

<http://www.halvorsen.blog>



Create Web Pages

with HTML & CSS

Hans-Petter Halvorsen

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- Part 2:
 - Step by Step Example
- Deploy to Web Server
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<http://www.halvorsen.blog>



HTML & CSS

Introduction

Hans-Petter Halvorsen

Web Site Example

Presentation (Figures and Text) of your Software Product



http://localhost:1360/index.htm

Weather System

The Weather System ...



Documents

-  Software Development Plan
-  Software Requirements & Design

Documents available for download
(Hyperlinks)



WYSIWYG HTML Editors

- **Adobe Dreamweaver** (Monthly Payment)
- Kompozer (Free)
- Bluegriffon (Free)
- Sparkle (\$80), etc...

WYSIWYG – What You See Is What You Get
You dont need to know HTML syntax - Its just like using MS Word.

Other HTML Editors (not WYSIWYG)

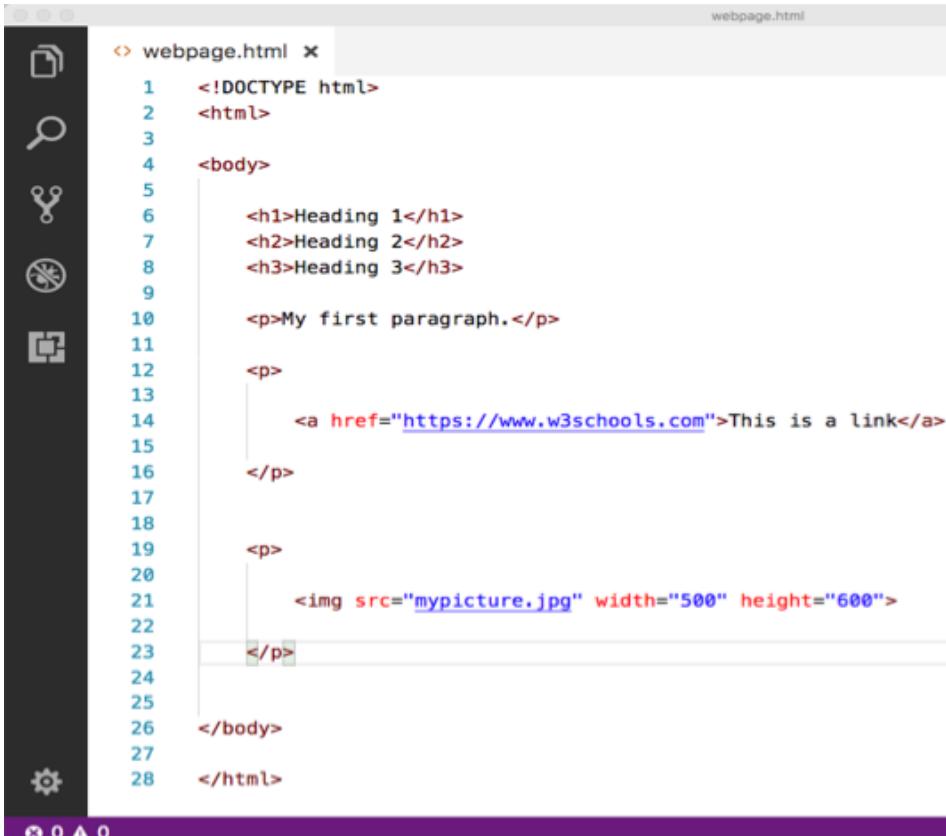
- **Visual Studio** (ASP.NET)
- **Visual Studio Code**
- CoffeeCup (\$69, Free Trial)
- Coda (\$99)
- NotePad (-> any textbased editor)

Only possible to change the HTML source code and then select “Preview” in order to see how it looks like in a Web Browser.
You need to know HTML syntax

