HTML 5

HTML is the **markup language** used for Web pages. HTML is the first thing we need to learn when we want to go into Web Development.

- HTML stands for **Hyper Text Markup Language**
- HTML describes the **structure** of a Web page
- HTML consists of a series of **elements**
- HTML elements tell the browser **how to display the content**

Editor

We will be using Notepad++ as our editor.

Notepad++

Notepad++
https://notepad-plus-plus.org/downloads/
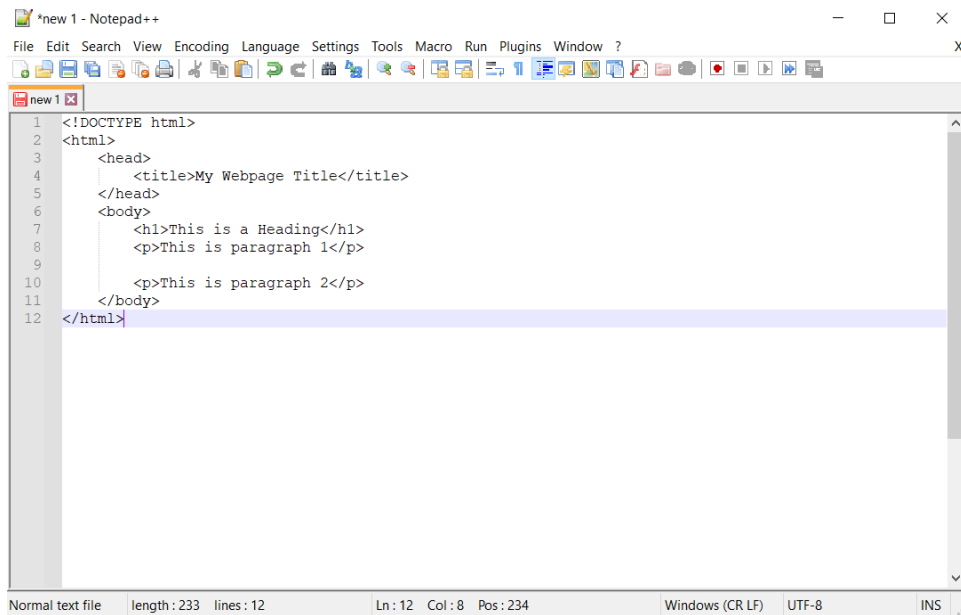
Go to download

Notepad++

https://notepad-plus-plus.org ▾

What is **Notepad++**. **Notepad++** is a free (as in "fr
code editor and Notepad replacement that supp
Windows environment, its use is governed by GN
editing component Scintilla, **Notepad++** is writter

