

# REPORT SEM

***BY : Aloui Mohamed Khalil***  
***Classe : 4 TWIN 2***

Année universitaire : 2018-2019

## Contents

<b>Introduction .....</b>	<b>2</b>
<b>Chapter 1 : Choice of keywords.....</b>	<b>3</b>
1. List of keywords.....	3
2. Existing Analysis: SEO Competitive Analysis.....	3
a) Competitor n°1:.....	3
b) Competitor n°2:.....	5
3. Validate the keywords.....	6
<b>Chapter 2 : Set up an SEO strategy.....</b>	<b>7</b>
1. On-page optimization.....	7
a) Optimization meta Title.....	7
c) Optimization meta description.....	8
d) Optimization of hierarchy titles <h1>, <h2>, <h3>.....	8
e) Optimization of images .....	8
f) Highlighting keywords in paragraphs .....	9
2. Off-page optimization .....	9
a) Customize the 404 error page.....	9
b) Add the no-follow attributes .....	10
c) Setting up the Robot.txt file .....	10
d) Setting up the sitemap.xml file .....	11
3. Netlinking Strategy .....	11
a) Checking back links and disavowing non-trust links .....	11
b) Indexing in google web master tools .....	11
c) Registration in directories .....	12
<b>Chapitre 3 : folow .....</b>	<b>12</b>
1. Reduced operating errors: webmaster tools tool.....	12
2. Evolution in research analysis: tool webmaster tools.....	12
3. Evolution versus audience presentation: google analytics .....	12
4. Synthèse des acquisitions : google analytics.....	12

# Introduction

SEO, also known as SEO (Search Engine Optimization), refers to all methods and technical and marketing know-how allowing a web page to be positioned as high as possible in the search engine result pages (Google , Bing ...).

To optimize the referencing of a site, it is possible to intervene on many variables like the urls, the keywords contained in your pages, the incoming links, the outgoing links ...

Depending on the areas of activity, the financial issues related to this presence can be very important.

The contribution of search engines via SEO is all the more important as they generate targeted traffic with users searching for what you offer.

Thus, to increase the traffic of your site it must be found and analyzed to be referenced in the search engines. And this statement is even more true if you are positioned in a competitive sector. Optimizing your SEO to be in front of your competitors is an invaluable investment.

As part of our academic project SEM module, we will develop and implement a natural referencing of our curriculum vitae (CV).

# Chapter 1 : Choice of keywords

## 1. List of keywords

What question does the user ask ?

- Is there an available MEAN Stack engineer?
- What are the best engineering schools in Tunisia?
- What is the level of Tunisian full stack web developers?
- Is there an engineer who develops with the latest web languages?
- Are there full stack engineers?

What reaserch does the user do ?

- developers web Mean Stack Tunisie
- CV engineer ESPRIT
- CV engineer full stack Tunisie
- CV engineer informatique mongodb nodeJs angular tunisie
- CV engineer web Tunisie

## 2. Existing Analysis: SEO Competitive Analysis

### a) Competitor n°1:

<http://www.asma-sassi.com/>

The screenshot shows a Google search interface with the query 'CV engineer full stack Tunisie'. The search results are displayed in French. The first result is for 'Asma Sassi - CV - Developpeur Web Full Stack Tunisie' with the URL 'www.asma-sassi.com/'. The second result is for 'Salim Ben Hassine | CV Ingénieur Développeur Web Full Stack Tunisie' with the URL 'https://salimbenhassine.com/'. The third result is for 'Neji Soltani : Full Stack JavaScript Web Developer and Designer from ...' with the URL 'https://www.nejisoltani.detect.tn/'.

Google

CV engineer full stack Tunisie

Tous Images Actualités Vidéos Plus Paramètres Outils

Environ 1 410 000 résultats (0,60 secondes)

**Asma Sassi - CV - Developpeur Web Full Stack Tunisie**  
[www.asma-sassi.com/](http://www.asma-sassi.com/) ▼  
Asma SASSI Ingenieur et developpeur web **Full Stack**.Je developpe avec AngularJS,Node.js,Express.js et Mean Stack.BackEnd-FrontEnd.Etudiante à ESPRIT.  
Termes manquants : engineer

**Salim Ben Hassine | CV Ingénieur Développeur Web Full Stack Tunisie**  
<https://salimbenhassine.com/> ▼  
Salim Ben Hassine, développeur et ingénieur, **full stack CV** en ligne. Salut ... Age 23; Adresse 19, Rue Bizerte, 8025 Hammem El Ghezaz (**Tunisie**); E-mail ... sont accrédités EUR-ACE (European Accreditation of **Engineering** Education).