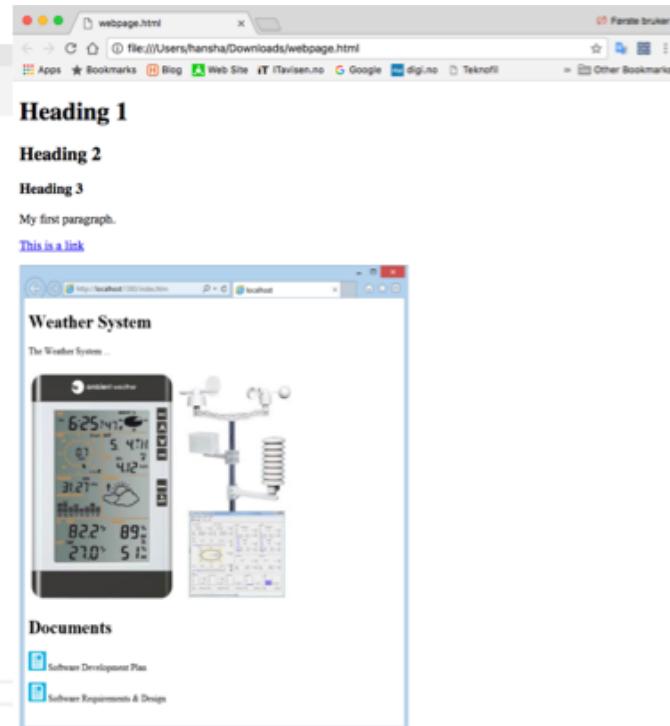
Create a Web Site with Visual Studio

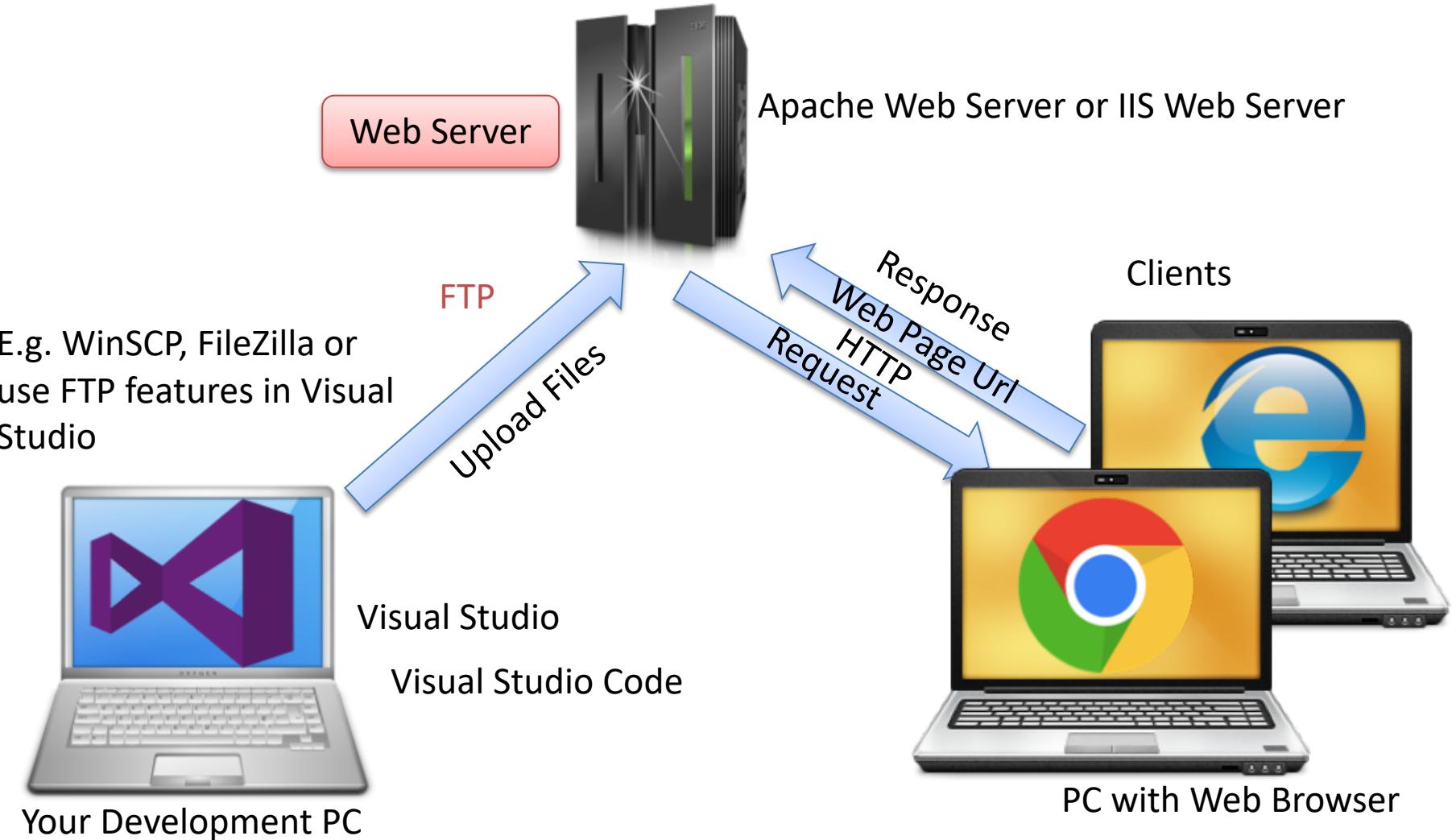
- Visual Studio is not well suited for creating Static HTML Web Pages.
- Visual Studio has poor WYSIWYG Editing possibilities
- Visual Studio is more optimized for creating Dynamic Web Pages and creating ASP.NET Web Pages in special
- For HTML pages Visual Studio Code may be a better choice.