Downloads

Downloads - Notepad++

1. *Create a folder and name it WebClass*
2. *Download and install Notepad++*
3. *Open Notepad++*
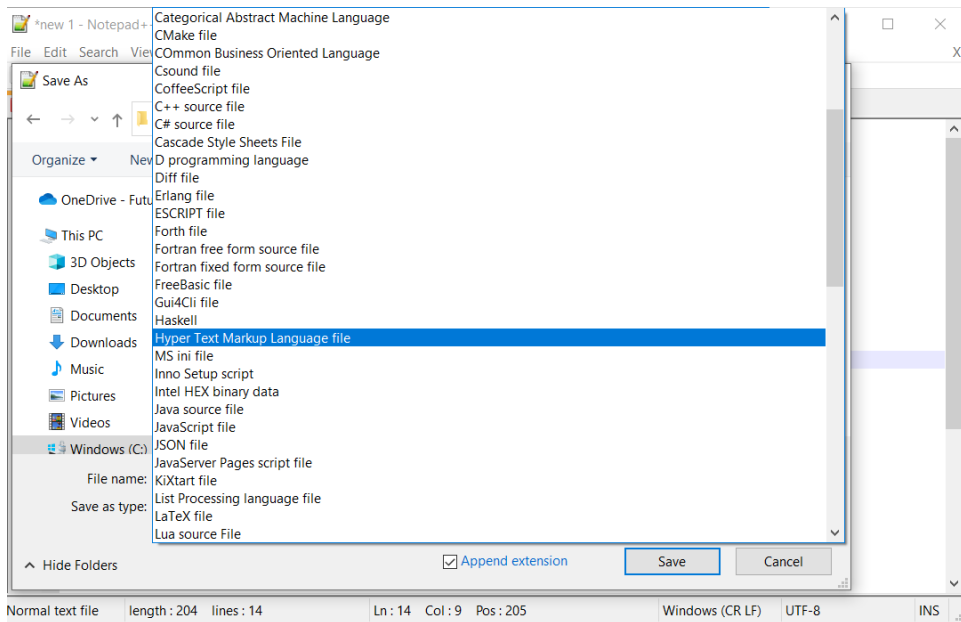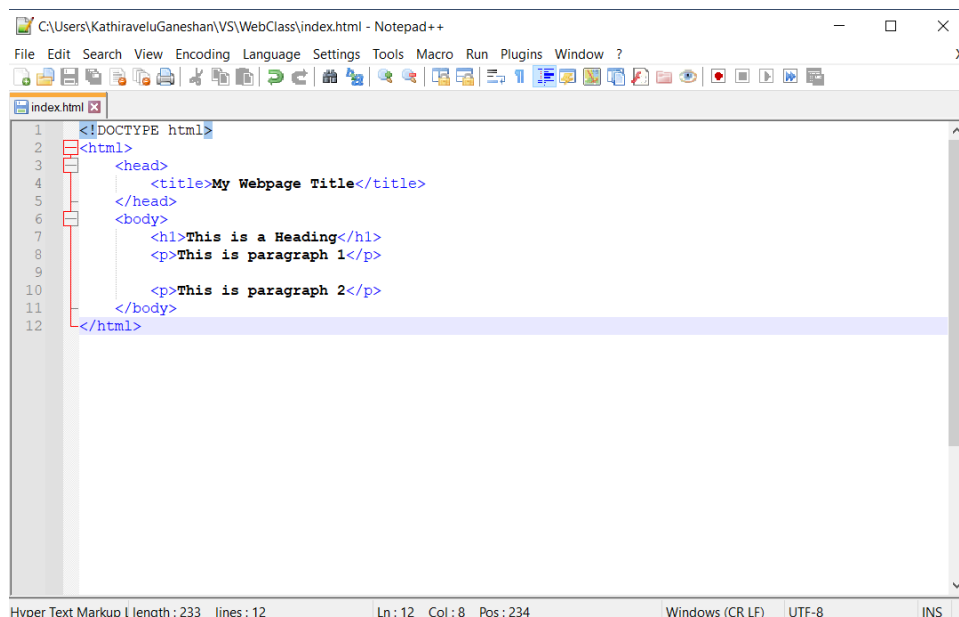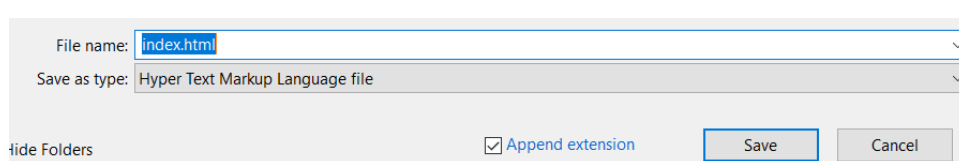4. *Type the following lines into Notepad++*

5. Save the file as *index.html* in the *WebClass* folder. Make sure you select the right file type (*Hyper Text Markup Language file*) as shown below. And note that Notepad++ has so many options for file types.

