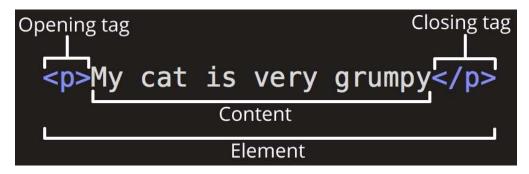


■ Internet Technologies

HTML

- HTML (HyperText Markup Language)
- network එකක් ඇතුලෙ තියෙන document & resources එකිනෙක link කරන්න හදල තියෙන language එකක්.
- markup language එකක්, programming language එකක් නෙවේ,
- web page එකක් structure කරන්න use කරන්නෙ
- HTML වලින් ලියපුවා Read කරන්නෙ browser එකෙන්.

Anatomy of HTML element



- HTML defines the structure and content of the page using Elements.
- HTML elements are created using tags.
- ⇔ opening tag , <> closing tag
- **Element** එකක් හැදෙන්නෙ opening tag + ඇතුලෙ content එක + closing tag

tags

tag is used to create a paragraph of text.
<h1> tag is used to create a heading. (6 different heading tags: <h1>
to <h6>) </h1>

b> bold text

 tag is used to indicate that a text is important (bold text)

The tag is used to make it semantically(අර්-ථමය වශාමයන්) important, while

ts simply styling the text bold.

```
<i>make text italic </i>
<em> make text emphasize (අවධාරණය කරන්න) (similer to italic) </em>
<u> make text underline</u>
```

Nested elements

```
<b> HTML</b> is fun  (element athule thiyena element)
```

HTML page

combination of multiple nested elements.

<!DOCTYPE html>

- HTML document එකක මුලින් ලියන declaration එකක් (tag එකක් නෙවෙ).
- Fully standard mode එක follow කරනව නම් මේක දානො.
- browser එකට දෙන information එකක්, document type එක html වලින් තියෙන්නෙ කියල.

HTML Attribute

Attribute My cat is very grumpy

- HTML element එකක open syntax එක ඇතුලෙ තියෙන key value pair එකක්.

ඒවගෙන් Element එක ඇතුලෙ තියෙන දේවල් වෙනස් කරන්න පුළුවන් අවශා විදියට.

(contain additional information about the element.)

hyperlinks

 Click here <a>

Images

 (no closing tag)

- alt → used to specify text, which will display if the image fails to load (image description)
- width → image width (ex: 100px) (or can give prcentages ex: 50%)
- height → " "

Empty Elements

<hr> horizontal line (break between paragraph elements.)

 element creates a line break in a paragraph (rendered in one line)

Elements

- block-level elements
 - visible block on a page and appear on a new line.
 - ex: paragraph element
 - A block-level element is displayed from a new line
- inline elements
 - contained <u>within block-level elements</u>
 - represent only small parts of the page.
 - ex: <a>, ,
 - Inline elements should not contain block-level elements.

HTML elements reference - HTML: HyperText Markup Language | MDN

HTML_Elements

Main Root

<html>

Document metadata

Give informations about the web site to the search engines

<head> </head>

machine-readable information (metadata) ලියන්නෙ මේකෙ ඇතුලෙ (Title, Scripts, Style sheets)

<base>

<base href = "localhost"> ← අපෙ address එක දෙනො.(localhost or web
host) (අතාවෙශා නෑ)

• <title> </title>

webpage එකෙ title එක

<link>

<link href="favicon.png" rel="icon"> ← favicon එක

<style>

Contains style information for a document, or part of a document.

<meta>

<meta charset="UTF-8"> ← අමතර Characters emojis use කරන්න පුළුවන්

<meta name = "keywords" content="keyword1,keyword2"> ← website keywords දාන්න

<meta name = "description" content= "short description goes here"> ← website description (search result වල පෙන්නන්නෙ)

<meta name="author" content="miusoft"> ← website authorയെ name එක

<meta name="owner" content="kasun miu"> ← website owner⊚ග name එක

<meta name="robots" content="index"> ← index කරන්න කියල search engine එකෙ botලට කියනො..

k rel="canonical" href="image.jpg"> ← botලට කියනො search result වල පෙන්නන්න එපා කියල

<meta name="theme-color" content="green"> ← mobile view එකේදි title bar color එක (mobile එකකින් බලන්න ඕන darkmode off)

<meta name="viewport" content="width=device-width initial-scale=1
minimum-scale=4 maximum-scale=5">

minimum-scale=4 maximum-scale=5 ← minimum & maximum scales manage කරන්න

width=device-width ← width එක device එකෙ width එකට set කරනා.

initial-scale=1 ← scale එක start එකේදි තියෙන ගාන user-scalable=no ← scale කරන්න දෙන්නෙ නෑ

<meta http-equiv="refresh" content="1"> ← 1s වලට පාරක් page එක refresh කර⊙නා.