Simple Web Page in Visual Studio Code

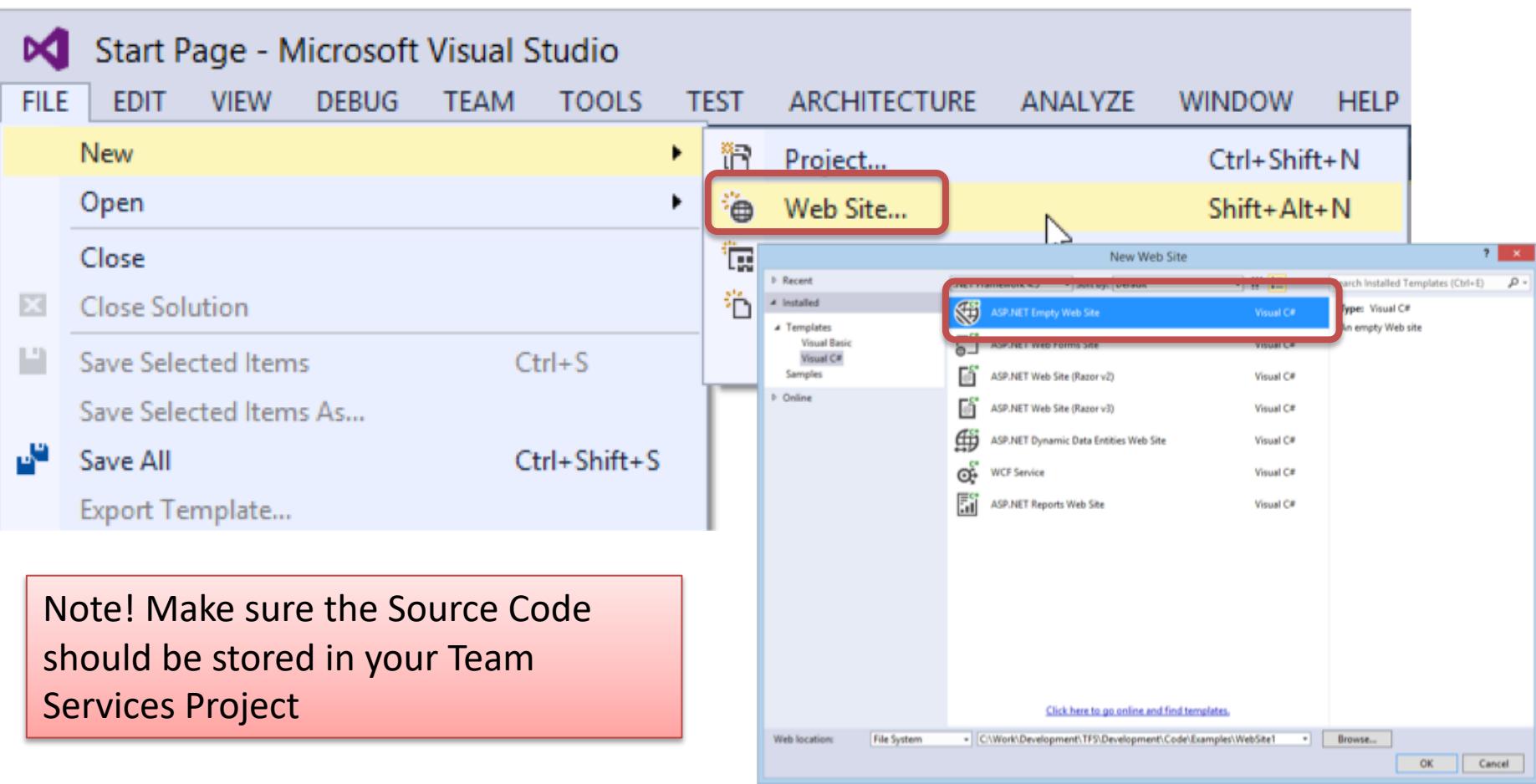


```
> webpage.html x
1  <!DOCTYPE html>
2  <html>
3
4  <body>
5
6      <h1>Heading 1</h1>
7      <h2>Heading 2</h2>
8      <h3>Heading 3</h3>
9
10     <p>My first paragraph.</p>
11
12     <p>
13
14         <a href="https://www.w3schools.com">This is a link</a>
15
16     </p>
17
18     <p>
19
20         
21
22
23     </p>
24
25
26 </body>
27
28 </html>
```

