



Web Development

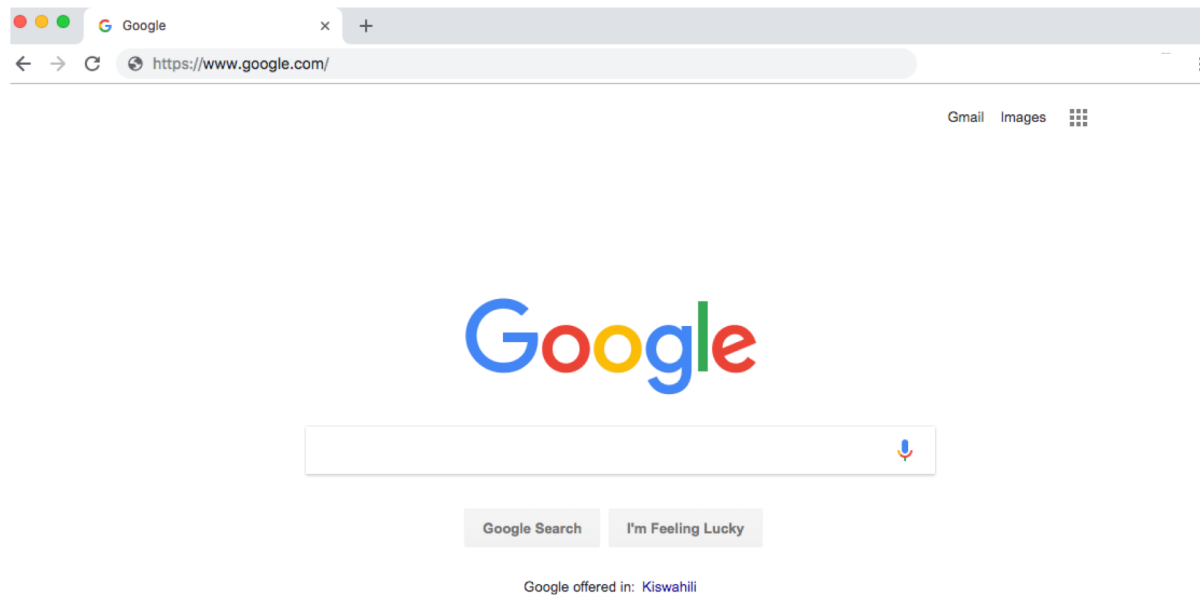
Andrew Kinai

Agenda

- Introduction
- Web development
 - HTML
 - CSS
 - JavaScript
- Project

Introduction

Website: a collection of related *web pages*, including multimedia content, typically identified with a common *domain name*, and published on at least one *web server*





Introduction

- Developing websites
 - **Front end:** presentation layer that the user interacts with
 - **Back end:** handles the business logic and data management
- Publishing a website
 - Domain name
 - Hosting in a web server



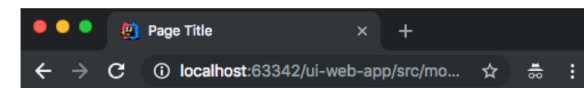
Web development

- Website core technologies
 - **HTML (Hyper Text Markup Language):** standard markup language for creating web pages
 - **CSS (Cascading Style Sheets):** style sheet language used for describing the presentation of a document
 - **JS (JavaScript):** high-level, interpreted programming language

Page Title

HTML: web page structure

```
<!DOCTYPE html>
<html>
  <head>
    <title>Page Title</title>
  </head>
  <body>
    <h1>Page Heading</h1>
    <p>Page content</p>
  </body>
</html>
```