Sectioning root

(start of the visible elements)

<body>

Content sectioning - semantic elements

document content එක logical pieces වලට වෙන් කරනො.

- <main>
- <body> main content එක represent කරයි.

<address>

```
Contact the author of this page:
<address>
    <a href="mailto:jim@rock.com">jim@rock.com</a><br>
    <a href="tel:+13115552368">(311) 555-2368</a>
</address>
```

Contact the author of this page:

jim@rock.com (311) 555-2368

<article>

Weather forecast for Seattle 03 March 2018 Rain. 04 March 2018 Periods of rain. 05 March 2018 Heavy rain.

<aside>

Several species of salamander inhabit the temperate rainforest of the Pacific Northwest, including the Ensatina, the Northwestern Salamander and the Rough-skinned Newt.

The Roughskinned Newt defends itself with a deadly neurotoxin.

Most calamanders are nocturnal and

<footer>

```
<footer>
    < 2018 Gandalf</p>
</footer>
© 2018 Gandalf
```

<header>



Beagles

08.12.2014

I love beagles so much! Like, really, a lot. They're adorable and their ears are

- <h1> to <h6>
- HTML Section Heading elements
- <nav>
- Navigation Section element

Bikes > BMX > Jump Bike 3000

- < <section>
 - Section element

Choosing an Apple

Introduction

This document provides a guide to help with the important task of choosing the correct Apple.

Criteria

There are many different criteria to be considered when choosing an

Text content

- <blockquote>
 - Block Quotation element

"Words can be like Xrays, if you use them properly—they'll go through anything. You read and you're pierced."

—Aldous Huxley, Brave New World

```
• , , <</pre>
```

```
 - Unordered List element
 - Ordered List element
- List Item element
```

```
    Mix flour, baking powder, sugar, and salt.
    In another bowl, mix eggs, milk, and oil.
    Stir both mixtures together.
    Ii>Fill muffin tray 3/4 full.
    Bake for 20 minutes.
```

- o Milk
- Cheese
 - Blue cheese
 - Feta
- Mix flour, baking powder, sugar, and salt.
- In another bowl, mix eggs, milk, and oil.
- 3. Stir both mixtures together.
- 4. Fill muffin tray 3/4 full.
- 5. Bake for 20 minutes.

<dl>, <dt>, <dd>

```
<dl> - Description List element
<dt> - Description Term element
<dd> - Description Details element
```

Cryptids of Cornwall:

Beast of Bodmin

A large feline inhabiting Bodmin Moor.

Morgawr

A sea serpent.

Owlman

A giant owl-like creature.

- Paragraph element

Some species live in houses where they hunt insects attracted by artificial light.

Some species live in houses where they hunt insects attracted by artificial light.

<figure>, <figcaption>

<figure> - image එකකට caption එකක් දාල explain කරන්න <figcaption> - Figure Caption element

```
<figure>
    <img src="/media/cc0-images/elephant-660-480.jpg"
        alt="Elephant at sunset">
        <figcaption>An elephant at sunset</figcaption>
</figure>
```



• <div>

- Content Division element section එකක් ඇතුලෙ තියෙන දේවල් වෙන් කරන්න.



<hr>

- Horizontal Rule

```
§1: The first rule of Fight Club is: You do not talk about Fight Club.
<hr>
§2: The second rule of Fight Club is: Always bring cupcakes.
```

§1: The first rule of Fight Club is: You do not talk about Fight Club.

____§ ____

§2: The second rule of Fight Club is: Always bring cupcakes.

