

## Web Engineering

### Spring Term 2014

#### Exercise 3

**Evaluate Thy Hotel is quite happy with your progress on the WordPress theme so far. Now, what they would really like to have is support for a panorama viewer based on the component you created previously by making it available as a WordPress plug-in, as well as adding support for reviewers based on custom post types and more customisation options for the theme.**

This is the description of the second, and final, part of Exercise 3. It also contains the grading scheme that will be used for assessment.

#### Exercise 3.1 *Turning your Evaluate Thy Hotel prototype into a WordPress Theme*

**Please refer to the description provided last week for the details of the first part of Exercise 3.**

#### Exercise 3.2 *Advanced Theme Functionality and Customisability*

The second part of Exercise 3 comprises the following three steps:

1. **Add new panorama pictures** based on your jQuery Panorama Viewer component developed in Exercise 2 by implementing a Panorama Viewer WordPress plug-in, and use it to re-create the Weekly Location page. Note that it is not required, though desirable, to integrate your gallery plug-in with the WordPress Media Library.
2. **Add reviewers** as a custom post type so that they can be dynamically shown in the reviewers page. Please note that it should be possible to manage reviewers from the WordPress administration. This step should be based on the second approach presented in the lecture, i.e. building the custom post type into the theme rather than using a plug-in.
3. **Add a relevance field** to the custom post type for reviewers. This field is meant to store a relevance/prominence value for each reviewer (the actual values for each reviewer are arbitrary and can be defined by you). Using that information, you should always show the two most relevant reviewers (i.e. those with the highest relevance) in the widget located on the main page.
4. **Make the theme customisable** by allowing for custom colours (adding colour pickers for the background, as well as the menus, headlines and article text as part of the theme settings), as well as supporting header image customisation (choosing a different image as well as cropping it).

As said in the lecture, you can learn from the examples of standard themes (e.g. WordPress Twenty Eleven) as well as online documentation.

**Note that you are encouraged to take inspiration from other WordPress themes and plug-ins. However, you must develop your own Evaluate Thy Hotel theme and Panorama View WordPress plug-in independent of existing themes, plug-ins and other solutions. In other words, the assistants may check whether you have a clean WordPress installation with only your theme and your plug-in activated.**

**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 second, and final, part of Exercise 3. As with previous exercises, the two parts build on top of each other. **The final team solution for Exercise 3 will need to be presented during the exercise session on 17 April 2013.** 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 and 3.2, the set of requirements are specified as follows:

#### **Set of Requirements - Part 1 (Max. points: 2)**

- Evaluate Thy Hotel WordPress theme based on your solution developed for Exercise 2. The content of the website (reviews of the various locations) should be manageable as posts from the WordPress posts management.
- Support for theme configurable elements: website title, website description, and navigation menus. These elements should be configurable from the WordPress administration pages, and the changes should then reflect in the working theme.

#### **Set of Requirements - Part 2 (Max. points: 4)**

- Panorama viewer plug-in based on your jQuery Panorama Viewer developed in Exercise 2
- Support for reviewers based on custom post types: listing reviewers in the reviewers page and most relevant reviewers shown in the widget integrated into the homepage
- Evaluate Thy Hotel options pages for setting custom colours and custom header images based on WordPress Settings API
- **Important:** For the presentation of your solution in the exercise session, please prepare a customised version of Evaluate Thy Hotel that demonstrates the functionality and customisability of your theme, e.g. by setting up a custom theme for a new travelling advertisement website for a different university association, such as Evaluate Perfect and Fantastic Locations (EPFL). Your custom version should include customisations of the theme (title, description, colours, header etc.) as well as different content (posts, reviewers, panorama image).

**Solutions which integrate the Panorama Viewer WordPress plugin with the WordPress Media Library will award 1 extra point.**