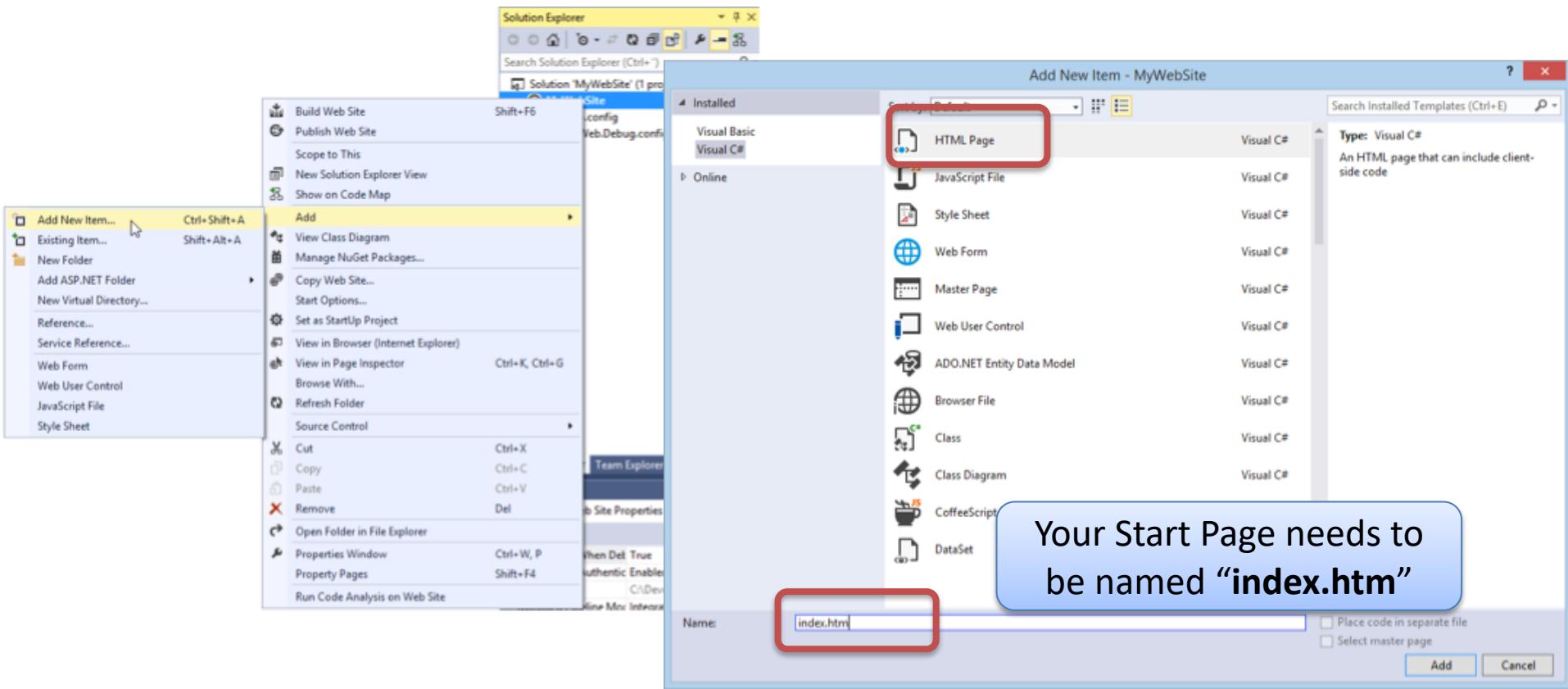




Create a Web Site with Visual Studio



Create a Web Site with Visual Studio

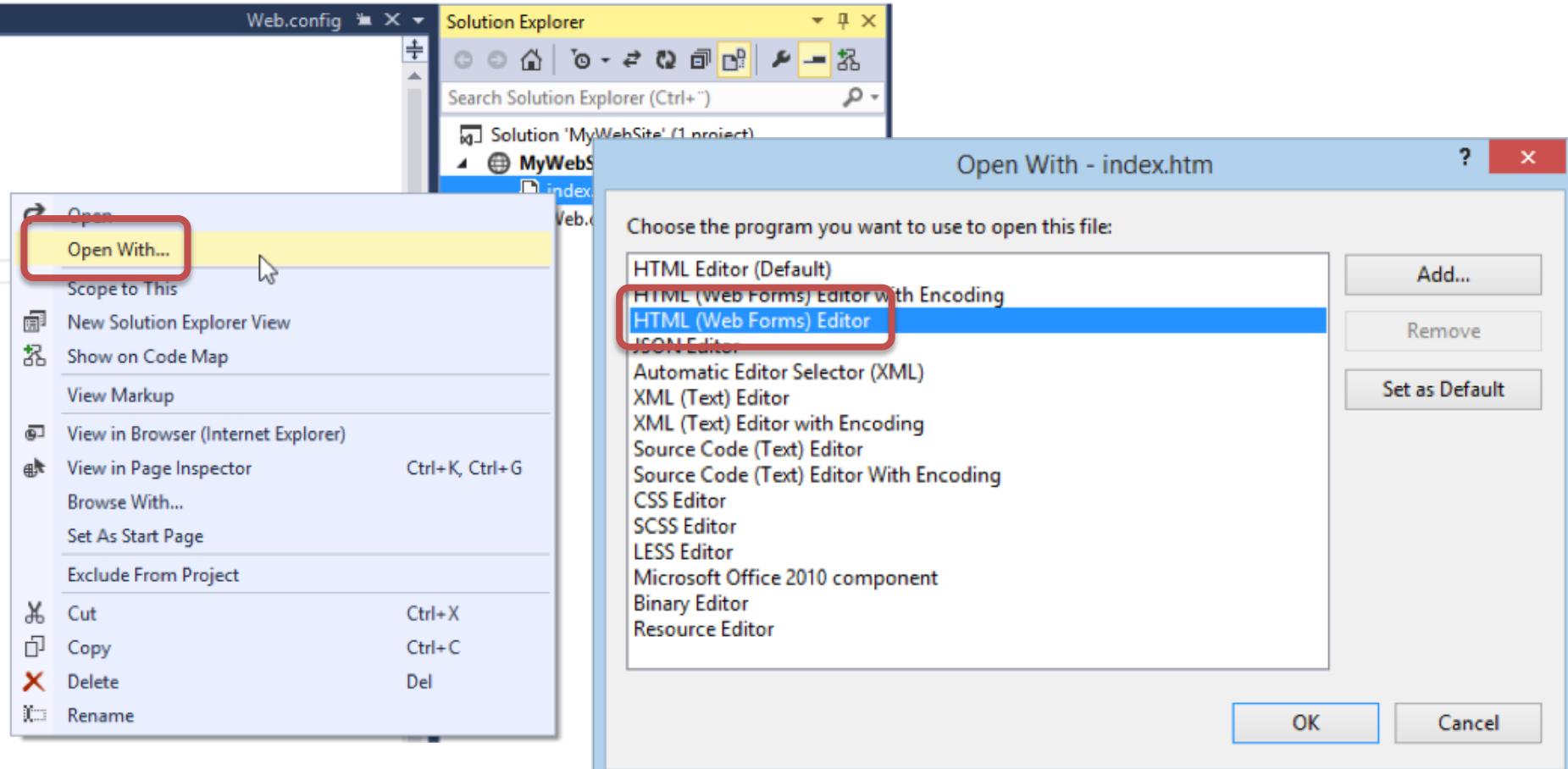


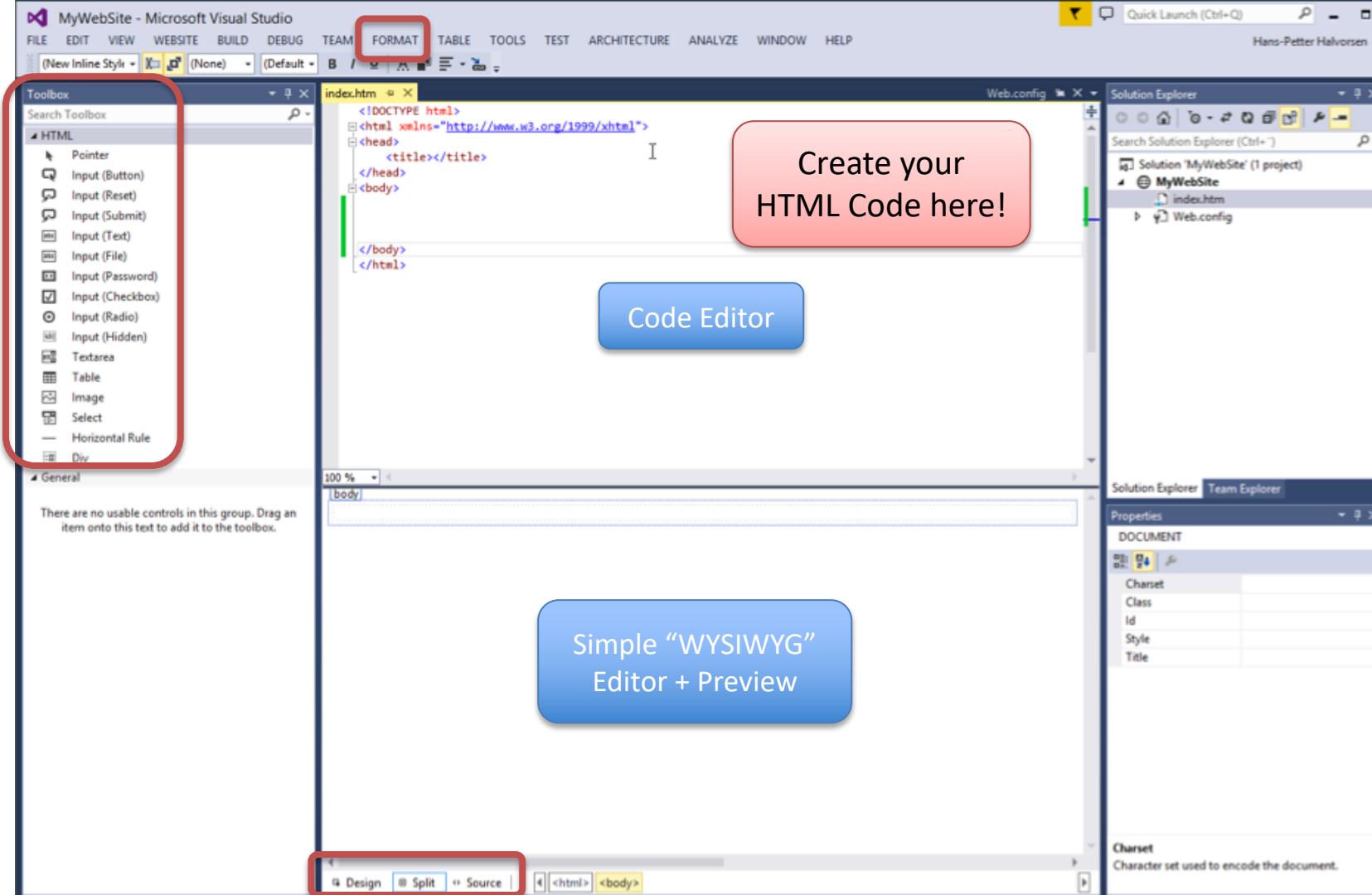
Visual Studio HTML Editor

Note! Due to the brand new HTML editor in Visual Studio, static HTML files no longer has the Design | Split | Source options enabled by default.

- That's because the new HTML editor is the default editor for all HTML files with the exception of ASP.NET Web Forms files (.aspx, .ascx, .master).
