# Website Design & Development

**FINAL ASSIGNMENT** 

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#### Introduction:

I was asked to make an interactive modern website for the Jordanian Ministry of Health, I was assigned to do it by a Non-Governmental Organization, the website should represent an interactive portal for the citizens who are served by this governmental organization.

I have finished the website and you can check it out on the domain I bought (lasamen.com).

# Making of the website:

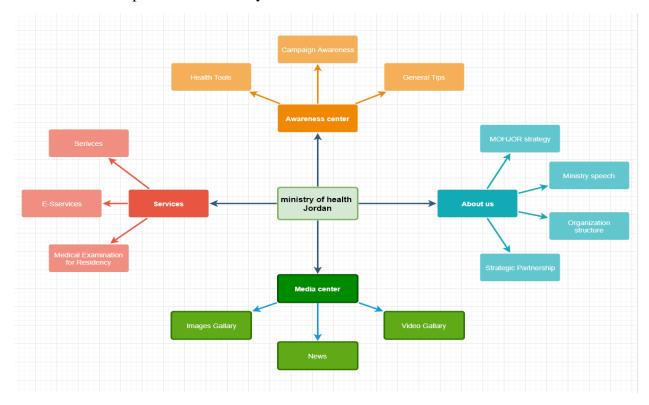
## Site Analysis:

Making a website without know what the purpose of it is not right, so the first step to make a website is to analyze what your website should have and what should it do.

#### Site Map:

Site mapping is putting you pages all together before starting to work on your website, knowing every page and what pages does it link to and how many pages you have so you could have a plan to work on when you start building your website.

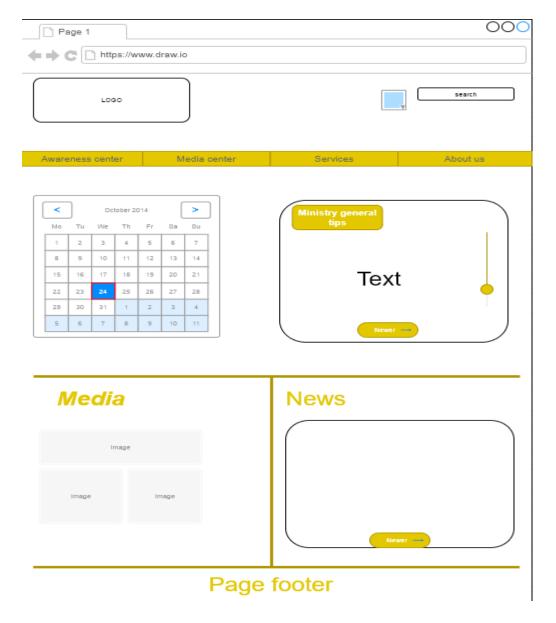
Here is the site map that I made for my website:



## Wire Frames and Mock-ups:

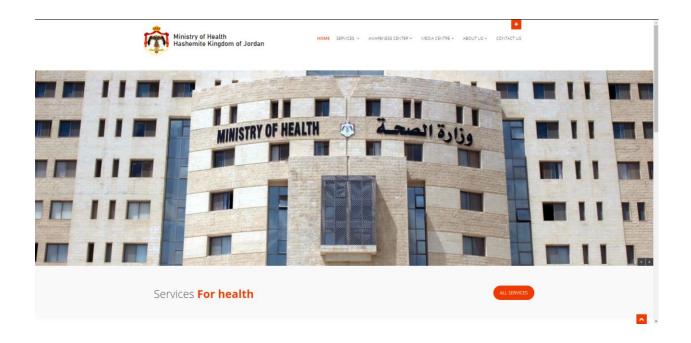
When you finish your site map you will have to work on the look of your website pages, you could use any software to do that like Photoshop or even Draw.io to make them.

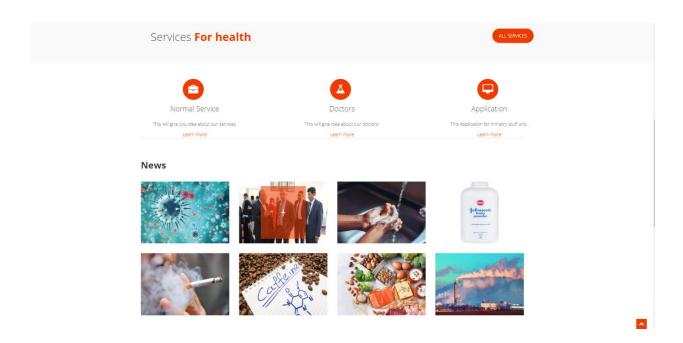
There was a huge different between my mock-ups and the real website because I found that my mock-up were a little bit not professional so my website turned out to be greater than my mock-up



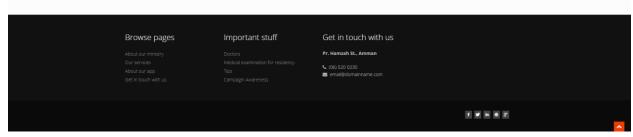


And here are some of the final pages you can see the different in the design:









# Technologies that I used:

The website is wrote in HTML language and is supported by CSS and Java Script to make it functional. I try my best to use PHP but it did not work.

Bootstrap was also used to make the website responsive and compatible with any screen even the phone ones.

