This will be a guide on how to create a simple website in html using a raspberry PI. You can find similar guides online, but there are notes that I took during my time at the GenCyber camp, which the lessons where taught at the GenCyber Summer 2018 Program. I am updating it to work with a raspberry pi. Using my notes from the official class on it as a base, we will be able to work on and be able to run a simple website from our raspberry PI.

If you have Raspberry Pi 3 Model B+, your final product should look like this:

As you can see by looking at it, I have connected it to the internet router, and I have also connected to my main computer, and because of that, I was able to access the website without having to put in an IP Address. I will be mentioning how you can get yours, but just know to the sake of this report that I was able to access the cite directly.
The Before you do anything else in regard to the process of making and editing your own webpage via Raspberry PI, you need to remember that you MUST make sure the lines of code are exact. Misspelling words or forgetting to use a comma or a semi-colon could be the difference between your code working as indented or refusing to active on the first line. For instance, if you forget to use a < or >, you could forget to close the line of code that signals the beginning of your header or body of the webpage.

Raspberry PI’s systems need to be edited with your computer, since the raspberry Pi itself doesn’t come with a keyboard, there are a couple of ways to do this. Depending on your computer, you might need to install the official Raspberry editorial zip files online. Once installed, make sure you find the location that you installed your Raspberry PI, you can access it via the console or the computer if you have connected it directly. The console should look like this:

![Console screen](image)

By doing that line of code from above, we are creating a directory in our raspberry PI. It is this directory that we will be using to create our website. There are a number of methods, but once you have found one that you want to use, you can use this code to achieve a simple website!
Assuming that you are trying to connect to your server on a modern computer, you will need to make sure that your code can be detected by the html5. Many cites will tell you that you should put <!DOCTYPE html> at the top of your code. While this isn’t what I used, I will be using the common method.

First, we need to create the outline of the code, which we do by typing <html> at the beginning of our code. This creates the beginning of our code, and we will follow it up by typing <head> on the next line. On the next line, we need to create the title of the website, so we put down <title>. On the next following, we can set whatever we want the tile of our website to be, so you can indent the line, and put whatever you want the title of the website to be.

If you want to follow a cookie cutter format on a basic website, the standard is to put Hello World!

Once you have set up your title code, you will need to close it with a </title> on the same line, followed by a </head> on the next line to finish up the head section of your website code. At this point, your code should look like this:

```html
<!DOCTYPE html>
<html>
<head>
<title>Hello World!</title>
</head>
<body>
<h1>Hello World!</h1>
</body>
</html>
```

Continuing on, we will put <body> on the next line to start creating the body or main part of the website. While the head will tell the user what the name of the website is, it will be the body that is what the user will interact with. The next lines that we code before we close the code for the body will tell the website what it should display/do with the user. We will edit it in a bit, but for now feel free to experiment with what you would like to do with it. I would recommend putting a <p> so you can put some describing words on the website.

Once you have put what line of code you want the user to see, end the next line of code with a </body> to end the code. The next line of code should conclude with </html> to finally end of the code. Make sure to save the code.

To clarify, your code should look something like this:

```html
<!DOCTYPE html>
<html>
<head>
<title>Hello World!</title>
</head>
<body>
<h1>Hello World!</h1>
</body>
</html>
```
Then you should find the IP address that your raspberry PI is giving off and type it into the website bar on your search engine. You should be able to connect to the page and witness what you coded. This is how you connect to your website.

If you want to continue on improving your website, you could do a couple of modifications to your code. Once again, use Nano index.html to reopen your website, and start thinking about possible modifications that you would like to make. While there are multiple that you can make, I will demonstrate how to implement a form into the website. This is done to be able to ask questions to the user, or even be able to redirect people to other sites.

Good luck with your coding and programming adventure!