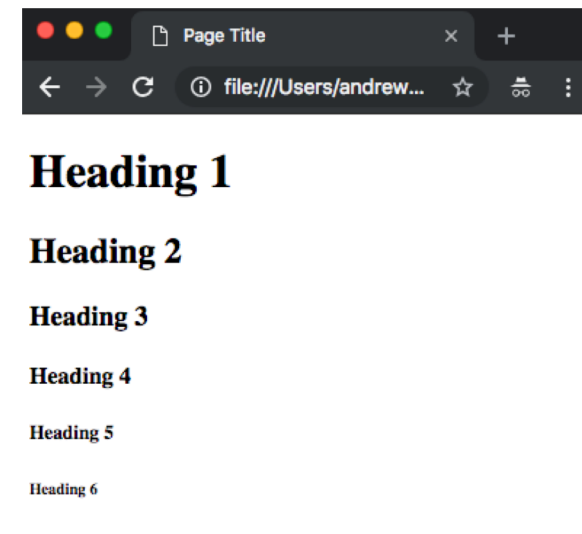
Page Heading

Page content



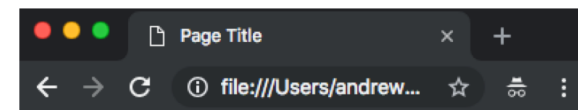
HTML: headings

```
<body>  
  <h1>Heading 1</h1>  
  <h2>Heading 2</h2>  
  <h3>Heading 3</h3>  
  <h4>Heading 4</h4>  
  <h5>Heading 5</h5>  
  <h6>Heading 6</h6>  
</body>
```



HTML: tables

```
<table>
<tr>
  <th>First name</th>
  <th>Last name</th>
  <th>Age</th>
</tr>
<tr>
  <td>John</td>
  <td>Kamau</td>
  <td>35</td>
</tr>
<tr>
  <td>Eve</td>
  <td>Akoth</td>
  <td>28</td>
</tr>
</table>
```



First name	Last name	Age
John	Kamau	35
Eve	Akoth	28

HTML: lists

<h1>Unordered list</h1>

Coffee

Tea

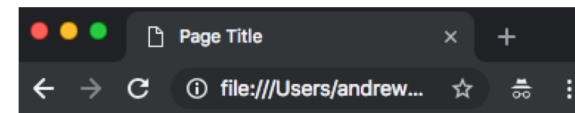
Milk

<h1>Ordered list</h1>

Bread

Mandazi

Samosa



Unordered list

- Coffee
- Tea
- Milk

Ordered list

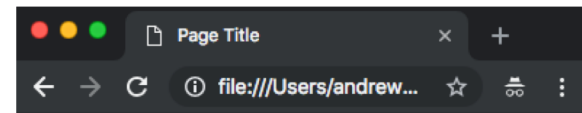
1. Bread
2. Mandazi
3. Samosa

HTML: images

```
<h1>Cat</h1>
```

```

```

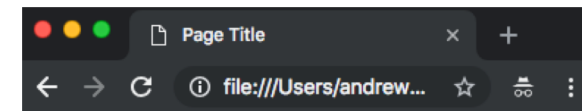


Cat



HTML: links

```
<body>
  <p>
    <a href="https://www.google.com">This is a link to
Google</a>
  </p>
  <p>
    <a href="index2.html">Page 2</a>
    <a href="index3.html">Page 3</a>
  </p>
</body>
```

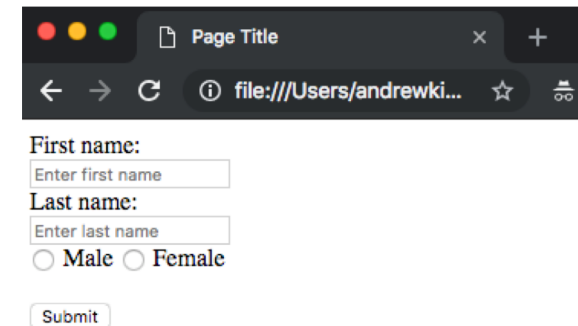


[This is a link to Google](#)

[Page 2](#) [Page 3](#)

HTML: forms

```
<form action="/action-url">  
  First name:<br>  
  <input type="text" name="firstname"  
placeholder="Enter first name"><br>  
  Last name:<br>  
  <input type="text" name="lastname"  
placeholder="Enter last name"><br>  
  <input type="radio" name="gender"  
value="male"> Male  
  <input type="radio" name="gender"  
value="female"> Female<br>  
<br>  
  <input type="submit" value="Submit">  
</form>
```



A screenshot of a web browser window. The address bar shows a file path: file:///Users/andrewki... The page title is "Page Title". The form contains two text input fields labeled "First name:" and "Last name:", each with a placeholder "Enter first name" and "Enter last name" respectively. Below these are two radio buttons labeled "Male" and "Female". At the bottom is a "Submit" button.

