HTML

## Introduction

This document covers

Introduction

## Basics

### DOM

The DOM is a tree of objects that represent a web page. The objects the DOM can be accessed from and manipulated by JavaScript. While the traditional html, head and body tags are optional in HTML5 browsers will add them if you leave them out. The following shows a simple HTML5 document

<!DOCTYPE html>

<!-- The html element is optional in html5-->

<html lang=en>

    <head>

        <meta charset="utf-8">

        <title>Hello World</title>

        <!-- head hold information about the page-->

    </head>

    <body>

        <!-- The body holds the actual content-->

        <p>Terve Maailmalle</p>

    </body>

</html>

### CSS

CSS can be specified in three ways as this fragment shows

  <head>

        <meta charset="utf-8">

        <title>Hello World</title>

        <!-- 1. External Style Sheet-->

        <link rel="stylesheet" href="../mystyle.css">

        <!-- 2.  Embedded Style sheet -->

        <style>

            h1 { text-align: center; }

        </style>

    </head>

    <body>

        <!-- 3. Inline Style-->

        <h1>Suomi</h1>

        <p  style="color: blue;">Terve Maailmalle</p>

    </body>

### JavaScript

JavaScript can also be specified in three ways.

<html lang=en>

    <head>

        <meta charset="utf-8">

        <title>Hello World</title>

        <!-- 1. External Script-->

        <script src="../../js/examples.js"></script>

        <!-- 2.  Embedded Script -->

        <Script>

            addEventListener("load", function(ev) {

                // getElementById searches decendants

                console.log(document.getElementById("bd").nodeName);

            });

        </Script>

    </head>

    <body>

        <h1>Suomi</h1>

        <!-- 3. Inline -->

        <button

            onclick="document.getElementById('text').innerHTML = Date()" id="bd">

            Click Me</button>

        <p id="text"></p>

    </body>

</html>

### A decent Template

The following shows how we might put together a basic page that imports an external style sheet and an external java script file

<!DOCTYPE html>>

<html lang=en>

    <head>

        <meta charset="utf-8">

        <title>Hello World</title>

        <link rel="stylesheet" href="./style.css"/>

        <script src="./scripts.js"></script>

    </head>

    <body>

        <h1> Hello World</h1>

        <button onclick="external()">Click Me</button>

    </body>

</html>

## DOM

To a web browser each tag is a box. Boxes have content which can be other tags. There are two kinds of box - block boxes and inline boxes. Block level elements such as <div>,<p>,<table>,<list> have a line break before and after then. Inline elements such as <span>,<strong> can have multiple such element inline on a single row.

### Elements

#### Div

Div is a block level element meaning it has a line break before and after it. Such a block can represent navigation bar, banner or anything else that takes a chunk of the page

#### Span

A span is an inline element appearing as part of a paragraph