**Neji Soltani : Full Stack JavaScript Web Developer and Designer from ...**  
<https://www.nejisoltani.detect.tn/> ▼ Traduire cette page  
currently studing @ Esprit as a computer science **engineering** student specialized ..... **full stack** neji soltani tunisie;full stack cv;full stack neji soltani;full stack web ...

Title	Asma Sassi - CV - Developpeur Web Full Stack Tunisie
Description	Asma SASSI Ingenieur et developpeur web Full Stack.Je developpe avec AngularJS,Node.js,Express.js et Mean Stack.BackEnd-FrontEnd.Etudiante à ESPRIT.Tunisie
prioritization <h1>, <h2>, <h3>	<h1>Asma SASSI</h1> <h3>Ingenieur &amp; Developpeur Web Full Stack</h3> <h2>A propos</h2> <h3>Asma Sassi</h3> <h3>Ingenieur &amp; Developpeur Web Full Stack</h3> <h2>Compétences</h2> <h3>Langages</h3> <h6>HTML5/CSS3</h6> <h6>JavaScript</h6> <h6>PHP</h6> <h6>C#</h6> <h6>Java</h6>
Text style <strong>, <U>, <Em>	yes
Doctype	<!DOCTYPE html>
Charset	utf-8
Segmentation: Header , nav et footer	Oui
Set up the css and Javascript files	Oui

Meta language tags	yes
Link to page 404	yes
Size of the page	355.84 KB
Number of intern links	18
robot.txt and sitemap.xml	Oui

b) Competitor n°2:  
<http://omar-ridene.com/>

The screenshot shows a Google search interface with the query 'ingénieur symfony esprit'. The search results are as follows:

- Offres d'emploi Ingénieur Symfony - Tunisie | Optioncarriere.tn**  
<https://www.optioncarriere.tn/emploi-ingénieur-symfony.html>  
Toutes les offres d'emploi Ingénieur Symfony - Tunisie sur optioncarriere.tn, ... PROFESSIONNELLE Bac+5, très bonne école d'ingénieur (INSAT, ESPRIT, ENSI ...
- Offres d'emploi Ingénieur Symfony sans Expérience - Tunisie ...**  
<https://www.optioncarriere.tn/emploi-ingénieur-symfony-sans-experience.html>  
Toutes les offres d'emploi Ingénieur Symfony sans Expérience - Tunisie sur ... PROFESSIONNELLE Bac+5, très bonne école d'ingénieur (INSAT, ESPRIT, ENSI.
- Développeur PHP/Symfony - Jobi**  
<https://www.jobi.tn/joboffer.../developpeur-php-symfony--at--proxym-group-217357>  
symfony3developpementdéveloppementreportingwebsymfonygitphptmcss. Salaire Min 1250 TND /Mois. Niveau d'études Ingenieur ( Bac + 5 ) ... sont construites autour de l'indépendance, le goût du challenge, l'exigence, l'esprit d'équipe, ...
- A propos - Ridéne Omar**  
<omar-ridene.com/propos.html>  
Ridéne Omar élève ingénieur informatique et developpeur web à ESPRIT ... social pour les randonnées à l'aide du framework Symfony pour l'application web ...

Titre	A propos - Ridéne Omar
Description	Ridéne Omar élève ingénieur informatique et developpeur web à ESPRIT ... social pour les randonnées à l'aide du framework Symfony pour l'application web ...
prioritization <h1>, <h2>, <h3>	Ridéne Omar <h2>Developpeur Web Full Stack &amp; Freelancer</h2>
Text style <strong>, <U>, <Em>	oui
Doctype	<!DOCTYPE html>