<</pre>

- Preformatted Text element
- ගහන විදියටම පෙන්නනො, format කරන්නෙ නැතුව.(වෙන style apply වෙන්නෙ නෑ)

```
L TE
A A
C V
R A
DOU
LOU
REUSE
- Apollinaire
```

```
L TE
A A
C V
R A
DOU
LOU
REUSE
- Apollinaire
```

<menu>

- Menu element

NASA's Webb Delivers Deepest
Infrared Image of Universe Yet

Save for later Share this news

Inline Text Semantics

- <a>>
 - Anchor element

```
You can reach Michael at:

    <a href="https://example.com">Website</a>
    <a href="tel:+123456789">Phone</a>
```

You can reach Michael at:

- Website
- Phone

HTML

- download<√a>
 - test.pdf file එක "My CV" නමින් download වෙනො
- <abbr>
 - Abbreviation element
 - title ekata dena text eka pennanoo mouse pointer eka tibbama

```
<abbr title="HyperText Markup Language">HTML</abbr>
```

,

 - Bring Attention To element (kiyawana kenata special
attention ekaka ganna)

 - Strong Importance element, strongly kiyanawa wadagath
kiyala

(2kama render wenne bold text ekak widiyata)

```
... the most important rule, the rule you can
never forget, <b>no matter</b> how much he cries, no
matter how much he begs: <strong>never feed him
after midnight</strong>.
```

... the most important rule, the rule you can never forget, **no matter** how much he cries, no matter how much he begs: **never feed him after midnight**.

• <bdi>

 Bidirectional text(eka eka pati walata liyana eewa, arabic wage) isolate karai.

World wrestling championships

- Evil: 1st place
- Franc: 2nd place
- rd place سما: 3
- الرجل ان
 4th place
- اسما 5th place

<bd><bd>>

- Bidirectional Text Override element
- Text direction eka change karai

```
This text will go left to right.
<bdo dir="rtl">This text will go right to left.
</bdo>
This text will go right to left.
<bdo dir="ltr">This text will go left to right.
</bdo>
```

This text will go left to right.

.tfel ot thgir og lliw txet sihT

This text will go right to left.

This text will go left to right.

>

- Line Break element
- Paragraph brak karanna use karai

```
O'er all the hilltops<br>
    Is quiet now,<br>
    In all the treetops<br>
    Hearest thou<br>
```

O'er all the hilltops Is quiet now, In all the treetops Hearest thou

<wbr>>

- Line Break Opportunity element
- Word break karanna use karanne
- Diga wachanayak type karaddi eeka breakdown wenna oona tana pennanna

(vertical side scrollbar ekak enne naa etakota)

```
Fernstraßen<wbr>bau<wbr>privat<wbr>finanzierung
br>gesetz
Fernstraßen&shy; bau&shy; privat&shy; finanzierungs&s
hy; gesetz
</div>
```

Fernstraßenbauprivatfinanzierungs gesetz

Fernstraßenbauprivatfinanzierungsgesetz

<cite>

- Citation element
- Uputa gattu thana daanna
- (attribute ekakut thiyeno)

It was a bright cold day in April, and the clocks were striking thirteen.

First sentence in <u>Nineteen</u>
<u>Eighty-Four</u> by George
Orwell (Part 1, Chapter 1).

<code>

- Inline Code element

The <code>push()</code> method adds one or more
elements to the end of an array and returns the new
length of the array.

The push() method adds one or more elements to the end of an array and returns the new length of the array.

<data>

- Data element
- machine-readable translation daanna (ex: product name ekai number ekai daaddi)

New Products:

- Mini Ketchup
- Jumbo Ketchup
- · Mega Jumbo Ketchup

• <dfn>

- Definition element

```
A <dfn id="def-validator">validator</dfn> is a program that checks for syntax errors in code or documents.
```

A *validator* is a program that checks for syntax errors in code or documents.

- Emphasis element
- stress level eka wadi wenna oona wachana walata daano (render wenne italic widiyata)

```
Get out of bed <em>now</em>!
We <em>had</em> to do something about it.
This is <em>not</em> a drill!
```

Get out of bed now!

We had to do something about it.

This is not a drill!

• <i>

- Idiomatic Text element

The term <i>bandwidth</i> describes the measure of how much information can pass through a data connection in a given amount of time.

The term bandwidth describes the measure of how much information can pass through a data connection in a given amount of time.