- However, it is only the Web Forms editor that has support for the designer and split view.
- So all we have to do is to map our .html or .htm files to use the Web Forms editor instead of the new HTML editor.
- Simply right-click any .html/.htm file in Solution Explorer and select Open With...

HTML Editor in Visual Studio





```
<!DOCTYPE html>
<html>
<body>

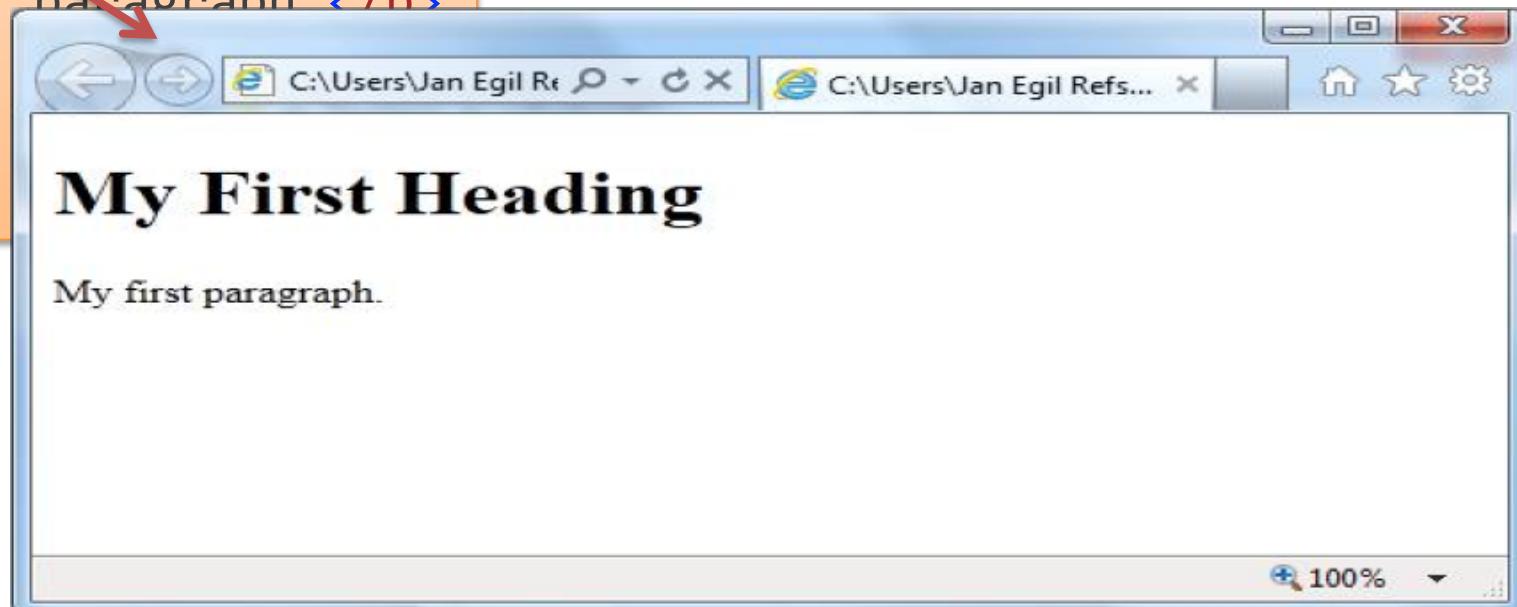
<h1>My First Heading</h1>

<p>My first paragraph<br/>
```