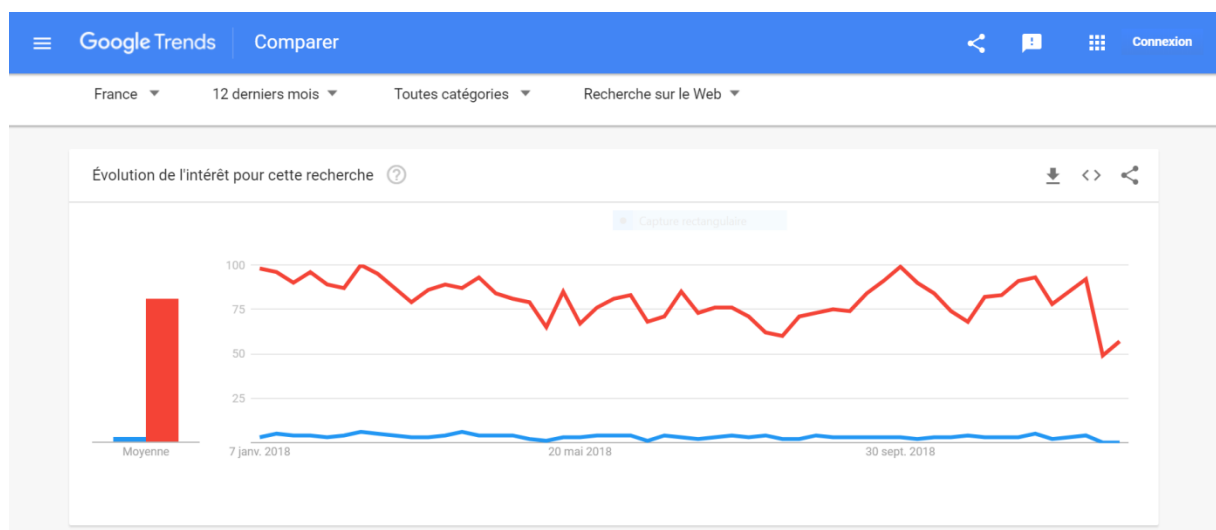
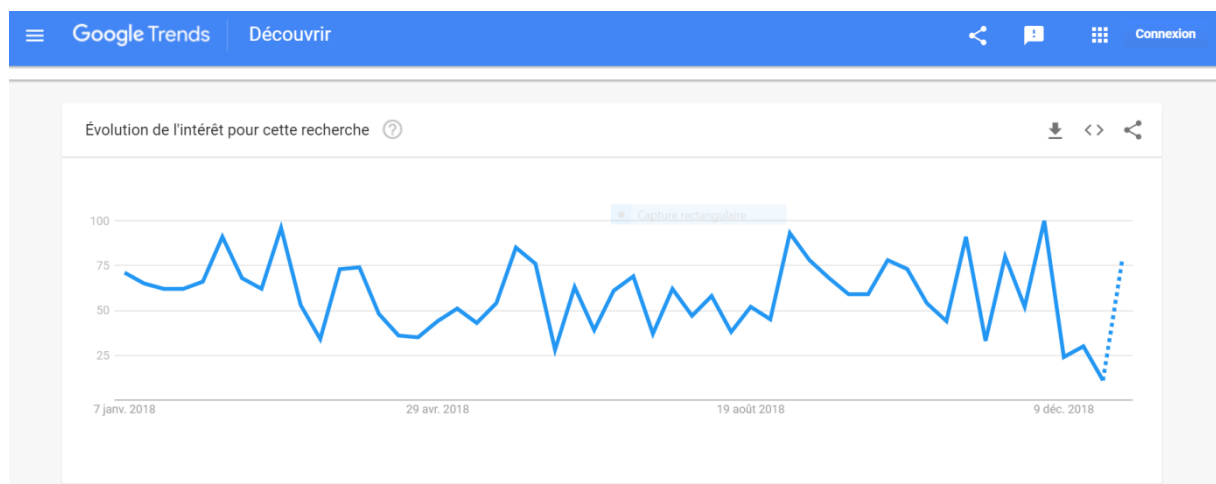
Charset	utf-8
Segmentation : Header , nav et footer	Oui
Jss and css	Oui
Balises meta language	Oui
Link to page 404	Non
Number of internal links	5
robot.txt and sitemap.xml	Oui

