

Data Visualization Frontent

Content

- Why is frontend important?
- Introduction to HTML document layout
- Introduction to HTML document components
- Introduction to CSS
- Annex.

Frontend

Frontend

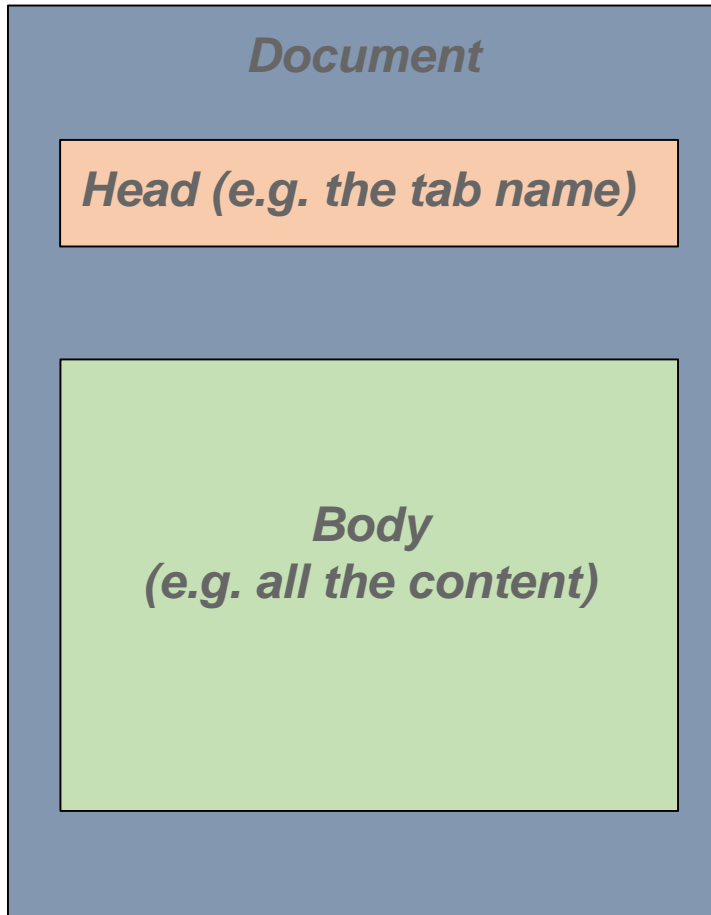
Frontend (the “face”) is what users interact with. Therefore, it is critically important to have user-friendly frontend design, as even if you have the best functionalities, user will not use your dashboard if it is not friendly. The design should also address user experience by decreasing the chance of wrong decisions.

As frontend component is what users interact with, it is also known as user interface.

Browsers understand only one language HTML, consequently, it is the choice for frontend development of web application. CSS will be used to give style to HTML.

HTML: layout

Layout



```
<html>

<head>
Here is the tab name
</head>

<body>

Here is the content.

</body>
</html>
```

HTML: components

Components: Headings and Paragraphs

Body

Heading 1

Heading 2

Heading 3

Heading 4

Heading 5

Heading 6

This is the first paragraph.
And this is the second paragraph.

`<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>`

This is the first paragraph.

`<p>` And this is the second paragraph.`</p>`

`</body>`

Components: Lists and Break

Body

Some ordered list:

1. Element 1
2. Element 2
3. Element 3

Some unordered list:

- Element 1
- Element 2
- Element 3

```
<body>
```

Some ordered list:

```
<ol>
```

```
  <li>Element 1</li>
```

```
  <li>Element 2</li>
```

```
  <li>Element 3</li>
```

```
</ol>
```

```
<br><br>
```