<kbd>

- Keyboard Input element
- Shortcut ekak wen kara penwai

```
Please press <kbd>Ctrl</kbd> + <kbd>Shift</kbd> + <kbd>Kbd>Shift</kbd> + <kbd>R</kbd> + <kbd>Kbd>R</kbd> + <kbd>Kbd>R</kbd>
```

Please press Ctrl + Shift + R to rerender an MDN page.

<mark>

- Mark Text element
- Mark / highlight karanna

```
Search results for "salamander":
<hr>
Several species of <mark>salamander</mark>
inhabit the temperate rainforest of the Pacific
Northwest.
```

Search results for "salamander":

Several species of salamander inhabit the temperate rainforest of the Pacific Northwest.

- Inline Quotation element
- Double quate athule enne

```
When Dave asks HAL to open the pod bay door, HAL answers:
<q</p>
cite="https://www.imdb.com/title/tt0062622/quotes/qt0396921">I'm sorry, Dave. I'm afraid I can't do that.
```

When Dave asks HAL to open the pod bay door, HAL answers: "I'm sorry, Dave. I'm afraid I can't do that."

<<p>rp>

Ruby Fallback Parenthesis element

kan ji 漢字

< <rt>

Ruby Text element

<ruby>

Ruby Annotation element

```
Ashita

<ruby>

明日 <rp>(</rp><rt>Ashita</rt><rp>)</rp>
```

<s>

- Strikethrough element
- Text eka madin irak adinna

```
<s>There will be a few tickets available at the box office tonight.
<0D OUT!</p>
```

There will be a few tickets available at the box office tonight.

SOLD OUT!

<samp>

- Sample Output element
- Represents sample (or quoted) output from a computer program

```
I was trying to boot my computer, but I got this hilarious message:
Keyboard not found <br>Press F1 to continue
```

I was trying to boot my computer, but I got this hilarious message:

Keyboard not found
Press F1 to continue

<small>

- side comment element
- represents side-comments and small print, like copyright and legal text, independent of its styled presentation.

```
MDN Web Docs is a learning platform for Web technologies and the software that powers the Web.

<hr>
<mall>The content is licensed under a Creative Commons Attribution-ShareAlike 2.5 Generic License.
```

MDN Web Docs is a learning platform for Web technologies and the software that powers the Web.

The content is licensed under a Creative Commons

Attribution-ShareAlike 2.5 Generic License.

</small>

- Content Span element
- It can be used to group elements for styling purposes

```
Add the <span class="ingredient">basil</span>,
<span class="ingredient">pine nuts</span> and <span
class="ingredient">garlic</span> to a blender and
blend into a paste.
```

Gradually add the olive oil while running the blender slowly.

Add the basil, pine nuts and garlic to a blender and blend into a paste.

Gradually add the olive oil while running the blender slowly.

<sub>

- Subscript element

C8H10N4O2

<sup>

- Superscript element

```
<var>a<sup>2</sup></var> + <var>b<sup>2</sup></var>
= <var>c<sup>2</sup></var>
```

$$a^2 + b^2 = c^2$$

<time>

- (Date) Time element

```
The Cure will be celebrating their 40th
anniversary on <time datetime="2018-07-07">July
7</time> in London's Hyde Park.
The concert starts at <time
datetime="20:00">20:00</time> and you'll be able to
enjoy the band for at least <time
datetime="PT2H30M">2h 30m</time>.
```

The Cure will be celebrating their 40th anniversary on **July 7** in London's Hyde Park.

The concert starts at 20:00 and you'll be able to enjoy the band for at least 2h 30m.

<u>>

- Unarticulated Annotation (Underline) element
- Waraddak tiye nm pennanna(spelling mistakes wage ewa)

You could use this element to highlight <u>speling</u> mistakes, so the writer can <u>corect</u> them.

You could use this element to highlight speling mistakes, so the writer can corect them.

< <var>

- Variable element

The volume of a box is $I \times w \times h$, where I represents the length, w the width and h the height of the box.