C:\Users\KathiraveluGaneshan\VS\WebClass\index.html - Notepad++

File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?

index.html

```
1    <!DOCTYPE html>
2    <html>
3        <head>
4            <title>My Webpage Title</title>
5        </head>
6        <body>
7            <h1>This is a Heading</h1>
8            <p>This is paragraph 1</p>
9
10           <p>This is paragraph 2</p>
11       </body>
12   </html>
```
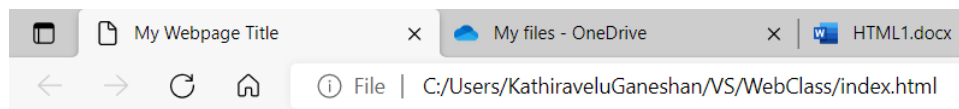
Hyper Text Markup L length : 233   lines : 12   Ln : 12   Col : 8   Pos : 234   Windows (CR LF)   UTF-8   INS

6. Open the WebClass folder and double click index.html

My Webpage Title   ×   My files - OneDrive   ×   HTML1.docx

← → C ⌂   ⓘ File | C:/Users/KathiraveluGaneshan/VS/WebClass/index.html

This is a Heading

This is paragraph 1.

This is paragraph 2.

Let us look at what all these lines mean.

```
<!DOCTYPE html>
<html>
    <head>
        <title>My Webpage Title</title>
    </head>
    <body>
        <h1>This is a Heading</h1>
        <p>This is paragraph 1</p>

        <p>This is paragraph 2</p>
    </body>
</html>
```

- <!DOCTYPE html> is used to declare this document as an **HTML5 document**
- <html> is the **root element** of the HTML page.
- <head> is the **element** that contains meta information about the HTML page.
- <title> is the **element** used to specify the title for the HTML page. This is the Title shown in the browser's title bar or in the page's tab.
- <body> is the **element** used to define the document's body. This is the container for all the visible contents, such as headings, paragraphs, hyperlinks, images, tables, and lists.
- <h1> is the **element** used to define a large heading. Other options are h2, h3, h4, h5 and h6. h1 is the largest.
- <p> is the **element** used to define a paragraph.

HTML Elements

An HTML element is defined by a start tag, some content, and an end tag.

For example, in <h1>This is a Heading</h1>, <h1> is the **start tag**, </h1> is the **end tag** and "This is a Heading" is the **content**.

Note: The <br> tag defines a line break, and is an **empty element** without a closing tag.

HTML Page Structure

<html>

    <head>
        <title>My Webpage Title</title>
    </head>

```html
<body>

<h1>This is a Heading</h1>

<p>This is paragraph 1</p>

<p>This is paragraph 2</p>

</body>


</html>
```

HTML Documents

All HTML documents must start with a document type declaration: <!DOCTYPE html>.

The HTML document itself begins with the <html> (start tag) and ends with </html> (end tag).

The visible part of the HTML document is between the <body> (start tag) and </body> (end tag).
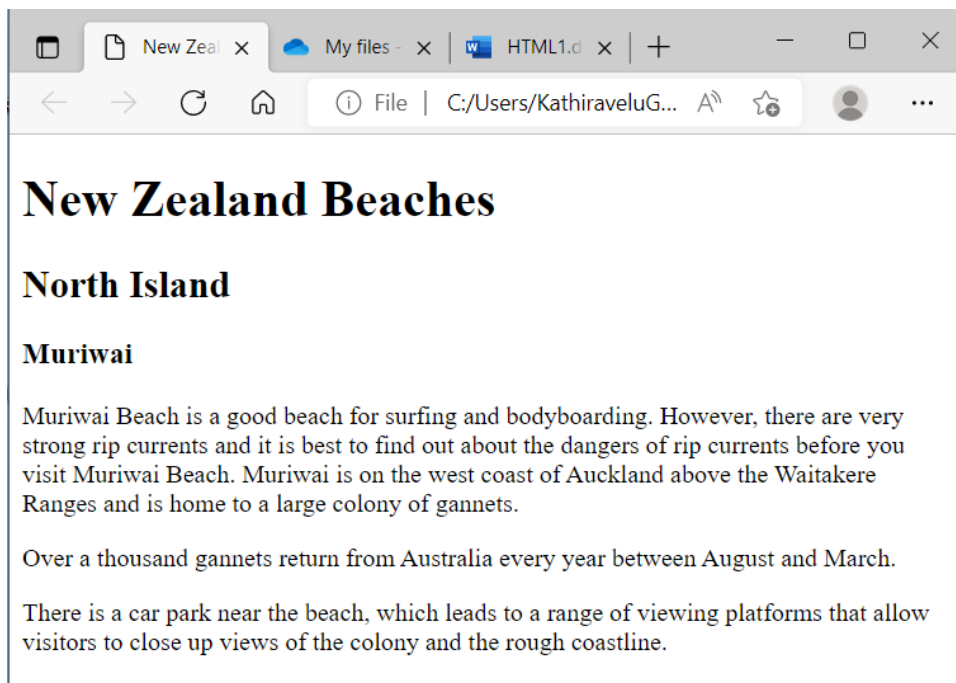

