Instructions

For the third homework assignment, each student has to create a web application. The domain of the application can be arbitrary, as long it is not an on-line store or something that does not differ much from an on-line store.

The application has to be implemented in PHP and MySQL, however, where appropriate, you should also use additional technologies that were presented during the course, such as HTML, CSS, JavaScript, jQuery, AJAX and others. Moreover, you are welcome to use 3rd party libraries and frameworks such as Bootstrap, Symphony, Zend and similar.

While the scope of the application can be arbitrary, be careful not to underestimate the workload. Make sure that you are able to complete the assignment within give time. The bare minimum requirements are the following:

- User registration and log-in: Your application should support both anonymous and logged-in users, that is, some actions are available to all users, while others are available only to those that have logged-in.
 Additionally, make sure that users are also able to register.
- Input validation: Your application should validate all client inputs. When inputs are invalid, the application should notify the client with a suitable notification.
- DBMS: Use MySQL (or MariaDB) and design a database that has at least three tables. The tables should be related (i.e. connected) and the database should be normalized to the third normal form.
- Nice user interface: Use suitable technologies (CSS, JS, jQuery, AJAX) and design a user-friendly interface.
- Proper HTTP requests: All HTTP requests within your application should follow the recommendation of the HTTP standard.

Report

Write a report that is based on your application. The report has to contain the following:

- State the name of your application (or the problem that is being addressed);
- State your information;
- Describe the problem (approximately 2 paragraphs) and your solution (approximately 2 paragraphs). Try to answer questions such as: what is the problem that is being addressed, who are the main users, how is the application being used;

- Show your database schema graphically: list tables, their attributes, relations and if applicable, explain non-trivial attributes. I suggest making the graphical schema representation with PHPMyAdmin **Designer**;
- List the sitemap of your application;
- Be concise: the recommended length of the report is 2 full A4 pages.

Submission and defense

The homework has to be handed-in to Moodle and later defended.

The submission deadline is **May 28 at 23:59**, while the defenses will take place in the following week according to <u>this schedule</u>

Important

- 1. Respect the deadlines. Delayed submissions will be penalized.
- 2. All questions pertaining to this homework should be asked in forums.
- 3. The solution you hand in, must be your own work; if we found out that you have copied the solution from the Internet, your classmate or from some other resource, you will be awarded no credit, and a disciplinary procedure will be triggered.