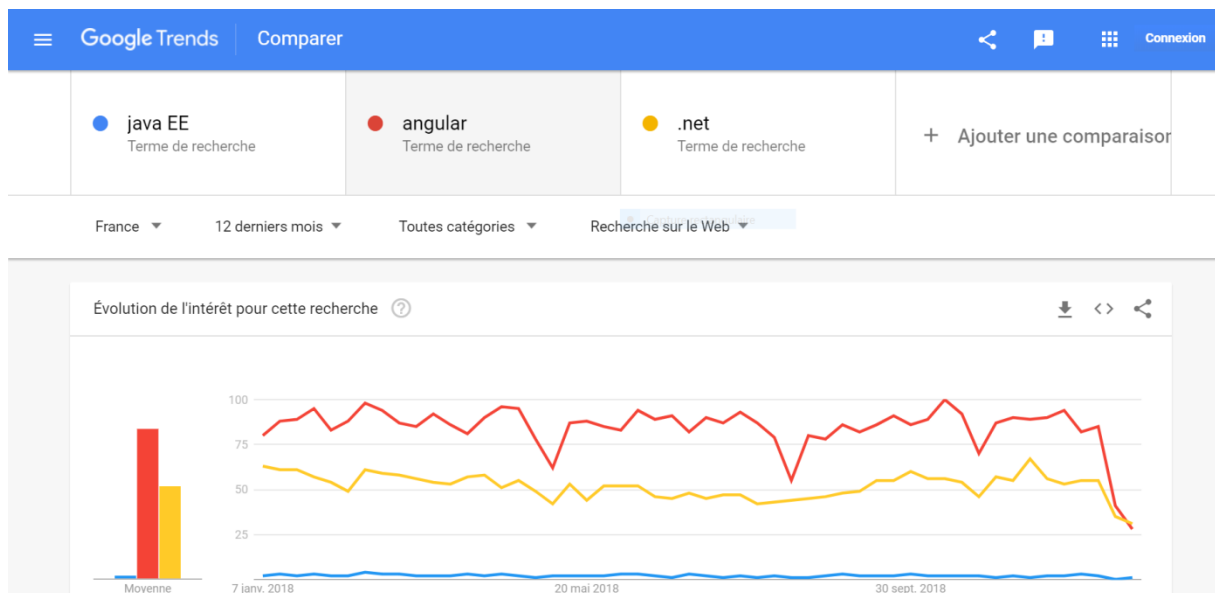
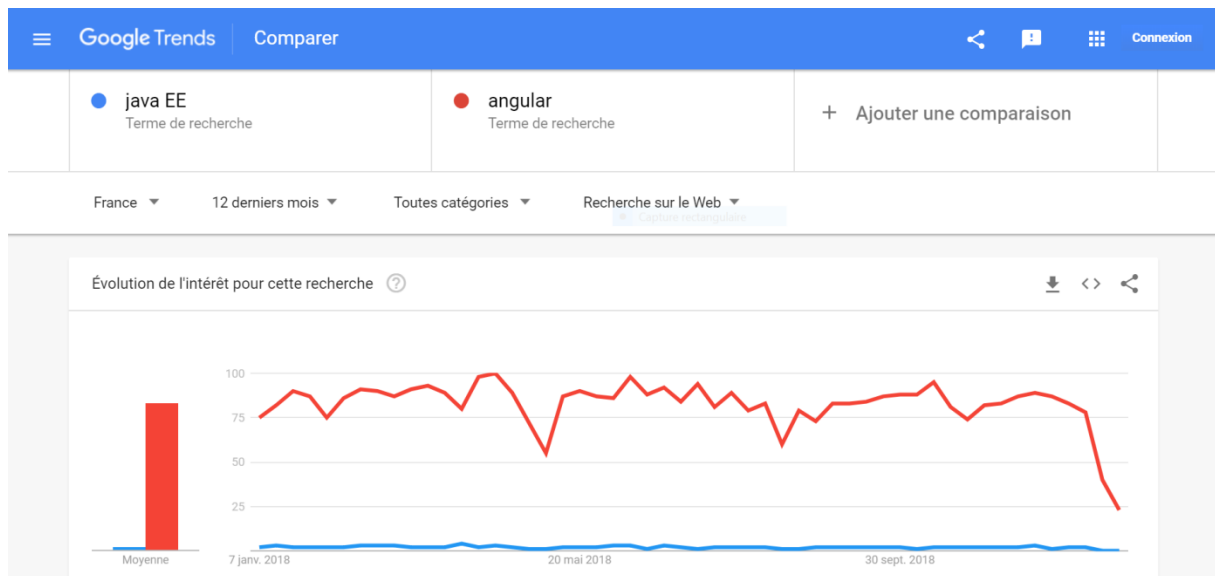
### 3. Validate the keywords

Using the synonym dictionary, google trends and google's keyword generator, the final list of keywords that I chose to implement it in my CV and specifically in the title, description and keywords tags is quoted in the end of this title is:

Web developer, full stack web developer, Java ee, angular, .NET

Here are some screenshots of my searches for the most relevant keywords.