Image and multimedia

• , <map> , <area>

<imq> - Image Embed element

- Attributes
 - src → image source
 - alt → alternative text (image eka render nownot pennano)
 - height
 - weight
 - usemap → use karana map eke name eka

<map> - Image Map element

<area> - Image Map Area element

<map> , <area> tag walin click karanna puluwn area ekak hadano image eke

shape - map area eke shape eka

coords - shape eke x,y ඛණ්ඩ & circul ekak nm radius , rectangle ekak nm width,height

<audio>

- Embed Audio element

► 0:00 / 0:13 **→**

< <video>

- Video Embed element



- controls attribute eken browser eke play wenna oona player eka hadano
- Video , Audio AutoPlay wada naa modern browser wala (video wala muted daala autoplay wenna tiyanna puluwn)

<track>

- Embed Text Track element
- video / audio wala subtitle daanna use karano
- .vtt format eken subtitle file eka denna oona

embedded content

• <object>

- External Object element
- Pdf wage file daanan

```
<object type="application/pdf"
   data="/media/examples/In-CC0.pdf"
   width="250"
   height="200">
</object>
```



<iframe>

- Site ekak, yt video ekak embed karanna



```
<iframe width = "250"
src="https://www.youtube.com/embed/0FcZgbMA8zo"
title="YouTube video player" frameborder="0"
allow="accelerometer; autoplay; clipboard-write;
encrypted-media; gyroscope; picture-in-picture; web-share" allowfullscreen></iframe>
```



<source>

- Media or Image Source element
- Source eka daanna



• <picture >

- Picture element
- Orientation wenas weddi/ Screen width eka wenas weddi image eka change karanna puluwan



<embed>

- Embed External Content element
- Modern browser support nathi nisa wadak naa

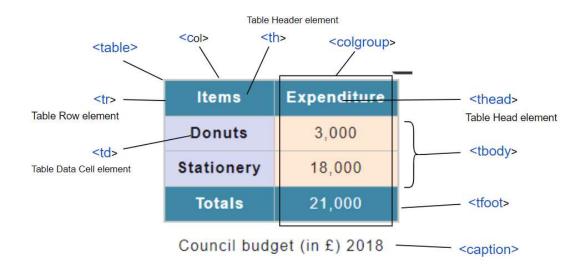
```
<embed type="video/webm"
    src="/media/cc0-videos/flower.mp4"
    width="250"
    height="200">
```



• <portal>

Experimental

Table content



```
Items
   Expenditure
  </thead>
 Donuts
   3,000
  Stationery
   18,000
  <tfoot>
  Totals
   21,000
  </tfoot>
```

Table element

• <caption>

Table Caption element

• <col>

Table Column element

<colgroup>

Table Column Group element

<thead>

Table Head element

•

Table Row element

•

Table Header element

Table Body element

• >

Table Data Cell element

<tfoot>

Table Foot element

Forms

<form>

Form element action="yawana location eka" method="post"

Enter your		
name:		
Enter your		
email:		
Subscribe!		

<button>

```
Button element

type="button" ← normal button

type="submit" ← Submit form

type="reset" ← reset form fields
```

<datalist>

HTML Data List element

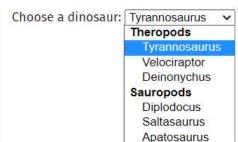
<select>

HTML Select element
 <select id="lang" multiple> ← multiple select karanna pulwn
multiple dammama

```
Choose a pet:
<label for="pet-select">Choose a pet:</label>
                                                                                 Dog
                                                                                 Dog
<select name="pets" id="pet-select">
                                                                                 Cat
    <option value="dog">Dog</option>
                                                                                 Hamster
    <option value="cat">Cat</option>
                                                                                 Parrot
    <option value="hamster">Hamster</option>
                                                                                 Spider
    <option value="parrot">Parrot</option>
<option value="spider">Spider</option>
                                                                                 Goldfish
    <option value="goldfish">Goldfish</option>
</select>
```

< <optgroup>

Option Group element



< <option>

HTML Option element t
<select> / <optgroup> / <datalist> ekak athule menu items daanna
use karai.

<fieldset>

Field Set element

Choose your favorite monster Kraken Sasquatch Mothman

<legend>

Field Set Legend element **f**Field set ekaka caption eka daanna.

<input>

Input (Form Input) element

<label>

Label element
required ← aniwaryen fill karanna oona
type="text"

• <meter>

HTML Meter element

• cprogress>

Progress Indicator element

```
<label for="file">File progress:</label>

cprogress id="file" max="100" value="70"> 70%
</progress>
```

• <output>

Output element

<textarea>

Textarea element

Tell us your story:

```
It was a dark and stormy night...
```