Assignment 2

Recommended readings:

- Lecture Slides as starting literature
- MDN Links within slides for details

Exercise 1 – HTML Tables

Open the file *ex1.html* and add a table that is rendered as follows:

Category	Austria	Germany	Switzerland
Automotive	120,000	1,200,000	100,000
Construction	420,000	0	
Engineering	350,000		
IT	120,000	500,000	90,000
Totals	1,010,000	1,700,000	190,000

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Do not change anything except the existing table element. Note: The example was rendered in Chrome.

Exercise 2 – Forms

Open the file *ex2.html* and extend the form for implementing an HTML form for the following requirements. Do not use CSS styles for now. Be sure to properly apply labels and field sets. Select appropriate HTML elements for each requirement and be sure to only allow valid values as input. Use HTML checks (e.g. specific input types or pattern attribute) and no JavaScript. Provide example data for the user (placeholder) for each text field.

A glazier shop allows customers to order glass panes in various sizes (up to 200cm X 200cm) and different thicknesses (4mm, 6mm, 8mm, 12mm). The color of the glass may be any RGB color as specified by the user.

Create an HTML form for entering contact data, glass specification and final comments. The contact data contains the title, name and physical address and the email address and mobile phone number of the customer. The glass specification allows the customer to order one pane of glass. A pane of glass is characterized by its size, color and thickness. The final comments should allow the customer to enter free text of no more than 700 characters.

When you submit the form, the data is transmitted via email (if you have an email client configured). Make sure that the data visible in the email is useful for the recipient. E.g. for each value there must be a key identifying the type of data. All fields except phone and comments are required. Hint: Use Google Chrome for submitting the form.

Exercise 3 – CSS Selectors

The following HTML Structure is given in file *ex3.html*:

```
<html>
  <body>
    <h2> This is some text </h2>
    <div id="content">
       <p> Text within paragraph 1 </p>
       <p> text within paragraph 2 </p>
       <h2>
           <p> Text within paragraph in h2 </p>
       </h2>
       <h1>
           <p> Text within h1 and p </p>
       </h1>
    </div>
    <div class="othercontent">
       <p> Text within p1</p>
       <p> Text within p2</p>
       <p> Text within p3</p>
       <p> Text within p4</p>
       <h2>
           <p> Text within h2 within a paragraph</p>
       </h2>
       <h1>
           <p> Text within h1 within a paragraph </p>
       </h1>
    </div>
    <p> Text in paragraph as a child of body</p>
    <a title="somelink" href="#">Some Link</a> <a title="otherlink"
    href="#other">Some other Link</a>
  </body>
</html>
```

Explain what happens if you apply separately each of the following style definitions to the HTML structure. Uncomment one rule at a time in file *ex3.html* and explain the result.

```
#content , p { color: red; }
#content p { color: red; }
#content h2 p { color: red; }
#content > p { color: red; }
#content h1 p { color: red; }
div p:nth-child(2) { color: red; }
div p:nth-child(2n) { color: red; }
h2 {color: red;}
div.othercontent > p:first-child { color:red; }
div.othercontent p:first-child + p { color:red; }
div.othercontent p:first-child ~ p { color:red; }
a[title^=other]:link { color:red; }
body a[title^=other]:link { color:red; }
.othercontent * p { color: red; }
```

Exercise 4 – CSS Layout

Create CSS rules for the file *ex4.html* and include them in the style element. You must not change any other content of the file. The page should be rendered as shown in the figure below.

- The text "CSS in action" in the header should be formatted in the font Verdana with a size of 2em and a margin of 10px;
- The background color of the header should be red 187, greed 204, blue 232.
- The logo with the id "logoImage" should be positioned on the right of the text "CSS in Action" and should have a margin of 10px and a height of 4em.
- The menu (Topic 1 to Topic 4) should be rendered in one line (see example) and with the background-color red 20, green 90, blue 204. There should be a horizontal spacing of 20px between every item.
- The second menu item should be rendered in red.
- The heading of the second topic should also be rendered in red.
- All h1 headings directly nested within sections which are directly nested within the content div should be rendered in the font Verdana and a size of 1.5 em.
- The footer should be rendered in the same background-color as the header. The list items within the footer should be displayed in one row and should be centred.
- External links (for the sake of simplicity: links starting with http) appearing anywhere in the content should get a disclaimer "(external)".
- In every second section the image(s) should be aligned to the right, otherwise to the left. Images should have a width of 100px.
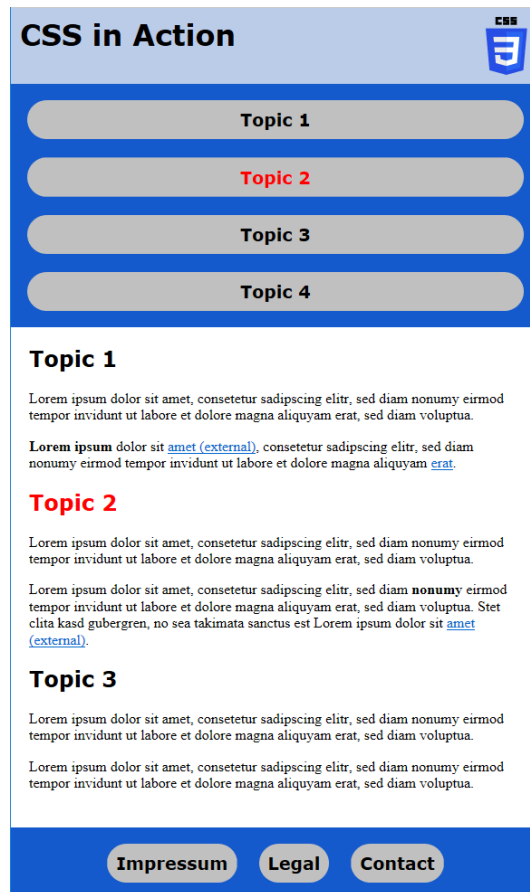
Finale Note: You will need to apply paddings and margins for some elements. Use values approximating the layout of the figure below.

Layout after applying the styles

Exercise 5 – Responsive Layout

Change your layout for Exercise 4 such that it is rendered as follows in a browser pane with less than 600 pixels:

Note: You can easily test your solution by resizing your browser window to below than 600 pixels width. Alternatively, you can use the developer tools of your browser to specify specific device characteristics.