, 2018 02:15

Django 5 admin tool : a revolution

- Users account
- Authentication & Authorization
- Users management
- System Management (contacts, currency, language, Message,...)
- Page Title and SEO Meta Tags and Robots
- Geo Database
- Keywords Database (Standards, User and Forbidden Keywords)
- Internal Messaging System
- Contact and FAQ
- Imaging for the whole projects (no more Photo link inside your SQL records !!)
- Digital photo image Cropping
- Private Chat
- Flat Pages
- Social Auth
- Translation manager
- Django Sophisticated Emailer (full asynchrone and Working with SendGrid)

a powerful administration Tool for your website

CAREGIVERS MANAGEMENT		
CAREGIVERS -- LIST	+ Add	✎ Change
Care Task Notes	+ Add	✎ Change
Care Task Options	+ Add	✎ Change
Care Task Reminders	+ Add	✎ Change
Care Tasks	+ Add	✎ Change
Care Tasks Recurrences	+ Add	✎ Change
CareGivers Addresses	+ Add	✎ Change
CareGivers Care Plan Notes	+ Add	✎ Change
CareGivers Care Plan Options	+ Add	✎ Change
CareGivers Care Plans	+ Add	✎ Change
Caregivers Details	+ Add	✎ Change
Certificates Caregivers	+ Add	✎ Change
Common Comments	+ Add	✎ Change
Common Notes	+ Add	✎ Change
Common Observations	+ Add	✎ Change
Contract Attachments	+ Add	✎ Change
Contract Details	+ Add	✎ Change
Families Details	+ Add	✎ Change
Health Details	+ Add	✎ Change
Health Measurements	+ Add	✎ Change
House Holds	+ Add	✎ Change
Primary Contacts	+ Add	✎ Change
Schedule Caregivers	+ Add	✎ Change
Skills Caregivers	+ Add	✎ Change
Tasks Caregivers	+ Add	✎ Change
Timecards Clients & Caregivers	+ Add	✎ Change
Trainings Caregivers	+ Add	✎ Change

CLIENTS MANAGEMENT		
CLIENTS -- LIST	+ Add	✎ Change
Client Activities	+ Add	✎ Change
Client Care Plans	+ Add	✎ Change
Client Care Tasks	+ Add	✎ Change
Client Care Teams	+ Add	✎ Change
Client Care teams	+ Add	✎ Change
Client House Holds	+ Add	✎ Change
Client Observations	+ Add	✎ Change

admin for Emails, Images, Chat, Currency, Faq, ..

DJANGO_IMAGE_CROPPING

Photos [+ Add](#) [Change](#)

DJANGO_MAILER

Blacklisted e-mail addresses [+ Add](#) [Change](#)

Logs [+ Add](#) [Change](#)

Messages [+ Add](#) [Change](#)

Queued messages [+ Add](#) [Change](#)

DJANGO_PRIVATE_CHAT

Dialogs [+ Add](#) [Change](#)

Messages [+ Add](#) [Change](#)

FINEUPLOADER

Fine files [+ Add](#) [Change](#)

FLAT PAGES

Flat pages [+ Add](#) [Change](#)

MULTIUPLOADER

Multiploader files [+ Add](#) [Change](#)

Multiploader images [+ Add](#) [Change](#)

ONLINE_USERS

Online user activitys [+ Add](#) [Change](#)

PYTHON SOCIAL AUTH

Associations [+ Add](#) [Change](#)

Nonces [+ Add](#) [Change](#)

User social auths [+ Add](#) [Change](#)

REGISTRATION

Registration profiles [+ Add](#) [Change](#)

ROBOTS

Rules [+ Add](#) [Change](#)

Url [+ Add](#) [Change](#)

SITES

Sites [+ Add](#) [Change](#)

TRANSLATION_MANAGER

Admin-translation_backup-plural [+ Add](#) [Change](#)

Proxy translation entrys [+ Add](#) [Change](#)



Translation_entry [+ Add](#) [Change](#)

