SEBA Master - Web Application Engineering
Summer term 2016

Exercise 4

The goal of this exercise is to finish the implementation of your web application and to present your final prototype.

1. Description of the Exercise

Finish the implementation of your web application based on the initial prototype as presented in exercise 3. Incorporate in particular the feedback you got during the presentation of your initial prototype.

The web application is considered to be finished if it **supports at least four distinct use cases** which are **specific** to your business model. Furthermore, in addition to those use cases, your web application has to

- support **user authentication**, i.e., a user has to login to use all or certain features of your web application
- provide **read and write access** to your model, i.e., you have to implement the CRUD methods (Create, Read, Update, Delete) for at least one of your model classes
- implement basic **form validation**

As presented in the first lecture: Do not distribute the workload strictly along the layers of your web application (e.g., UI, application logic, database, etc.), but in a way that each team member gets familiar with each layer of the web application. This includes models, controllers and views on both the client- and server-side part of the web application.

2. Presentation Session

Right before your presentation, make sure that your **presentation notebook** is **prepared**, i.e., start the web application and a proper browser, and open your slides. Also make sure that your presentation and live demo works for lower resolutions (e.g., 1280x800). We can only guarantee a VGA-connection to the beamer, i.e., take care of respective adapters by yourselves!

The structure of your presentation should be as follows:

- Short description of your team (1 slide) including
  - Names and pictures
  - Roles and responsibilities of each team member
  - Approximation of how much time each team member spent for the development of the web application
- Short description of your business idea. (1 slide)

Thereafter, you have to do a live demo of your final prototype. Think of a meaningful scenario by which you can guide the audience through your web application. This scenario should cover most of the use cases as presented in exercise 1.

The presentation (inclusive the live demo) must not exceed 10 minutes. The subsequent discussion, will last additional 10 minutes at most. During the discussion, you might be asked to do a short code review, e.g., to explain certain parts of the web application's implementation. For this purpose, think of which parts of the code do you consider as the most interesting/challenging ones.

The presentation of the slides and the live demo has to be done by exactly two students. These two presenters will be assigned randomly immediately before the presentation. Therefore, make sure that each of the team members is famil-

iar with the web application and its implementation. However, in the discussion session and thus for the code review, each team member might be asked and take part.

3. Questioning Session

20 minutes before your presentation, your team has to be in the "Question room" (01.12.020b) in order give a written answer to a randomly chosen question out of a public question catalog. The questions cover the content of the lecture from part *6 – Libraries and Frameworks for Web Clients*.

The question catalog will be published on June 28th, 2016.

4. Deliverables

For this exercise, there are 4 deliverables which you have to submit:

1. One **ZIP-Archive** containing the full code of your web application. If the size of the ZIP-Archive is too big to send by mail, send a link by which the ZIP-Archive can be downloaded.
2. A **paper** (in PDF format) containing one Screenshot of the homepage of your web application as well as at least **one Screenshot for each of the use cases** as presented by you in exercise 1. Also add some description of which use case is covered by which screenshot.
3. The **Presentation** (in PDF format) as defined in Section *2. Presentation Session*.
4. A **Paper** (in PDF format) describing the individual contribution to the development of the web application of each team member. Also include each team member's roles and responsibilities as well as estimated efforts.

5. Submission of Deliverables

You have to submit deliverables via e-mail with the following guidelines:

- Deliverables must be sent via e-mail in PDF format. Recipient is: ***seba-master.sebis@tum.de***.
- The subject line must conform to the following format:
  "**[SEBA-Master] Exercise *4 - Group number <Number of your group> - v<Version>***".
  Please replace the parts enclosed in <> (and delete thereafter the symbols '<' and '>'). Provide the group number with a leading '0' in case it is less than 10, i.e., '01' instead of '1'.
- The e-mail body must contain the following information about each group member:
  - last name,
  - first name,
  - matriculation number,
  - your project group number
- The e-mail with the highest version number before the deadline is considered as final.

Only submissions conforming to the stated form will be accepted.

Submission deadline for the third exercise is Friday, July 04th, 2016, 12:00 (noon).

6. Evaluation

The exercise is evaluated according to the following guidelines:

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- Documents and slides were delivered in time (before deadline)
- Quality of the final prototype, coverage of the use cases of exercise 1, and adherence to the mock-ups of exercise 2 (Deviations of the UI from the mock-ups of exercise 2 have to be justified accordingly)
- Individual contribution of each team member to the exercise
- Style and structure of the document
- Presentation of the slides
    - Make sure to comply with the schedule. Overtime (exclusive interruptions due to questions) will affect your assessment negatively!
- Style of presentation
    - Presentation skills (confident appearance, fluent speech, etc.)
    - Dealing with short interruptions and questions
    - Slide design and appearance (no animations, pleasant colors, "corporate design", etc.)
- Correctness of the submitted answer in the questioning session.

This exercise is worth **43 points**:

- 8 for the questioning session
- 2 for the presentation
- 33 for the deliverables

In total, there are 100 points over the course of the semester.

7. Outlook

After the final presentation, we will select the best projects, which can be presented in the last lecture (11.07.2016) by the corresponding student team.