## Chapter 2 : Set up an SEO strategy

### 1. On-page optimization

#### a) Optimization meta Title

The title of the page must contain between 10 and 12 words, the most representative of the content of the page.

**Titre1** : curly-brackets.tn

**Titre 2** : engineering and web developer Freelance



### c) Optimization meta description

The "Meta Description" tags are not a criterion of relevance for search engines. They are used to display a presentation text in the search results.

You have to put important keywords for SEO, otherwise Google may not display the content of this tag in the search results.

### d) Optimization of hierarchy titles <h1>, <h2>, <h3>

Title tags H, six in number, are tags provided for prioritizing content. They are used when writing web content to indicate titles, subtitles, lines of argument, etc.

In SEO, their importance is not negligible since they make it possible to make the engines understand our structure of document and show our editorial quality.

H1: Aloui Mohamed Khalil

H2: future engineer and web developer Full Stack

H3: Home, about me, resume, contact, Academic Project

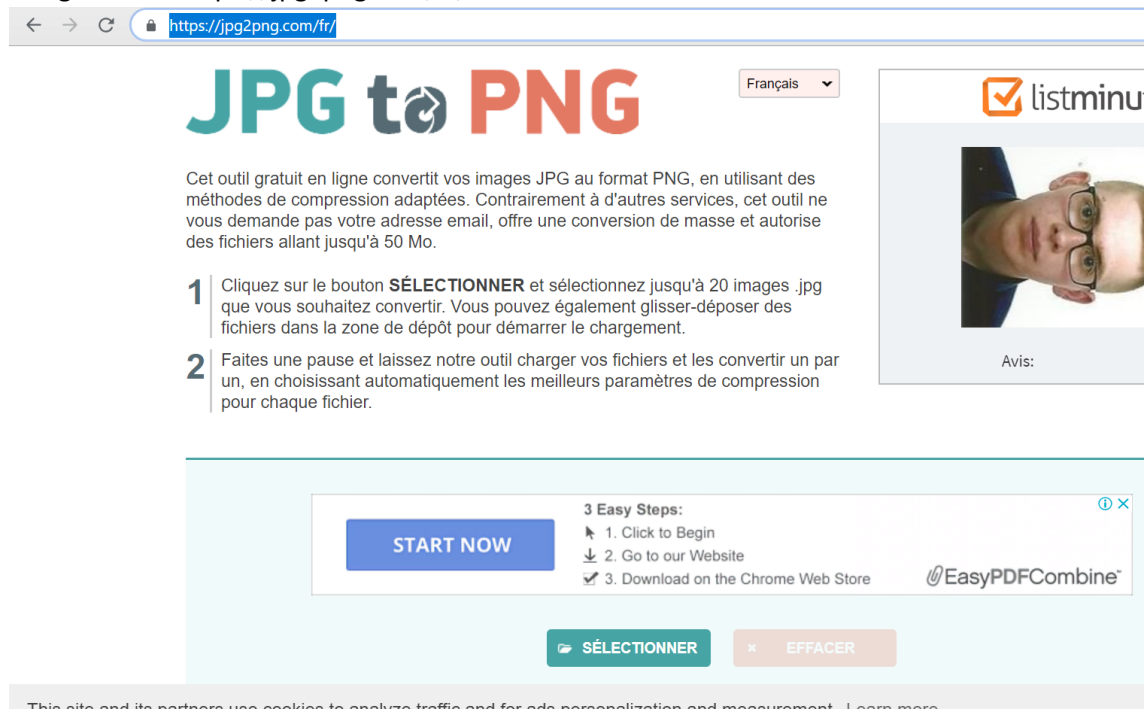
H4: Hello

H3: education, Skills, expertise

### e) Optimization of images

I used multiple images with ALT tags filled in to help with SEO. ALT attributes are usually taken into account as text by search engines, even if their importance is quite low. However, the text that is inserted into it can also be used by image search engines to index and recognize your graphic files.