Let us create our first website.

7. *Open the index.html file in Notepad++ and edit as shown below.*

File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?

index.html

```
 1    <!DOCTYPE html>
 2    <html>
 3        <head>
 4            <title>New Zealand Beaches Website</title>
 5        </head>
 6        <body>
 7            <h1>New Zealand Beaches</h1>
 8            <h2>North Island</h2>
 9            <h3>Muriwai</h3>
10
11            <p>
12                Muriwai Beach is a good beach for surfing and bodyboarding.
13                However, there are very strong rip currents and it is best to
14                find out about the dangers of rip currents before you visit
15                Muriwai Beach. Muriwai is on the west coast of Auckland
16                above the Waitakere Ranges and is home to a large colony
17                of gannets.
18            </p>
19
20            <p>
21                Over a thousand gannets return from Australia every year
22                between August and March.
23            </p>
24
25
26            <p>
27                There is a car park near the beach, which leads
28                to a range of viewing platforms that allow visitors
29                to close up views of the colony and the rough coastline.
30            </p>
31        </body>
32    </html>
33
34
35
36
```

Hyper Text Markup I length : 891   lines : 36   Ln : 16   Col : 63   Pos : 527   Windows (CR LF)   UTF-8   INS

8. Open the *WebClass* folder and double click *index.html*

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File | C:/Users/KathiraveluG...

New Zealand Beaches

North Island

Muriwai

Muriwai Beach is a good beach for surfing and bodyboarding. However, there are very strong rip currents and it is best to find out about the dangers of rip currents before you visit Muriwai Beach. Muriwai is on the west coast of Auckland above the Waitakere Ranges and is home to a large colony of gannets.

Over a thousand gannets return from Australia every year between August and March.

There is a car park near the beach, which leads to a range of viewing platforms that allow visitors to close up views of the colony and the rough coastline.

HTML Attributes

HTML **attributes** provide additional information about HTML elements.