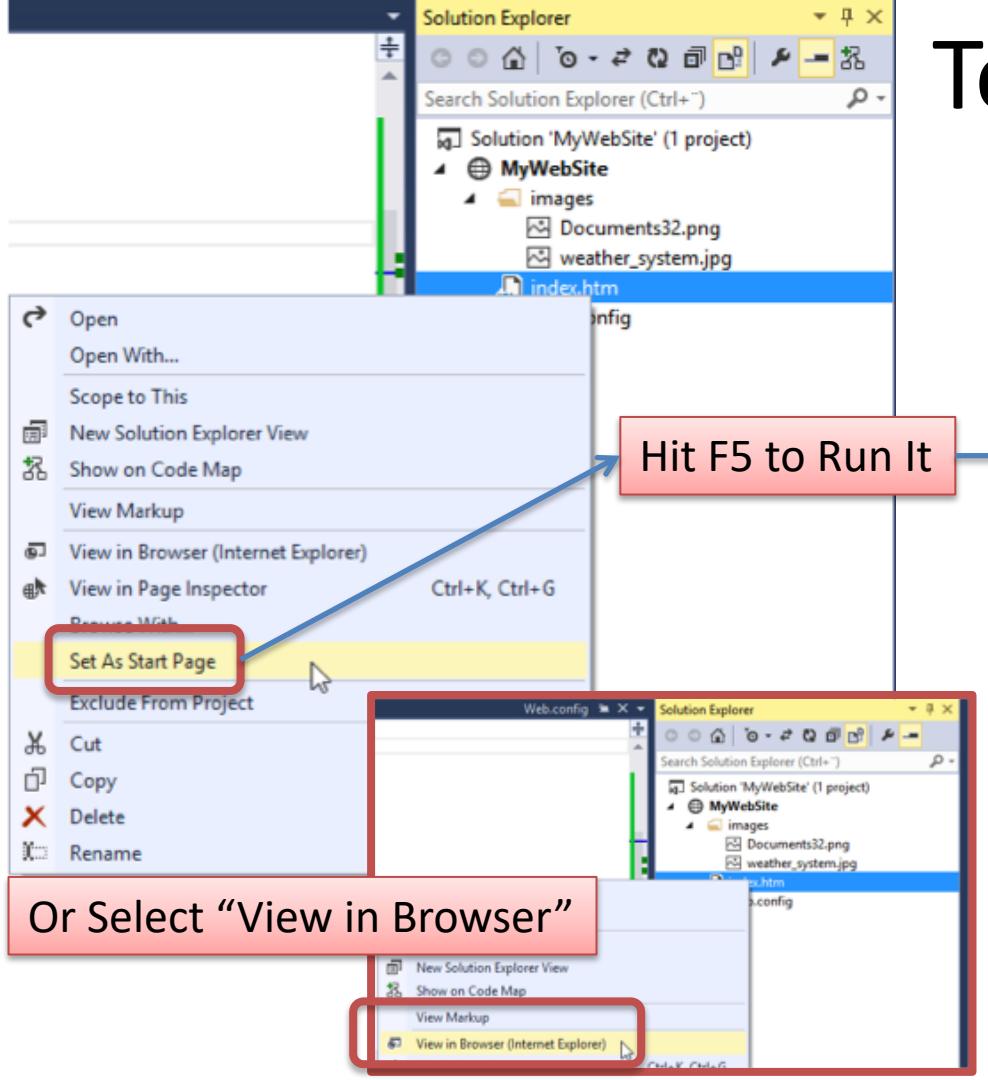
HTML Code

Simple HTML Page Example

Web Browser:



Test in Browser



The browser window shows a weather system interface. At the top, it says 'Weather System' and 'The Weather System ...'. Below that is a smartphone displaying weather data: 6:25, 74°F, 5.4TH, 4.12, 31.27, 82.2°F, 89%, 27.0°F, 51%. To the right of the phone is a diagram of a weather station with various sensors and a computer monitor showing data graphs.

Documents

- Software Development Plan
- Software Requirements & Design

Note! All documents should be PDF Files!!

Hyper-links:

```
<!DOCTYPE html>
<html>
<body>

<h1>This is a heading</h1>

<a href="http://www.google.com">This is a link to Google</a>

</body>
</html>
```

Images:

```
<!DOCTYPE html>
<html>
<body>

<h1>This is a heading</h1>



</body>
</html>
```

HTML Tags Overview

Hyperlink:

```
<a href="http://www.google.com">This is a link to Google</a>
```

Bold Text:

```
<b>This is my Text</b>
```

Headers:

```
<h1>This is my Header</h1>
```

```
<h2>This is my Header</h2>
```

```
<h3>This is my Header</h3>
```

Title:

```
<title>This is my Title</title>
```

Image:

```

```

Paragraph:

```
<p>My first paragraph.</p>
```

Line Break:

```
This is my Text
```

```
<br>
```

```
This is also my Text
```

Comments:

```
<!-- Write your comments here -->
```

```
<table width="200" border="1">
  <tr>
    <td>a</td>
    <td>b</td>
    <td>c</td>
    <td>d</td>
  </tr>
  <tr>
    <td>e</td>
    <td>f</td>
    <td>g</td>
    <td>h</td>
  </tr>
  <tr>
    <td>i</td>
    <td>j</td>
    <td>k</td>
    <td>l</td>
  </tr>
</table>
```

HTML Tags - Table

a	b	c	d
e	f	g	h
i	j	k	l

CSS (Cascading Style Sheet)

CSS is a stylesheet language that describes the presentation of an HTML page.

myfile.htm:

```
...
<head
...
    <link rel="stylesheet" type="text/css" href="stylesheet.css" />
    ...
</head>
...
```

stylesheet.css:

```
body {
    background-color: #d0e4fe;
}

h1 {
    color: orange;
    text-align: center;
}

p {
    font-family: "Times New Roman";
    font-size: 20px;
}
```

HTML

Good Resource for creating Web Pages with
HTML, CSS, JavaScript, SQL, etc.

<http://www.w3schools.com>

<http://www.halvorsen.blog>



HTML & CSS

Step by Step Example

Hans-Petter Halvorsen

We are going to make a Web Page like this:

Weather System

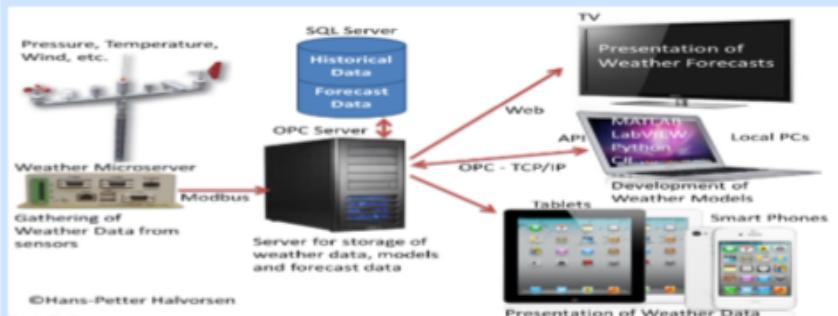
The Weather System shows data from the weather station at HSN, Porsgrunn.

