

Web Engineering

Spring Term 2015

Exercise 3

Before you even go online, now also other private professionals such as photographers or other designers ask you for a similar website for themselves. Therefore, you want to take a new direction for the project; you want to play it smart. After a thorough review of existing technologies, you decide to build a WordPress theme that can be also eventually re-used for all of their projects, bringing your website to the next level.

Note: The goal of the third series of exercises is to experiment with WordPress as one example of a general platform that could be exploited for systematic web development. In a two-step exercise, you will examine the WordPress model and extend it to suit your needs.

Exercise 3.1

In the first step of this exercise, you want to re-engineer your existing website, and turn it into a WordPress theme, along with all the advantages that the platform can offer you for your goals.

Note: as a starting point, you will get a starting theme partially converted to make use of the WordPress theme structure. You can either use that as a starting point for this exercise, or adapt your existing solution to support WordPress in the form of a WordPress theme. Paired with the starting theme, you will also get a ready-made starting database, which you can restore¹ after a clean install WordPress on your web server². Keep in mind that even if you choose to use the starting theme we provide, you shouldn't delete your solutions to the previous exercises.

Showing blog posts

You quickly find out you can manage single posts for your blog page from the WordPress Dashboard. Therefore, you plan to convert the blog page to support post excerpts in multiple pages, which means that at most four posts should be visible with their title and excerpt; if there are more to show, the users should be able to browse to the next or previous page. Moreover, there should be a page to read the complete version of each single blog post.

Dynamic index and footer

You also want your index to adapt to the content you gradually update on your website. The text shown on the index page should be modifiable from the WordPress Dashboard. Also, in the footer you want its second column to dynamically retrieve the content from the index page. You also plan to display dynamically the latest blog post in the footer's third column.

Contact page

Finally, you want your contact page to actually send emails to the administrator of the website on behalf of the customers. Please note that the administrator's email can be dynamically modified from the Dashboard. To be able to send emails, you will need also to configure your local web server (e.g. XAMPP) to send emails³.

Workmode and Grading. All exercises in the Web Engineering course are designed for teams of 3 students. Every member has to contribute to the team solution, and the assistants may ask about the role of each member and who contributed what.

This is the first part of Exercise 3. **The final team solution for Exercise 3 will need to be presented during the exercise session on 16.04.2015 from 12:15 to 14:00. If you have any (real) problem to show your solution on the**

¹http://codex.wordpress.org/Restoring_Your_Database_From_Backup

²https://codex.wordpress.org/Installing_WordPress

³<http://stackoverflow.com/questions/15965376/how-to-configure-xampp-to-send-mail-from-localhost>

16th, please send me an email before the 12th. From all the teams that have requested to be assessed on Friday we will randomly pick 5 groups. These teams will show their solution in our lab (CNB E 108.2) from 15:15pm. You do not need to hand in the source code, but the assistants may ask questions about how you implemented some of the features when you demo it in the exercise session. **We will use the following grading scheme.**

Grading Scheme For each part of the graded exercises, we specify the amount of points your team can achieve and a set of requirements. These requirements represent the minimal set of goals you need to accomplish to get full points. If you fulfil the requirements only partially or fail to answer corresponding questions during the presentation, points will be deducted. No or wrong solutions get zero points.

The maximum number of points may differ between parts and thus reflect their respective weights. For Exercises 3.1, the set of requirements are specified as follows:

Set of Requirements - Part 1 (Max. points: 3)

- Conversion of the blog page to support post excerpts in multiple pages and page to display single posts. Please note that posts can be written and modified from the dashboard.
- Implement a dynamic index page which loads its content from the database. The content of the index page should be modifiable from the dashboard.
- Implement dynamic retrieval of content in the footer for the columns *About me* and *My last post*
- Handle messages sent through the Contact page. You need to send an email to deliver the message, and it needs to be delivered to the email address belonging to the administrator of the website. Please note that the email can be dynamically set from the settings in the dashboard. You can develop this through forms, but you are not forbidden to use more advanced techniques to implement this.

Please note that you are **not allowed** to use any plug-ins for this part of this exercise.