Some unordered list:

```
<ul>
```

```
  <li>Element 1</li>
```

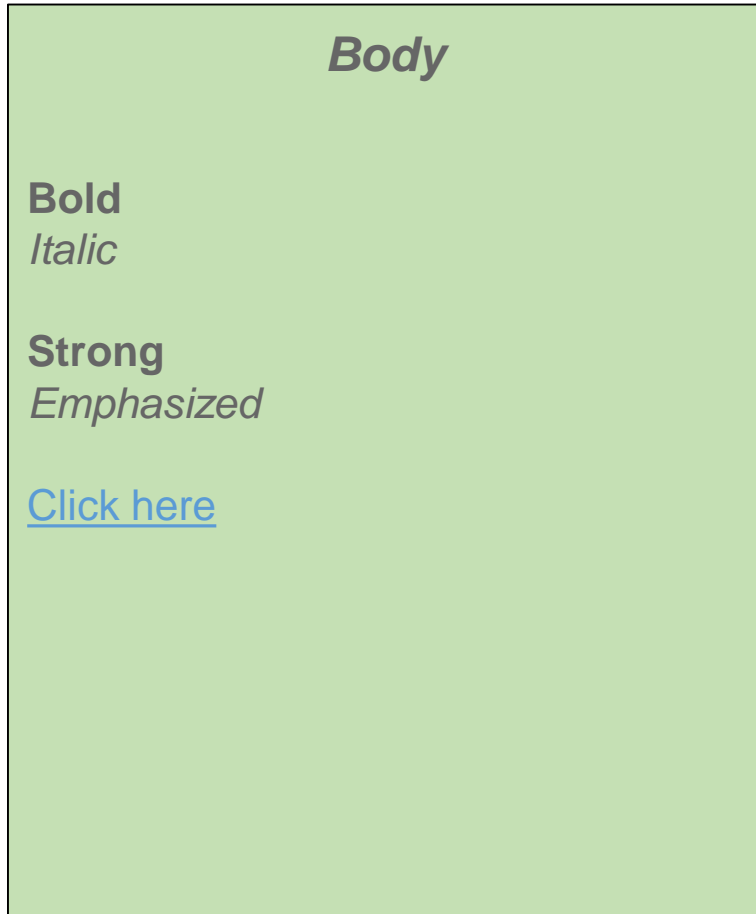
```
  <li>Element 2</li>
```

```
  <li>Element 3</li>
```

```
</ul>
```

```
</body>
```

Components: Text formatting



```
<body>

<b>Bold</b>
<i>Italic</i>
<br>
<strong>Strong</strong>
<em>Emphasized</em>
<br>
<a href="fb.com">Click here</a>

</body>
```

Components: Tables

<i>Body</i>	
Header 1	Header 2
Row1, Data1	Row1, Data2
Row2, Data1	Row2, Data2

```
<body>
<table>
  <tr>
    <th>Header 1</th>
    <th>Header 2</th>
  </tr>
  <tr>
    <td>Row1, Data1</td>
    <td>Row1, Data2</td>
  </tr>
  <tr>
    <td>Row2, Data1</td>
    <td>Row2, Data2</td>
  </tr>
</table>
</body>
```