Below we see the Weather System App:



System Overview

Below we see an overview of the system:



Documents

Below you will find the documents for the system:

[Software Development Plan](#)
[Software Requirements and Design](#)

Create a proper Folder structure, e.g.:

You should always think
structure before you start coding

My Web Site
/css
...
/documents
...
/html
...
/images
...
/js
...
index.html

Start with an empty HTML Page

```
index.html  ✎  
1  <!DOCTYPE html>  
2  
3  <html>  
4  
5      <title></title>  
6  
7      <body>  
8  
9  
10     </body>  
11  
12     </html>
```

Create Title, Header and Text

```
index.html  x
1  <!DOCTYPE html>
2
3  <html>
4
5      <title>Weather System</title>
6
7  <body>
8
9
10     <h1>Weather System</h1>
11
12     <p>The Weather System shows data from the weather station at HSN, Porsgrunn.</p>
13
14
15  </body>
16
17 </html>
```

Weather System

The Weather System shows data from the weather station at HSN, Porsgrunn.

```

1  <!DOCTYPE html>
2
3  <html>
4
5      <title>Weather System</title>
6
7  <body>
8
9      <h1>Weather System</h1>
10
11     <p>The Weather System shows data from the weather station at HSN, Porsgrunn.</p>
12
13
14     <p> Below we see the Weather System App:</p>
15
16     
17
18
19     <h2>System Overview</h2>
20
21     <p> Below we see an overview of the system:</p>
22
23     
24
25
26  </body>
27
28  </html>

```

Create Images

Weather System

The Weather System shows data from the weather station at HSN, Porsgrunn.

Below we see the Weather System App:



System Overview

Below we see an overview of the system:



Create Hyperlinks

```
index.html x
<body>
  <h1>Weather System</h1>
  <p>The Weather System shows data from the weather station at HSN, Porsgrunn.</p>
  <p> Below we see the Weather System App:</p>
  
  <h2>System Overview</h2>
  <p> Below we see an overview of the system:</p>
  
  <h2>Documents</h2>
  <p> Below you will find the documents for the system:</p>
  <a href="documents/software_development_plan.pdf" target=_blank">Software Development Plan</a>
  <br>
  <a href="documents/software_requirements_design.pdf" target=_blank">Software Requirements and Design</a>
</body>
</html>
```

Hyperlinks can be other web pages, documents, etc.

Weather System

The Weather System shows data from the weather station at HSN, Porsgrunn.

Below we see the Weather System App:



System Overview

Below we see an overview of the system:



Documents

Below you will find the documents for the system:

[Software Development Plan](documents/software_development_plan.pdf)
[Software Requirements and Design](documents/software_requirements_design.pdf)

Learn more HTML

- <https://www.w3schools.com/html>

CSS

- CSS is a language that describes the style of an HTML document.
- CSS describes how HTML elements should be displayed.
- Examples: Font Size, Colors, Alignment, etc.

```
body {  
    background-color: lightblue;  
}  
  
h1 {  
    color: white;  
    text-align: center;  
}  
  
p {  
    font-family: verdana;  
    font-size: 20px;  
}
```

Inline CSS

- The CSS is part of the HTML file

<style>

..

</style>

inline_css.html

```
1  <!DOCTYPE html>
2  <html>
3  <head>
4  <style>
5  p {
6      color: red;
7      text-align: center;
8  }
9  </style>
10 </head>
11 <body>
12
13 <p>Hello World!</p>
14 <p>These paragraphs are styled with CSS.</p>
15
16 </body>
17 </html>
```

External CSS File

Here you see a simple example:

```
index.html      stylesheet.css ×  
1   body  
2   {  
3       color: #153744;  
4       background-color: #d0e4fe  
5   }  
6  
7   h1  
8   {  
9       color: red;  
10      text-align: center  
11   }  
12  
13  h2  
14  {  
15      color: blue;  
16      text-align: center  
17  }  
18  
19
```

```

1  body
2  {
3      color: #153744;
4      background-color: #d0e4fe
5  }
6
7  h1
8  {
9      color: red;
10     text-align: center
11  }
12
13 h2
14 {
15     color: blue;
16     text-align: center
17  }

```

```

3 <html>
4
5     <head>
6
7         <title>Weather System</title>
8
9         <link rel="stylesheet" type="text/css" href="css/stylesheet.css"/>
10
11    </head>
12
13
14    <body>
15
16        <h1>Weather System</h1>

```

Create CSS

Weather System

The Weather System shows data from the weather station at HSN, Porsgrunn.

Below we see the Weather System App:



System Overview

See an overview of the system:



Documents

will find the documents for the system:

[Development Plan](#)
[Requirements and Design](#)

```

1  <!DOCTYPE html>
2
3  <html>
4
5      <head>
6
7          <title>Weather System</title>
8
9          <link rel="stylesheet" type="text/css" href="css/stylesheet.css"/>
10
11 </head>
12
13 <body>
14
15     <h1>Weather System</h1>
16
17     <p>The Weather System shows data from the weather station at HSN, Porsgrunn.</p>
18
19
20     <p> Below we see the Weather System App:</p>
21
22     
23
24
25     <h2>System Overview</h2>
26
27     <p> Below we see an overview of the system:</p>
28
29     
30
31     <h2>Documents</h2>
32
33     <p> Below you will find the documents for the system:</p>
34
35     <a href="documents/software_development_plan.pdf" target=_blank">Software Develop
36     <br>
37
38     <a href="documents/software_requirements_design.pdf" target=_blank">Software Requ
39
40     </body>
41
42 </html>

```

```

1  body
2  {
3      color: ■#153744;
4      background-color: □#d0e4fe
5  }
6
7  h1
8  {
9      color: ■red;
10     text-align: center
11 }
12
13 h2
14 {
15     color: ■blue;
16     text-align: center
17 }
18
19

```

Explore!

Find Colors, Font Sizes,
etc. that fits your system

Weather System

The Weather System shows data from the weather station at HSN, Porsgrunn.

Below we see the Weather System App:



System Overview

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Learn more CSS

- <https://www.w3schools.com/css/>

Bootstrap

Bootstrap is the most popular HTML, CSS, and JavaScript framework for developing responsive, mobile-first web sites.

Bootstrap is completely free to download and use!