I also opted to compress the size of the images to reduce the loading time of the page by using the tool <https://jpg2png.com/fr/>



## f) Highlighting keywords in paragraphs

I put the keywords that I chose several times so my site, and more specifically in the title tags, description and in several paragraphs in the about parts, experience, training and skills that contain the majority of keywords that I chose (Engineer, freelance web developer, engineer, web application, java ...)

## 2. Off-page optimization

### a) Customize the 404 error page

Of course, it is important to avoid 404 pages. But along the life of a site, it will likely happen that a user visits a non-existent page at one time or another. It is therefore necessary to redouble efforts on this page to explain to the Internet what could have happened. It is essential to limit your frustration

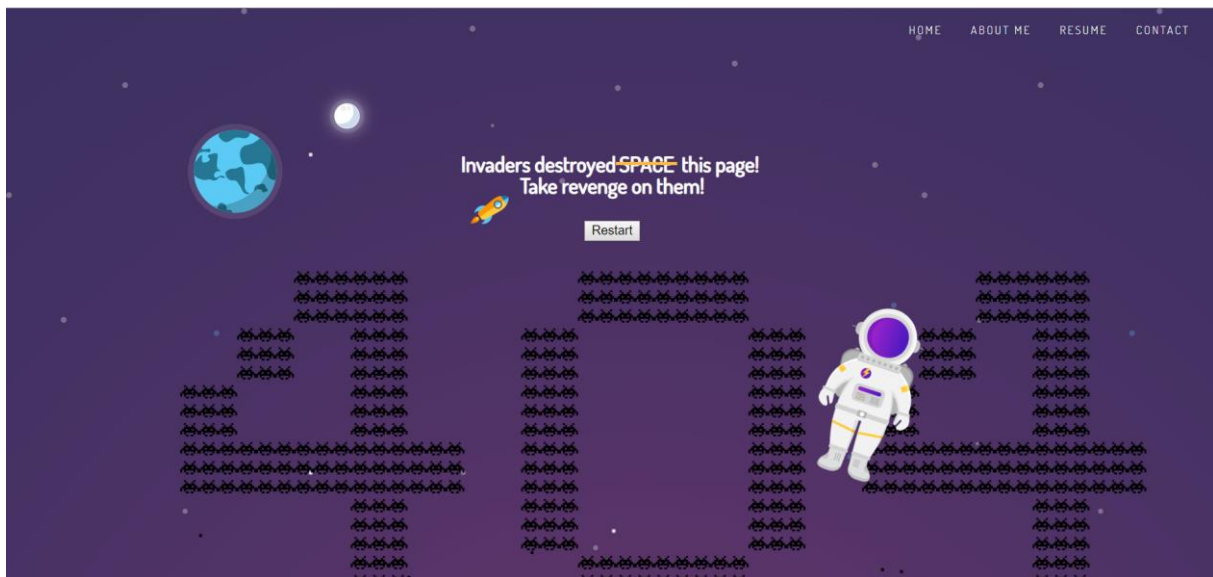
Indeed, I chose to use a custom page 404 that contains a link to the home page (index.html) so as not to lose the Traffic.

## b) Add the no-follow attributes

**nofollow** is a non-standard value of the rel (relation) attribute of the <a> tag, which is used in HTML to produce a hyperlink.

The attribute nofollow (not follow) is used to specify that the link in question should not be taken into account by a program reading the page, for example in order not to increase the rank in the search engines of the website to which point the link.

It is especially used for low quality links. It can also be used when the webmaster wishes to specify to the search engines that it is not necessary to follow the link.



I used the non follow attribute to restrict access to all social network links such as facebook, linkedIn

## c) Setting up the Robot.txt file

The robot exclusion protocol is a text-based resource that can be placed at the root of a website, and contains a list of site resources that are not expected to be indexed by engine indexing robots. By convention, robots consult robots.txt before indexing a website. On the Web server, this resource is frequently saved to a text file called robots.txt.

The use of robots.txt makes it possible to avoid that resources without public interest are found in the results page of a search engine. In addition, the fact that the robots do not access these resources reduces the work of the HTTP server and the traffic on the computer network.