Components: Images and Attributes



```
<body>
```

```

```

```
</body>
```

Components: Head

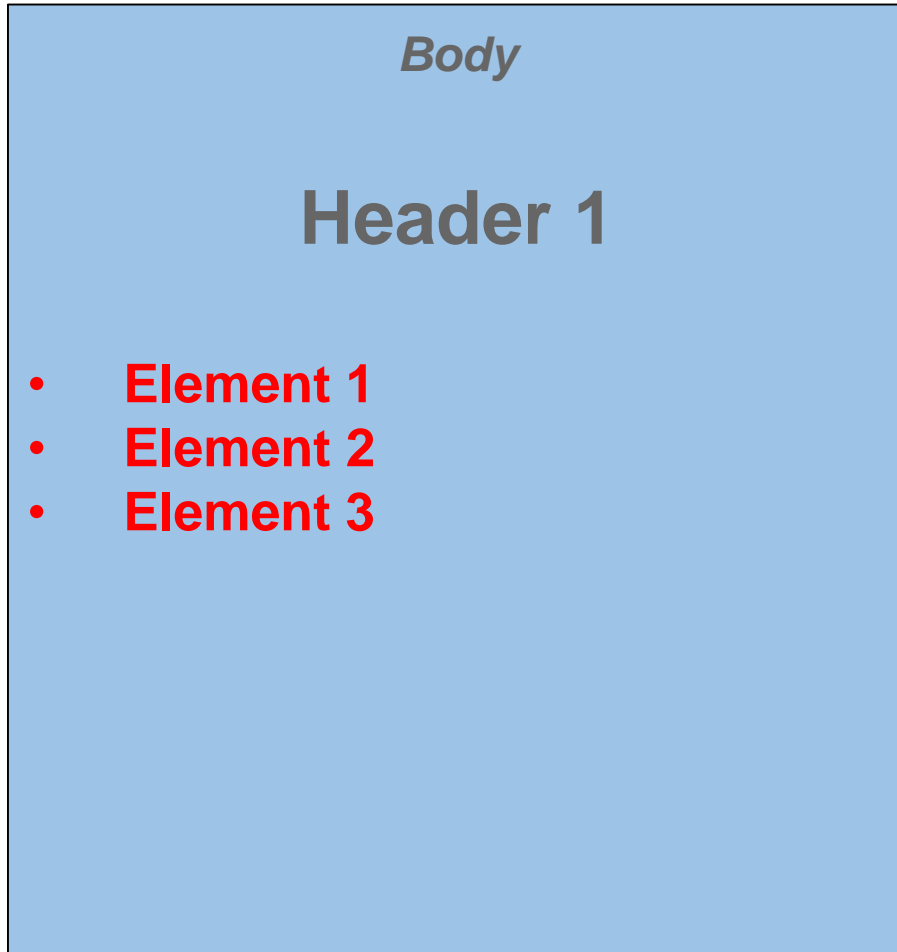
Head

Introduction to HTML

```
<head>  
<link rel="stylesheet"  
href="style.css">  
  
<title>  
Introduction to HTML  
</title>  
</head>
```

CSS

Stylesheet structure



```
body {  
    background: lightblue;  
}  
  
h1 {  
    text-align: center;  
}  
  
ul {  
    color: red;  
    font-size: 60px;  
}
```

Personalization

Components: class (.), id (#), style

Screen

Body

Header 1

- **Element 1**
- **Element 2**
- **Element 3**

HTML

```
<body>
<h1 id="title"
style="color:green;">Header1</h1>

<br>

<ul class="u_list">
  <li>Element 1</li>
  <li>Element 2</li>
  <li>Element 3</li>
</ul>

</body>
```

CSS

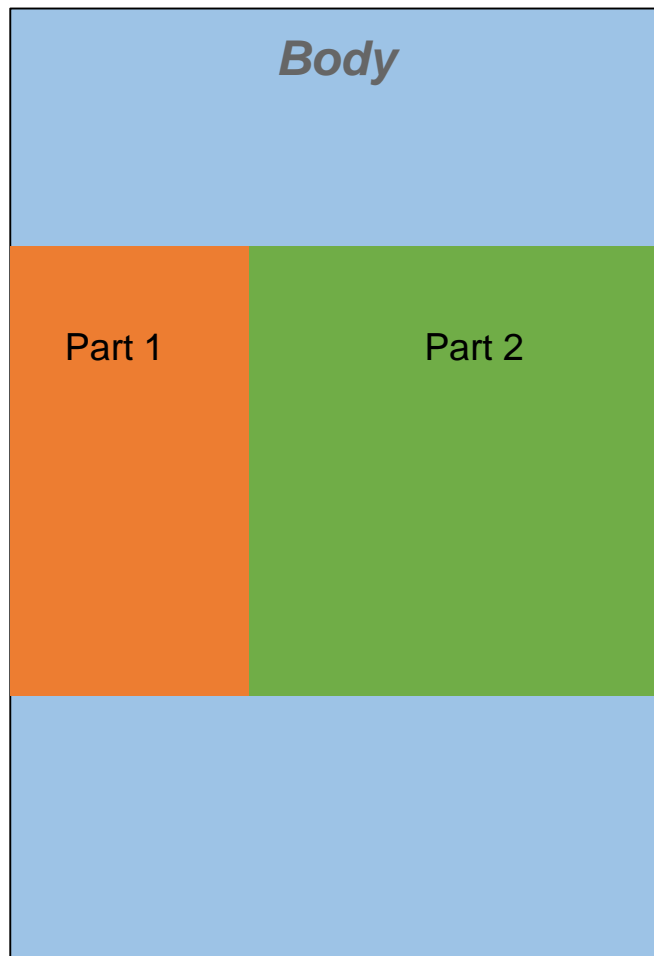
```
body {
  background: lightblue;
}

#title{
  text-align: center;
}

.u_list{
  color: #f44a41;
  font-size: 60px;
}
```

Components: <div>,

Screen



HTML

```
<body>
  <div id="left">
    <h1>Part 1</h1>
  </div>

  <div id="right">
    <h1>Part 2</h1>
  </div>

</body>
```

CSS

```
body {
  background: lightblue;
}
.left {
  float: left;
  width: 25%;
  height: 100px;
  background-color: orange;
}
.right {
  float: right;
  width: 75%;
  height: 100px;
  background-color: green;
}
```

Let's code