#### Test Plan:

For the test plan I did a testing in a certain order:

- Content: I check that all the content asked for it shown in the website in every page and nothing is left.
- Sitemap: the website does not follow the site map exactly like it was supposed to do I
  made some changes.
- The mockups of the website are very different from the website itself but the final
  website was more good in design than the mockups because I find that the website that I
  take is so complicated.
- The website is published in two domains( <a href="http://www.lasamen.com/Home.html">http://www.lasamen.com/Home.html</a>) and (<a href="http://www.lasabosamen.epizy.com/Home.html">http://www.lasabosamen.epizy.com/Home.html</a>) and are ready to use.
- And the pages are linked together and lead to every page it is supposed to.
- The website is responsive in every type of devices.

## Server Hosting and Domain Name:

I used infinityfree.net to host my two websites on their servers and I used FileZilla to transfer my website to their servers and make it accessible from the domain name I bought from GoDaddy.com also I got from infinityfree.net a free subdomain and linked with the server and the domain names

## DNS Explanation and domain names:

To understand how the website is working you should understand what DNS is and what the purpose from it when making a website. The Domain Name System (DNS) is the phonebook of the Internet. Humans access information online through domain names, like nytimes.com or

espn.com. Web browsers interact through Internet Protocol (IP) addresses. DNS translates domain names to IP addresses so browsers can load Internet resources. Each device connected to the Internet has a unique IP address which other machines use to find the device. DNS servers eliminate the need for humans to memorize IP addresses such as 192.168.1.1 (in IPv4), or more complex newer alphanumeric IP addresses such as 2400:cb00:2048:1::c629:d7a2 (in IPv6).

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## Types of DNS:

There are four types of DNS

- 1. Recursive resolvers
- 2. Root name servers
- 3. TLD name servers
- 4. Authoritative name servers

## How does a website work?

A website is simply a collection of web pages of codes – codes that describes the layout, format and content on a page. The web server is an internet-connected computer that receives the request for a web page sent by your browser. The browser connects your computer to the server through an IP address.

#### Front-End and Back-End:

Having a functional website requires both front and back ends, the front-end part you can write with HTML to give your website the look it should have and how to display it for the costumer,

And when you want your website to do a specific command like sending an email or giving warnings, you will need the back-end part for that, the back-end is written in JavaScript mainly and PHP so you can make your website useful like having a (sign in) function or sending emails for support.

# Creating Tool or HTML?

There are many website creating tools to use out there most of them are free and easy to use, but why should we write our own code for a website and not to use them? The answer is easy and it is accessibility, making a website by writing in HTML has no limits.

When you see a website created with a web tool you will see how simple is it and the user would have a good experience with it but for the interface the user would prefer a written website using HTML because as I said you can make shape it like you want with no limite.

#### What does the user want?

If you were assigned to make a website, you must ask the client what the purpose of the website IN my case the NGO asked me to make a website for the ministry of health to display the information about it and about the news in the health department in Jordan and a way to contact them in case of questions.

## The Progress of Making a Website:

- 1- Gathering Information: Purpose, Main Goals, and Target Audience.
- 2-Planning: Sitemap and Wireframe Creation.
- 3-Design: Page Layouts, Review, and Approval Cycle.
- 4-Content Writing and Assembly.
- 5-Coding.
- 6-Testing, Review, and Launch.
- 7-Maintenance: Opinion Monitoring and Regular Updating

# **Search Engines:**

Your website will be available on the internet when you link it to a server but you will need to write the URL to get to it and that could work if you want to see your website or share it with other people by the URL, but if your website is for a company and you want people to know your brand you need to share your website on search engines like Google or Bing, and by doing that you will get more steps to do it.

But for your website to be more famous by show on the top pages in browsers you need to optimize your website with simple tags to make them relevant when people search for them.

## Tools and Techniques:

You can use costume website making tools to make your website, but if you want to build a website from scratch you would need to add some CSS, JavaScript and Bootstrap to make it look beautiful in design and functionality by using them it gives you a huge capability to add anything to your website.

## What have I changed in the website?

As you can see from the screenshots above I changed a lot between the mockups and the final website in design.

## Why we should use the CSS and Bootstrap?

We use CSS to give the website the look and design that we want, from shadows to adjusting positions, and I used it in every part on my website because without the CSS my website would only be text with photos that the user won't see it good.

For the Bootstrap is used to make the website responsive in any monitor that you put it on, and I used it in my website so the user can check it out on their smartphones, laptops and PC's.

## What did I do wrong?

- While making the mockups for the website I didn't do a great job because I don't
  understand anything from the HTML and how to deal with it but after I understand it I
  make new website but not from the same mockups.
- I had really bad situations to decide which website should I do but after I look at the big picture I start it.
- I had a hard time look for information about the ministry

# What did I do right?

After fixing a lot of mistakes I start to focus on layout to be more beautiful and I took extra courses on the internet to improve myself, also I tried almost every single exercises from internet so that help me to look at my website in different way.

## What is quality assurance?

**Quality Assurance (QA)** is defined as an activity to ensure that an organization is providing the best possible product or service to customers. QA focuses on improving the processes to deliver Quality Products to the customer. An organization has to ensure, that processes are efficient and effective as per the quality standards defined for software products. Quality Assurance is popularly known as QA Testing

## How to do quality assurance: complete process

Quality assurance has a defined cycle called PDCA cycle or Deming cycle. The phases of this cycle are:

- Plan
- Do
- Check
- Act



- Plan Organization should plan and establish the process related objectives and determine the processes that are required to deliver a high-Quality end product.
- Do Development and testing of Processes and also "do" changes in the processes
- Check Monitoring of processes, modify the processes, and check whether it meets the predetermined objectives
- Act Implement actions that are necessary to achieve improvements in the processes