The robot.txt file I used:

```
User-agent: *  
Disallow : /*.jpg$  
Disallow : /*.png$  
Sitemap: http://www.zaynebbbarbouche.tn/sitemap.xml
```

#### d) Setting up the sitemap.xml file

A sitemap is a file that contains a list of URLs that are internal to a website. This file is in XML format. It allows to provide the main search engines with information on the URLs of a website that they could not discover by themselves.

My sitemap.xml file is:

```
<?xml version="1.0" encoding="UTF-8"?>  
- <urlset xsi:schemaLocation="http://www.sitemaps.org/schemas/sitemap/0.9 http://www.sitemaps.org/schemas/sitemap/0.9/sitemap.xsd"  
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://www.sitemaps.org/schemas/sitemap/0.9">  
  <!-- created with Free Online Sitemap Generator www.xml-sitemaps.com -->  
  - <url>  
    <loc>http://curly-brackets.tn/</loc>  
    <lastmod>2018-12-20T21:13:04+00:00</lastmod>  
    <priority>1.00</priority>  
  </url>  
  - <url>  
    <loc>http://curly-brackets.tn/index.html</loc>  
    <lastmod>2018-12-20T21:13:04+00:00</lastmod>  
    <priority>0.80</priority>  
  </url>  
  - <url>  
    <loc>http://curly-brackets.tn/about-me.html</loc>  
    <lastmod>2018-12-20T21:13:03+00:00</lastmod>  
    <priority>0.80</priority>  
  </url>  
  - <url>  
    <loc>http://curly-brackets.tn/resume.html</loc>  
    <lastmod>2018-12-20T21:13:05+00:00</lastmod>  
    <priority>0.80</priority>  
  </url>  
  - <url>  
    <loc>http://curly-brackets.tn/contact.html</loc>  
    <lastmod>2018-12-20T21:13:03+00:00</lastmod>  
    <priority>0.80</priority>  
  </url>  
</urlset>
```

### 3. Netlinking Strategy

#### a) Checking back links and disavowing non-trust links

Netlinking is an SEO technique that works "off-site", that is to say outside the site. The method consists of positioning external hypertext links (via other websites), which are also called backlinks. These links or backlinks will point to the page of a website that we wish to position at best on the search engines, in order to promote its content and provide it with authority.

One of the most used techniques and publication of links in social networks. I chose to share the link in my resume on Facebook, Instagram and LinkedIn to have inbound links in my site.

The Majestic SEO Tool has detected 3 external backlinks, and no non-trust links

#### b) Indexing in google web master tools

Google Webmaster Tools is a set of tools for webmasters to analyze and optimize the indexing of websites and URLs in the search engine most used by Internet users.

It makes it possible to check if a site is indexed by Google and to optimize its referencing.

For Google to verify the site, just add your property.

We can also check the indexation of our site through a search in Google: curly-brackets.tn

### c) Registration in directories

Manual referencing on web directories is an important step to ensure the popularity of your site and the improvement of its positioning on search engines.

Dmoz: it is the most powerful generic directory in the world of the web, once the link is submitted in this directory we will gain a full point over the page rank.

## Chapitre 3 : follow

### 1. Reduced operating errors: webmaster tools tool

In Google Webmasters Tools, crawl errors are pages on the site where Google's bot has fallen. This may be deleted pages, or wrong links in the site. In my case, here is the report of Crawl Errors

### 2. Evolution in research analysis: tool webmaster tools

The Search Analysis report shows how often the site is displayed in Google search results. It allows you to filter and group the data by category, depending in particular on the search query, the date or the device.

### 3. Evolution versus audience presentation: google analytics

Google analytics is a free web analytics service offered by Google. Its free and functional wealth have made it by far the most widely used web analytics tool on the market for personal and small business sites as well as for large companies.

### 4. Synthèse des acquisitions : google analytics

Depuis sa création en 2005, Google Analytics a beaucoup évolué et permet de savoir presque tout sur les internautes qui visitent un site internet. Toutefois, de nombreux utilisateurs de cette solution se trouvent très rapidement dépassés par toutes les possibilités qu'elle offre.

# Conclusion

I think this module had me discover many new things that i never knew about the web ,am very happy about the efforts that i made and hope that i will learn even more