- All HTML elements can have **attributes**
- Attributes are always **specified** in the start tag
- Attributes usually come in **name/value pairs** like: name="value"
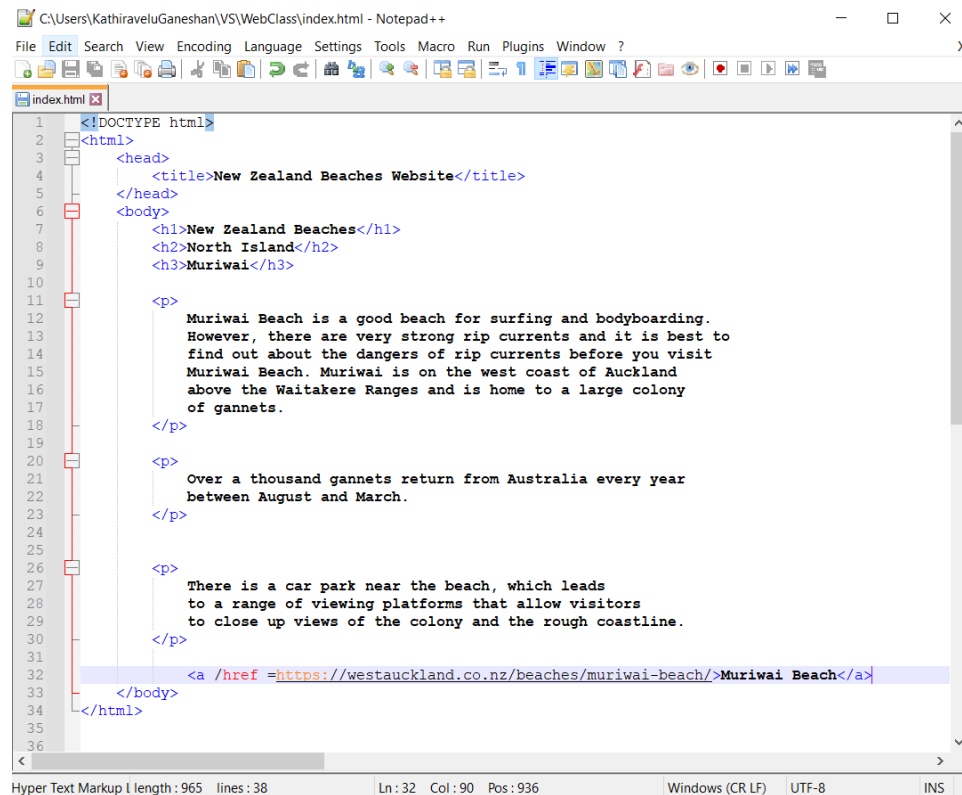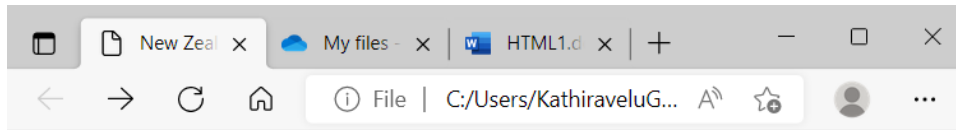
href Attribute

The **<a>** tag defines a **hyperlink**. The **href** attribute specifies the URL of the page the link refers to.

9. Open the *index.html* file in Notepad++ and add

<a /href = "https://westauckland.co.nz/beaches/muriwai-beach"/>Muriwai Beach

as shown below.