HTML: formatting

<body>

<p>

Text can be **bold** or **<i>italic</i>**

</p>

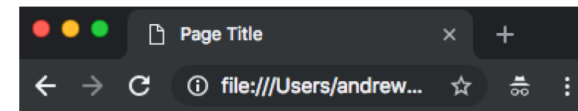
<p>

This is **_{subscript}** and

^{superscript}

</p>

</body>

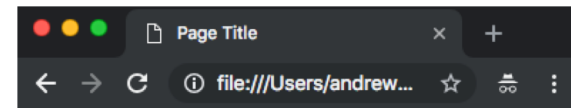


Text can be **bold** or *italic*

This is _{subscript} and ^{superscript}

HTML: styles

```
<h1 style="text-align:center; font-family: verdana;  
color: blue;">Centered Heading</h1>  
<p style="text-align:center; font-family: courier;  
color: green;">Centered paragraph.</p>
```



Centered Heading

Centered paragraph.

Page Title

CSS

HTML

<head>

<title>Page Title**</title>**

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

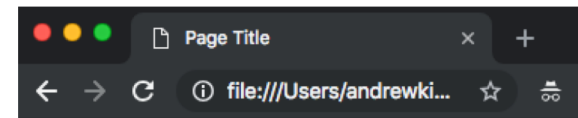
</head>

CSS

body {

font-family: "Helvetica Neue", Helvetica, Arial, sans-serif;

}



Page Heading

Page content



CSS: id selector

HTML

```
<h1>Page Heading</h1>
```

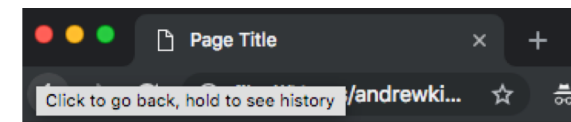
```
<p id="paragraph1">Page content 1</p>
```

```
<p id="paragraph2">Page content 2</p>
```

CSS

```
#paragraph1 {  
  color: green;  
}
```

```
#paragraph2 {  
  color: blue;  
}
```



Page Heading

Page content 1

Page content 2

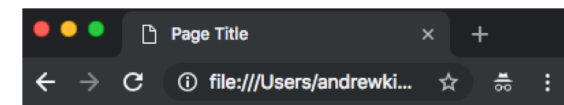
CSS: class selector

HTML

```
<h1>Page Heading</h1>  
<p class="content center">Page content 1</p>  
<p class="content">Page content 2</p>
```

CSS

```
.content {  
  color: blue;  
}  
.center {  
  text-align: center;  
}
```



Page Heading

Page content 1

Page content 2



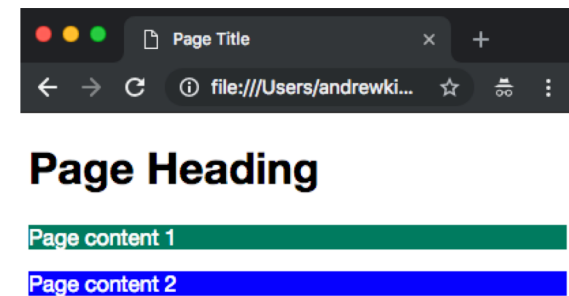
CSS: background

HTML

```
<h1>Page Heading</h1>
<p id="paragraph1">Page content 1</p>
<p id="paragraph2">Page content 2</p>
```

CSS

```
p {
  color: #ffffff;
}
#paragraph1 {
  background: #007b5e;
}
#paragraph2 {
  background: #0000ff;
}
```