System & Technologies

We provide all the best System Technology & Installation

- **Linux Debian Ubuntu or Debian:**
 - 24.04 (Ubuntu - LTS)
 - Memcached / RabbitMQ / Celery
- **Python and Django :**
 - Python 3.12 and Django 5
 - Django Add-on (*will be detailed later*), thousand available across a large Opensource
- **Nginx Installation :** 
 - Nginx & Google Page Speed, Nginx for WebSocket (*Private Online Chat*) v 1.15.8
 - **Gunicorn** Interface : v 19.9 
- **Supervisor :** Control of Processes on Linux. v 3.3.5
- **MySQL Server :**
 - MySQL 8.0 (*Oracle system*)
 - MariaDB 10.6 & PostGreSQL
- **Java / Elastic Search / Haystack :** (*Java support Jdk 8 and 2.4.6*)
- **Django 5:**
 - emailer (*with SendGrid provider*)
 - Crontab Management (*Cron Activity Tools*)
 - I18N management (*Internationalization & Google Translation API*)
- **Google Map & Geocode API**

System Technology - Extended

- **GIT - SSH:**
 - Store the Code Here
 - Unfuddle Account
- **SSL / HTTPS**
 - Cerbot / Let's Encrypt Technology  **certbot**
- **RabbitMQ : Message Broker**  **RabbitMQ** by Pivotal.
- **Memcached** : (*Django Cache Internal system*)
- **PIP**: common Python-Django installer for VirtualEnv
- **VirtualEnvWrapper** : (*to generate a Virtual Environment for Python*)
- **PageSpeed** : (Nginx Optimization) 
- **Linux Crontab** : Batch Jobs which are running in Background
- **WebSocket** : Server installation, Nginx Settings
- **Google ReCaptcha** : against Hacking
- **Google AutoComplete** : The New Google Geocode AutoComplete
- **Maxmind Geo localization API** (*By IP address*)
- **ElasticSearch**

Django addon

**Linux system
addon**

Linux Technology

Technologies involved within Django Framework

- Memcached
- RabbitMq
- Celery
- Crontab
- ElasticSearch
- NGINX
- Gunicorn
- Java
- VirtualEnvs
- Supervisor
- PostGreSQL, MySQL 8.0 or MariaDB
- Python 3.12