<http://www.w3schools.com/bootstrap/>

```

1  <!DOCTYPE html>
2
3  <html>
4
5      <head>
6
7          <title>Weather System</title>
8
9
10         <meta charset="utf-8">
11         <meta name="viewport" content="width=device-width, initial-scale=1">
12         <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/css/bootstrap.min.css">
13         <script src="https://ajax.googleapis.com/ajax/libs/jquery/3.1.1/jquery.min.js"></script>
14         <script src="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/js/bootstrap.min.js"></script>
15
16     </head>
17
18     <body>
19
20         <div class="container-fluid">
21
22             <h1>Weather System</h1>
23
24             <p class="text-primary">The Weather System shows data from the weather station at HSN, Porsgrunn.</p>
25
26             <p class="text-success"> Below we see the Weather System App:</p>
27
28             
29
30
31             <h2>System Overview</h2>
32
33             <p class="text-success"> Below we see an overview of the system:</p>
34
35             
36
37             <h2>Documents</h2>
38
39             <p class="text-success"> Below you will find the documents for the system:</p>

```

Alternative 1

Weather System

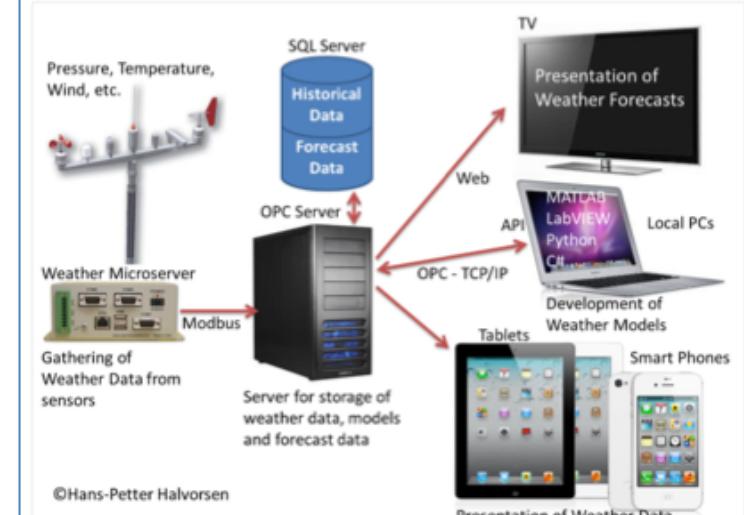
The Weather System shows data from the weather station at HSN, Porsgrunn.

Below we see the Weather System App:



System Overview

Below we see an overview of the system:



index_bootstrap2.html x

```

1  <!DOCTYPE html>
2
3  <html>
4
5      <head>
6
7          <title>Weather System</title>
8
9
10         <meta charset="utf-8">
11         <meta name="viewport" content="width=device-width, initial-scale=1">
12         <link rel="stylesheet" href="css/bootstrap.css">
13         <script src="js/jquery-1.11.3.min.js"></script>
14         <script src="js/bootstrap.js"></script>
15
16     </head>
17
18     <body>
19
20         <div class="container-fluid">
21
22             <h1>Weather System</h1>
23
24             <p class="text-primary">The Weather System shows data from the weather station
25
26             <p class="text-success"> Below we see the Weather System App:</p>
27
28             



# FTP

## File Transfer Protocol

Hans-Petter Halvorsen

# Web Server

- You need to deploy your files to the Web Server
- Typically you use a FTP program
  - You need to know the Host Name, and a User Name and a Password

Server-side

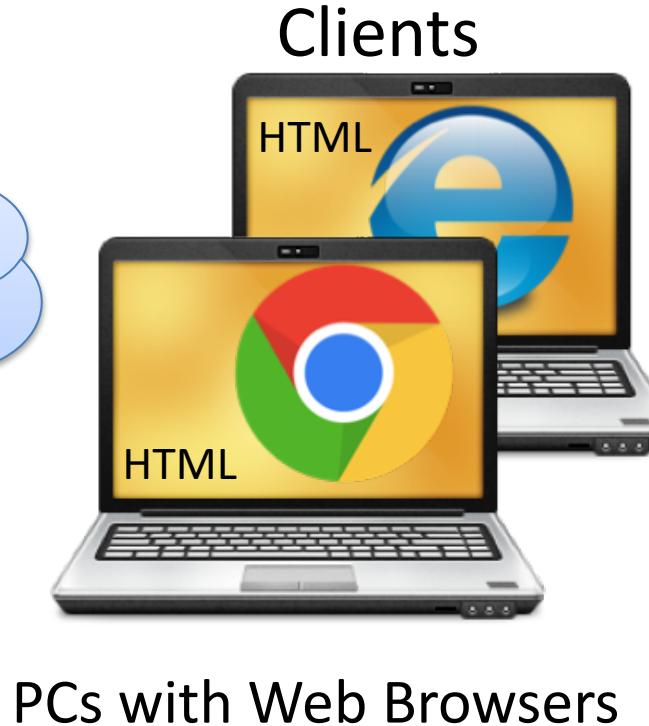
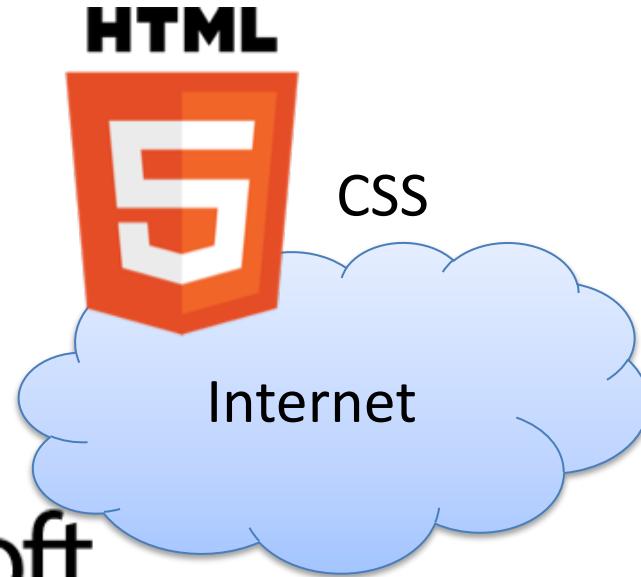


 Microsoft  
IIS



 MySQL®

Web



# FTP Software

- WinSCP
  - <https://winscp.net>
- FileZilla
  - <https://filezilla-project.org>

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Web: <https://www.halvorsen.blog>