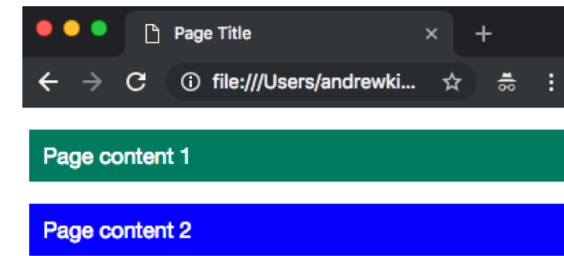
CSS: padding

HTML

```
<p id="paragraph1">Page content 1</p>  
<p id="paragraph2">Page content 2</p>
```

CSS

```
p {  
  color: #ffffff;  
  padding: 10px;  
}  
#paragraph1 {  
  background: #007b5e;  
}  
#paragraph2 {  
  background: #0000ff;  
}
```



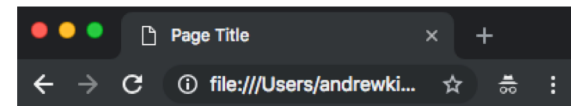
CSS: margin

HTML

```
<p id="paragraph1">Page content 1</p>  
<p id="paragraph2">Page content 2</p>
```

CSS

```
p {  
  color: #ffffff;  
  padding: 10px 30px;  
  margin: 50px 0 0 0;  
}  
#paragraph1 {  
  background: #007b5e;  
}  
#paragraph2 {  
  background: #0000ff;  
}
```



Page content 1

Page content 2

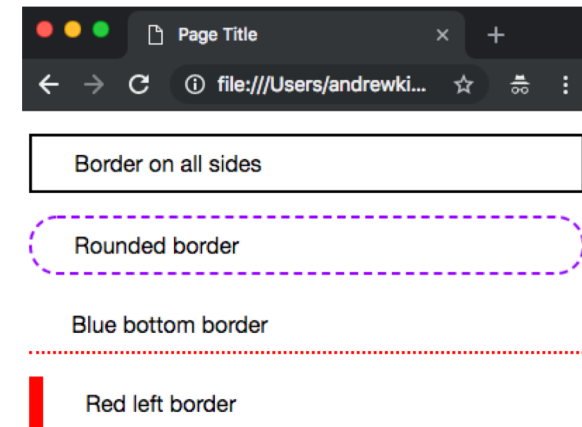
CSS: borders

HTML

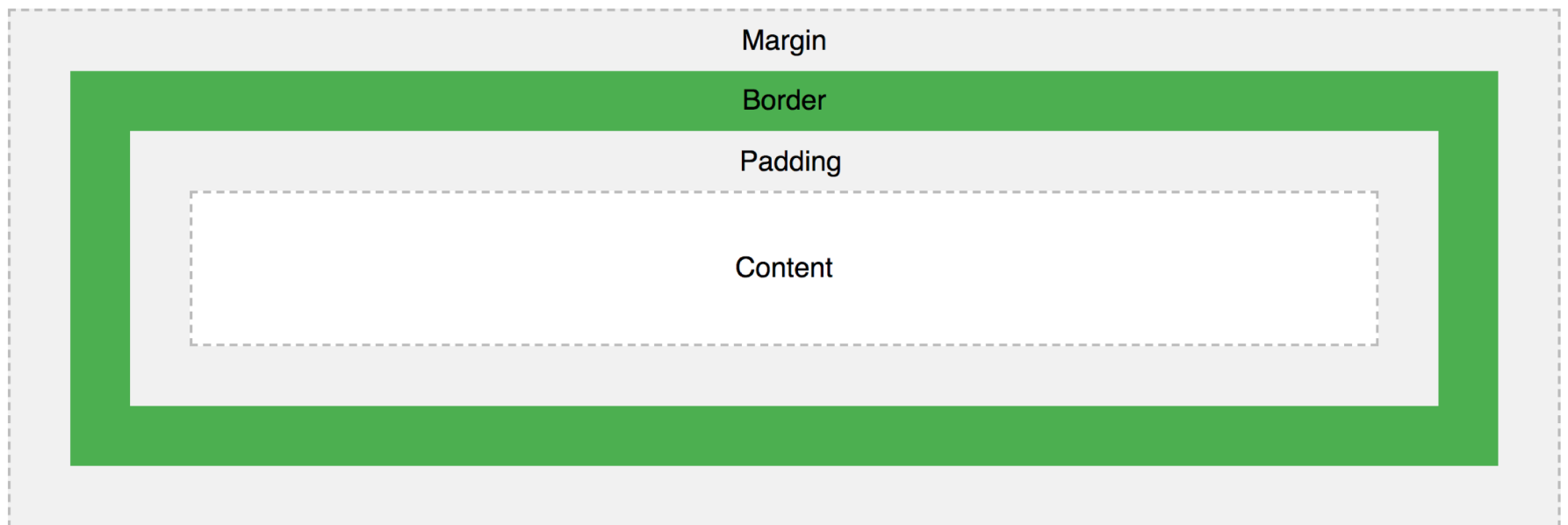
```
<p id="paragraph1">Border on all sides</p>
<p id="paragraph2">Rounded border</p>
<p id="paragraph3">Blue bottom border</p>
<p id="paragraph4">Red left border</p>
```