Python and Django

Django Addon

Django primary addon – Managing and installing

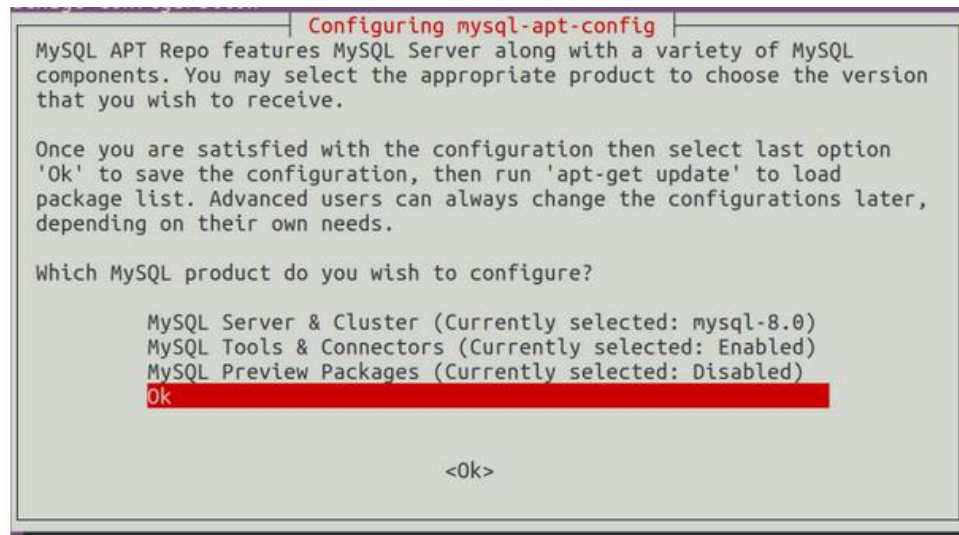
```
amqp==1.4.9
anyjson==0.3.3
appdirs==1.4.3
asn1crypto==0.22.0
Babel==2.4.0
BabelDjango==0.2.2
beautifulsoup4==4.6.0
billiard==3.3.0.23
bleach==2.0.0
boto==2.40.0
celery==3.1.25
certifi==2017.4.17
cffi==1.10.0
chardet==3.0.4
cryptography==1.9
defusedxml==0.5.0
Django==1.10.7
django-admin-honeypot==1.0.0
django-appconf==1.0.1
django-babel==0.6.0
django-bootstrap-pagination==1.6.2
django-cache-machine==0.9.1
django-captcha==1.0.0
django-celery==3.2.1
django-compat==1.0.14
django-compressor==2.1.1
django-constance==2.0.0
django-cors-headers==1.1.0
django-embed-video==1.1.2
django-extensions==1.7.9
django-fabric==2.1.0
django-facebook==6.0.3
django-filter==1.0.4
django-filters==0.2.1
django-fine-uploader==0.2.0
django-geoip==0.5.2.1
django-grappelli==2.10.1
django-gunicorn==0.1.1
django-haystack==2.6.1
django-picklefield==0.3.2
django-progressbarupload==0.1.7
django-secure==1.0.1
django-simple-captcha==0.5.5
django-smtp-ssl==1.0
django-sslserver==0.19
django-storages==1.4.1
django-timezones==0.2
django-ultracache==1.11.1
django-websocket-redis==0.5.0
django-wysiwyg-redactor==0.5.1
django-honeypot==0.6.0
django-idmapper==0.2
django-image-cropping==1.0.4
django-imagekit==4.0.1
django-maintenancemode==0.11.2
django-memcached==0.1.2
django-mysql==1.2.0
django-pagination==1.0.7
django-pagination-bootstrap==1.2.4
djangorestframework==3.5.0
djangorestframework-filters==0.10.0
elasticsearch==2.4.1
Fabric==1.13.2
geoip2==2.5.0
geopy==1.11.0
gevent==1.2.1
google-api-python-client==1.6.2
greenlet==0.4.12
gunicorn==19.7.1
html5lib==0.999999999
httplib2==0.10.3
idna==2.5
IPy==0.83
jsonfield==2.0.1
kombu==3.0.37
lockfile==0.12.2
maxminddb==1.3.0
mysqlclient==1.3.10
oauth2client==4.1.0
oauthlib==2.0.2
olefile==0.44
packaging==16.8
paramiko==2.1.2
pillkit==2.0
Pillow==4.1.1
postmarkup==1.2.2
pyasn1==0.2.3
pyasn1-modules==0.0.9
pyparsing==2.1.7
PyJWT==1.5.2
PyMySQL==0.7.11
pyparsing==2.2.0
pypng==0.0.18
python-dateutil==2.6.0
python-memcached==1.58
python-openid==2.2.5
python-social-auth==0.3.6
python3-openid==3.1.0
pytz==2017.2
rcssmin==1.0.6
redis==2.10.5
requests==2.18.2
requests-oauthlib==0.8.0
rjsmin==1.0.12
rsa==3.4.2
simplejson==3.10.0
six==1.10.0
social-auth-app-django==1.2.0
social-auth-core==1.4.0
sorl-thumbnail==12.3
Unidecode==0.4.20
uritemplate==3.0.0
urllib3==1.22
uWSGI==2.0.12
virtualenv==15.1.0
virtualenvwrapper-win==1.2.1
webencodings
```

Main Django Technology and Package addon

- **Imaging :**
 - SORL Thumbnail (Sophisticated Imaging management)
 - Asynchronous Upload and Cropping
 - Imaging Gallery
- **Pagination**
 - Bootstrap Pagination
- **Forum Package & Blog (Django addon)**
- **I18N Package and Internationalization Admin tool**
- **Mailer + admin tool**
- **System Admin Tool**
- **Celery : Manage asynchronous Tasks**

