

**Exercise 2.1 ACID2 Test**

- Use your Browser to do both the ACID2 [1] and ACID3 Test [5].  
Is your Browser compatible? Which results do you get? Which topics are checked in both tests?
- Use a Web page of your choice and check it using <http://browsershots.org/>.  
What is the result of your test?
- Create an XHTML page using a text editor. Use [2] as a reference.
- Create a document using Word or Open Office Write and save it as HTML.  
Open this html file within a text editor and compare the result for the outcome of the previous exercise.
- Modify your first XHTML page so that they contain errors.  
How does your Browser display this page? Which section of the XHTML page do you have to modify in order to produce an error message?

**Exercise 2.2 HTML Text Formatting**

Complement your XHTML page with:

- a HEAD section displaying author information
  - paragraphs, inline text attributes, heading, blocks, pre-formatted text, lists
- Use the Lorem Ipsum-Generator [3] to create bigger text areas.

**Exercise 2.3 HTML5**

Read <http://diveintohtml5.info> answer the following questions:

- What is new in HTML5? Provide examples.
- How is HTML5 currently be supported by browsers?

**Exercise 2.4 CSS3**

- What is new in CSS? Provide examples.
- Find example applications of CSS3. What are their benefits compared to implementations using prior standards?

**Exercise 2.5 Your Web Site (Requirements)**

In this exercise you're laying the basic work for all lab work to come in this course.

*Web Engineering I (AI) – Prof. Dr. Holger D. Hofmann – Lab Work*

- Form groups of 2-3 persons and agree on a common type of Web site you would like to create jointly. This may be, for example, a Web site for booking hotels, for information exchange on a particular hobby, etc.
- Collect your requirements and create and mark the requirements you would like to realise in the context of the lab work. (also consider c) for this exercise)  
Describe the requirements as detailed so that you would be able to hand the over to a third person not being involved in defining the requirements ("outsourcing").  
Subdivide your requirements into technical and non-technical requirements and try to be as precise as possible.
- Is there a standard for describing Web sites? Search the Internet for examples (e.g., [www.rentacoder.com](http://www.rentacoder.com), [www.my-hammer.de](http://www.my-hammer.de), [www.getafreelancer.com](http://www.getafreelancer.com), ...).
- [HOMEWORK] Search for a formal modelling technique for Web sites and be able to give a short presentation in front of the course.

**Exercise 2.6 HTML Links**

- Integrated absolute and relative links to one of your HTML sites.
- Search the Web which sorts of HTML link management exist as well for local and for remote usage and give a short presentation.

**Exercise 2.7 Your Web Site (Structure + Layout)**

- A Web application can be displayed as a tree structure ("wire frame"). A connection between two nodes means that there exists a link between two Web sites.  
Create a structure for your Web site.
- Create a static design for your Web site.  
Create contents by means of graphics, static HTML files or another method of design favoured by you.

**Exercise 2.8 Graphics**

- Install the application "The Gimp" or another graphic software of your choice and create one/multiple raster graphics für your Web site (e.g., menu buttons, Web Banner, ...)  
Save the graphics created to different graphics formats and compare their file size.

- b) Create an image with a transparent and with a solid background.  
Hint: Use the Gimp feature "Extras..."
- c) Include the graphics created to your XHTML pages. Use different attributes, e.g., height, width, etc. (see [2]).
- d) Use Gimp to create an animated GIF and include this to your XHTML pages.  
First create a graphics having multiple layers. Each of the layers represent a different step within the animation.  
Hint: Use the feature "Ebene duplizieren" to create new layers.
- e) Use graphic software of your choice to separate RGB and CMYK color channels.

### **Exercise 2.9      Image Maps**

- a) Take an image of your choice and apply an image map to it.  
Create at least 4 clickable regions on it and try out different shapes.

### **Online Resources**

- [1] ACID2-Test ([tinyurl.com/s5ecp](http://tinyurl.com/s5ecp))
- [2] Selft-HTML (<http://de.selfhtml.org>)
- [3] Lore Ipsum Generator ([www.lipsum.com](http://www.lipsum.com))
- [4] Gimp-Benutzerhandbuch (in German, <http://docs.gimp.org/de/index.html>)
- [5] ACID3-Test (<http://acid3.acidtests.org/>)