CSS

```
p {
  padding: 10px 30px;
}
#paragraph1 {
  border: solid 2px black;
}
#paragraph2 {
  border: dashed 2px #9600ff;
  border-radius: 20px;
}
#paragraph3 {
  border-bottom: dotted 2px red;
}
#paragraph4 {
  border-left: solid 10px red;
}
```



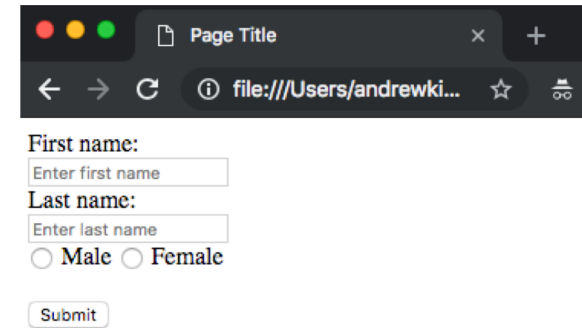
CSS: box model



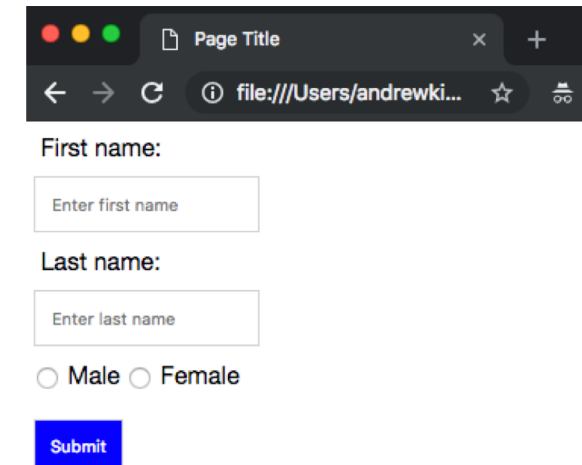
CSS: forms

CSS

```
input[type=text] {  
  padding: 10px;  
  margin: 10px 0;  
}  
input[type=submit] {  
  padding: 10px;  
  color: white;  
  background: blue;  
}
```