MySQL 8.0 & MariaDB

- `cd /tmp/ && wget https://dev.mysql.com/get/mysql-apt-config_0.8.10-1_all.deb`
- `sudo dpkg -i mysql-apt-config_0.8.10-1_all.deb`



The screenshot shows a terminal window titled "Configuring mysql-apt-config". The text inside reads: "MySQL APT Repo features MySQL Server along with a variety of MySQL components. You may select the appropriate product to choose the version that you wish to receive." It then says: "Once you are satisfied with the configuration then select last option 'Ok' to save the configuration, then run 'apt-get update' to load package list. Advanced users can always change the configurations later, depending on their own needs." The question "Which MySQL product do you wish to configure?" is followed by three options: "MySQL Server & Cluster (Currently selected: mysql-8.0)", "MySQL Tools & Connectors (Currently selected: Enabled)", and "MySQL Preview Packages (Currently selected: Disabled)". A red horizontal bar highlights the word "Ok" at the bottom of the list. Below the list, the text "<Ok>" is displayed.

- `sudo apt update`
- `sudo apt install mysql-server mysql-client`
- `Sudo mysql -u root -p`
- <https://mysql.wisborg.dk/2018/11/05/using-django-with-mysql-8/>
- `'ENGINE': 'mysql.connector.django',` (for `local_settings`, Django)

Elasticsearch and Java

Elasticsearch

- apt-get install openjdk-11-jre
- Pip install elasticsearch==2.4.1 or 5 (with special extension)
- Pip install --upgrade django-haystack
- wget https://download.elasticsearch.org/elasticsearch/elasticsearch/elasticsearch-2.4.6.tar.gz
- tar xzvf elasticsearch-2.4.6.tar.gz
- ----- manage stop/start -----
- cd /root
- cd elasticsearch-2.4.6
- ./bin/elasticsearch
- nohup ./bin/elasticsearch &
- -----manage (check and stop) -----
- ps aux | grep 'elasticsearch'
- kill -9 Nnnnn
- ps aux | grep 'elasticsearch' | grep -v grep

- Linux auto install :
<https://www.elastic.co/guide/en/elasticsearch/reference/current/deb.html#install-deb>
- <http://www.elasticsearch.org/guide/en/elasticsearch/reference/current/setup-service.html>

WordPress 6

Installation Requisites

- Nginx
- Page Speed
- MariaDb or Mysql 8
- PHP-FPM 8.4
- Create Database
- Wordpress 6.9 & Settings
- SSL perm Key (HTTPS)

Nginx - Basic settings

- `sudo apt-get install nginx`

`sendfile on;`

`tcp_nopush on;`

`tcp_nodelay on;`

`keepalive_timeout 10s;`

`types_hash_max_size 2048;`

`server_names_hash_bucket_size 64;`

`include /etc/nginx/mime.types; default_type application/octet-stream;`

Nginx - compression base settings

```
gzip on;
```

```
gzip__vary on;
```

```
gzip_proxied any;
```

```
gzip_comp_level 9;
```

```
gzip_buffers 16 8k;
```

```
gzip_http_version 1.1;
```

```
gzip_types text/plain text/css application/json applicationx-javascript text/xml application/xml  
application/xml+rss text/javascript;
```

Database – Linux Installation

- `sudo apt-get install mariadb-server mariadb-client`
- `sudo apt-get install mysql-server mysql-client`

PHP - Installation

```
sudo apt-get install software-properties-common  
sudo add-apt-repository ppa:ondrej/php
```

```
Sudo apt update
```

```
apt-get install apt-transport-https lsb-release ca-certificates
```

```
wget -O /etc/apt/trusted.gpg.d/php.gpg https://packages.sury.org/php/apt.gpg
```

```
echo "deb https://packages.sury.org/php/ $(lsb_release -sc) main" >> /etc/apt/sources.list.d/php.list
```

```
apt-get update
```

```
sudo apt-get install php7.4-fpm php7.4-common php7.4-mbstring
```

```
sudo apt-get install php7.4-xmlrpc php7.4-soap php7.4-gd php7.4-xml
```

```
sudo apt-get install php7.4-intl php7.4-mysql php7.4-cli php7.4-mcrypt
```

```
sudo apt-get install php7.4-zip php7.4-curl
```

```
sudo nano /etc/php/7.4/fpm/php.ini
```

```
file_uploads = On
```

```
allow_url_fopen = On
```

```
memory_limit = 256M
```

```
upload_max_filesize = 100M
```

```
cgi.fix_pathinfo=0
```

```
max_execution_time = 360
```

```
date.timezone = America/Chicago
```