10. Open the *WebClass* folder and double click *index.html* or refesh your website if it is already open.

New Zealand Beaches
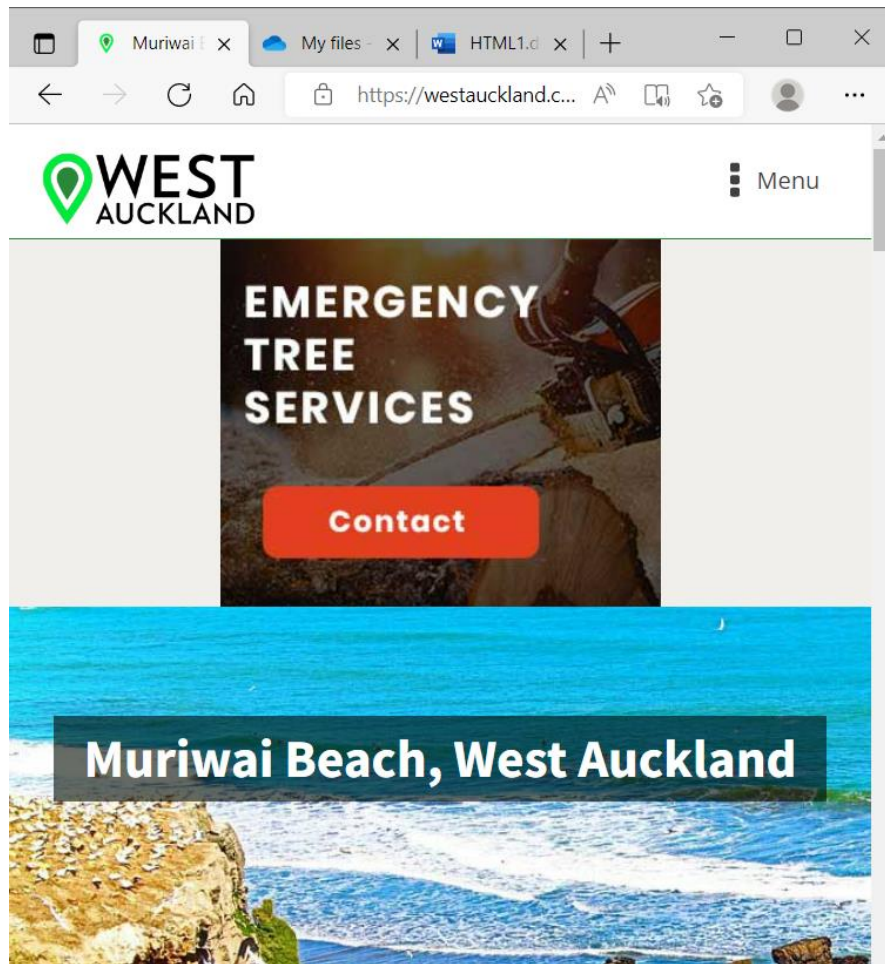
North Island

Muriwai

Muriwai Beach is a good beach for surfing and bodyboarding. However, there are very strong rip currents and it is best to find out about the dangers of rip currents before you visit Muriwai Beach. Muriwai is on the west coast of Auckland above the Waitakere Ranges and is home to a large colony of gannets.

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There is a car park near the beach, which leads to a range of viewing platforms that allow visitors to close up views of the colony and the rough coastline.

[Muriwai Beach](#)

11. *Click on the link "Muriwai Beach" and it will take you to the Muriwai Beach website.*

src, width and **height** Attributes

The **<img>** tag is used to embed an image in an HTML page. The **src** attribute specifies the path to the image to be displayed.

12. Copy a *.jpg* file into the *WebClass* folder and *rename* the .jpg file *myimage.jpg*.
13. Add the line <img src="myimage.jpg" width="200" height="250"> to the index.html file as shown below.

```
C:\Users\KathiraveluGaneshan\VS\WebClass\index.html - Notepad++                    —    □    ✕

File  Edit  Search  View  Encoding  Language  Settings  Tools  Macro  Run  Plugins  Window  ?                X

  1    <!DOCTYPE html>
  2    <html>
  3        <head>
  4            <title>New Zealand Beaches Website</title>
  5        </head>
  6        <body>
  7            <h1>New Zealand Beaches</h1>
  8            <h2>North Island</h2>
  9            <h3>Muriwai</h3>
 10
 11            <img src="myimage.jpg" width="200" height="250">
 12
 13            <p>
 14                Muriwai Beach is a good beach for surfing and bodyboarding.
 15                However, there are very strong rip currents and it is best to
 16                find out about the dangers of rip currents before you visit
 17                Muriwai Beach. Muriwai is on the west coast of Auckland
 18                above the Waitakere Ranges and is home to a large colony
 19                of gannets.
 20            </p>
 21
 22            <p>
 23                Over a thousand gannets return from Australia every year
 24                between August and March.
 25            </p>
 26
 27
 28            <p>
 29                There is a car park near the beach, which leads
 30                to a range of viewing platforms that allow visitors
 31                to close up views of the colony and the rough coastline.
 32            </p>
 33
 34            <a /href = "https://westauckland.co.nz/beaches/muriwai-beach"/>Muriwai Beach</a>
 35        </body>
 36    </html>
```

14. Reload the web page.

New Zealand Beaches

North Island

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Muriwai Beach