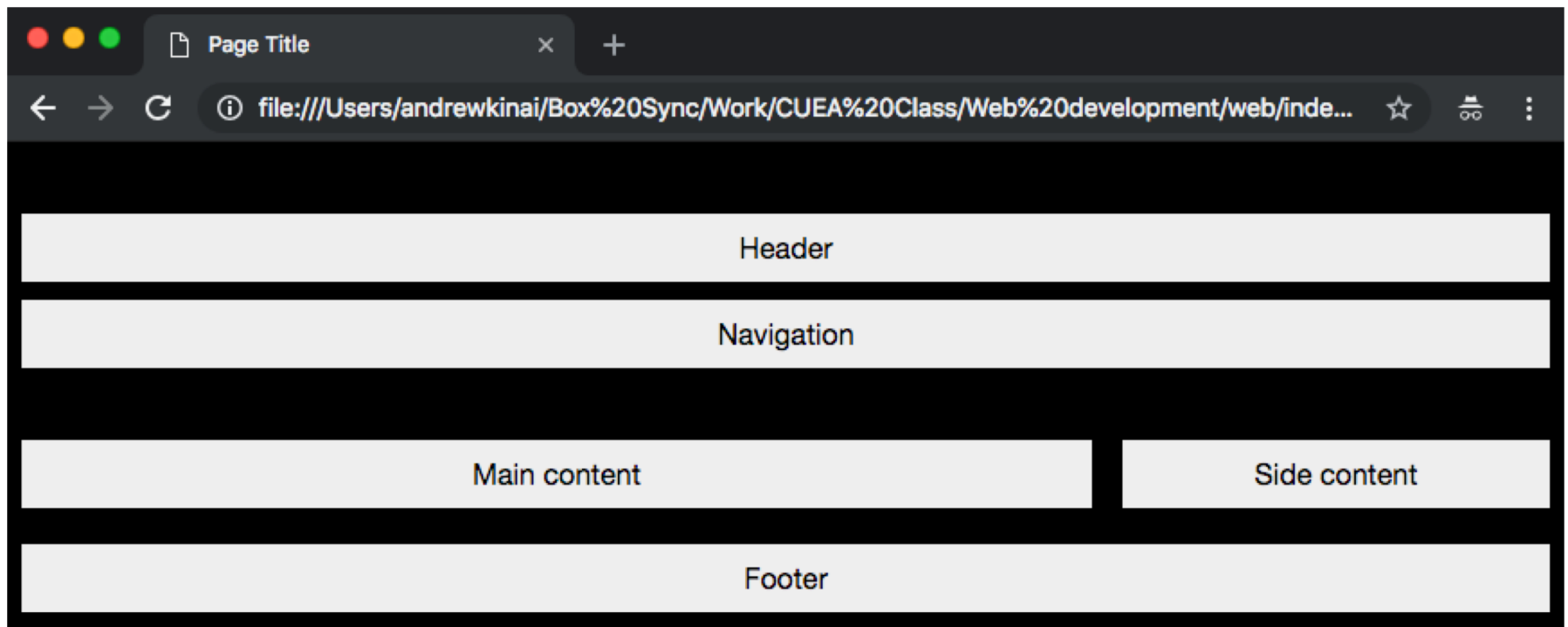


A screenshot of a web browser window titled "Page Title". The address bar shows "file:///Users/andrewki...". The form contains the following elements: "First name:" followed by a text input field with placeholder text "Enter first name"; "Last name:" followed by a text input field with placeholder text "Enter last name"; two radio buttons labeled "Male" and "Female"; and a "Submit" button.



A screenshot of a web browser window titled "Page Title". The address bar shows "file:///Users/andrewki...". The form contains the following elements: "First name:" followed by a text input field with placeholder text "Enter first name"; "Last name:" followed by a text input field with placeholder text "Enter last name"; two radio buttons labeled "Male" and "Female"; and a "Submit" button. The "Submit" button is styled with a blue background and white text, matching the CSS code provided.

CSS: website layout





CSS: website layout

```
<body>
  <div id="page-wrap">
    <div id="header-wrap">
      <div id="header" class="content">
        Header
      </div>
      <div id="navigation" class="content">
        Navigation
      </div>
    </div>
    <div id="content-wrap">
      <div id="main-content">
        Main content
      </div>
      <div id="side-content">
        Side content
      </div>
    </div>
    <div id="footer" class="content">
      Footer
    </div>
  </div>
</body>
```



CSS: website layout

```
.content {  
  background: #eee;  
}  
#page-wrap {  
  max-width: 960px;  
  padding: 10px;  
  background: black;  
}  
#page-wrap div {  
  margin-top: 10px;  
  text-align: center;  
  padding: 10px 0;  
}  
#header {  
  margin-bottom: 10px;  
  padding: 30px 0;  
}  
#content-wrap {  
  overflow: hidden;  
}  
#main-content {  
  float: left;  
  width: 70%;  
  margin-right: 2%;  
  background: #eee;  
}  
#side-content {  
  float: left;  
  width: 28%;  
  background: #eee;  
}
```

Agenda

- **Introduction**
- **Web development**
 - **HTML**
 - **CSS**
 - JavaScript
- Project



Thanks