Create Wordpress Database

```
CREATE DATABASE wordpress;
```

```
CREATE USER 'wordpressuser'@'localhost' IDENTIFIED BY '77558899';
```

```
GRANT ALL ON wordpress.* TO 'wordpressuser'@'localhost' IDENTIFIED BY '77558899'  
WITH GRANT OPTION;
```

```
SET PASSWORD FOR root'@'localhost' = PASSWORD('Pouzy+03320');
```

```
Flush privileges ;
```

Wordpress core code 6.0

- `cd /tmp && wget https://wordpress.org/latest.tar.gz`
- `tar -zxvf latest.tar.gz`
- `sudo mv wordpress /var/www/html/wordpress`
- `sudo chown -R www-data:www-data /var/www/html/wordpress/`
- `sudo chmod -R 755 /var/www/html/wordpress/`
- `sudo nano /etc/nginx/sites-available/wordpress`

Wordpress installation - Tuto

<https://websiteforstudents.com/install-wordpress-on-ubuntu-24-04-its-with-nginx-mariadb-and-php-7-1-support/>

<https://howto.wared.fr/installation-wordpress-ubuntu-nginx/>

Configure WordPress

```
sudo mv /var/www/html/wordpress/wp-config-sample.php /var/www/html/wordpress/wp-config.php
```

```
sudo nano /var/www/html/wordpress/wp-config.php
```

```
// ** MySQL settings - You can get this info from your web host ** //  
/** The name of the database for WordPress */  
define('DB_NAME', 'wordpress');  
  
/** MySQL database username */  
define('DB_USER', 'wordpressuser');  
  
/** MySQL database password */  
define('DB_PASSWORD', 'user_password_here');  
  
/** MySQL hostname */  
define('DB_HOST', 'localhost');  
  
/** Database Charset to use in creating database tables. */  
define('DB_CHARSET', 'utf8');  
  
/** The Database Collate type. Don't change this if in doubt. */  
define('DB_COLLATE', '');
```

WordPress – Url config

- **Edit wp-config.php**

Url change

- **Edit DataBase :**

```
select option_name, option_value from wp_options where option_name =  
'home' or option_name = 'siteurl';
```

```
update wp_options set option_value =  
'https://staging.earthrotic.com/wordpress' where option_name = 'home'  
or option_name = 'siteurl';
```

Chmod and ChOwn

```
sudo chmod -R 755 /var/www/html/wordpress
```

```
sudo chown www-data:www-data -R *
```

NGINX - Base configuration - HTTP

```
server {
    ## Your website name goes here.
    server_name domain.tld;
    ## Your only path reference.
    root /var/www/wordpress;
    ## This should be in your http block and if it is, it's not needed here
    .

    index index.php;

    location = /favicon.ico {
        log_not_found off;
        access_log off;
    }

    location = /robots.txt {
        allow all;
        log_not_found off;
        access_log off;
    }

    location / {
        # This is cool because no php is touched for static content.
        # include the "?$args" part so non-default permalinks doesn't b
reak when using query string
        try_files $uri $uri/ /index.php?$args;
    }

    location ~ \.php$ {
        #NOTE: You should have "cgi.fix_pathinfo = 0;" in php.ini
        include fastcgi.conf;
        fastcgi_intercept_errors on;
        fastcgi_pass php;
    }

    location ~* \.(js|css|png|jpg|jpeg|gif|ico)$ {
        expires max;
        log_not_found off;
    }
}
```