

I3302 Server side web development

Project 2018-2019 Duration: 2 months Dr. Mohamad Hamze

Project Title: Agile Assessment

Subject:

In agile method, it is useful to improve the quality and the effectiveness of the entire work. The goal of the project is to conceive, develop and put in use a complete package for agile assessment.

We can find the following actors in the system:

- We can create: a hierarchy of agile coaches (coach of coaches), a scrum master, a product owner and a developer. (id, first name, last name, username, password, mobile, email, ...)
- We have projects (id, title, description, start date, end date, duration, department, ...).
- We have teams (in each team: scrum master, product owner, developers).
- We have questionnaires (we can build it any time by the coach): each questionnaire contains a set of questions. For each question we give a grade between 1 and 5. (or can be variable)
- You must have additional tables to make the relation between tables (assigning teams to projects, users to teams, answers of questionnaires, ...)

Process:

First we have to create the accounts for coaches, scrum masters, product owners and developers.

Then the coach or a specific coach creates a questionnaire(s), which contains a set of questions. He chooses the teams that can have access to this questionnaire.

The team will receive a notification by the created questionnaire. The members of the team must fill in the questionnaire. And also each member can add his comments to each questionnaire.

The coach, after a fixed period, can display many type of reports than contains charts for statistics reasons. The type of reports will be discussed later.

Guidelines:

- 1. Your project will be marked according to the technical choices you will make, the technical quality of the product code, its respect for the subject, the ergonomics of your site and its general appearance. The additional features you implement will also be accounted for.
- 2. The handing over of the project to the instructors implies the complete handing over of the code (HTML, PHP...). You will also include a minimum 10-pages report explaining the general operation of the project (using the Template).
- 3. Your project must be designed using HTML5, PHP and MySQL (using prepared statement with MySQLi). You can use style sheets (CSS), frames, cookies, ajax, jQuery ... However, for those who would like to use it, limit

the use of Javascript (including ajax and jQuery) to simple functions and Not essential to the functioning of the project.

- 4. On the other hand, you are strongly advised to validate your website (and your style sheet (s)) using the tools offered by the W3C (http://www.wc.org). This validation will verify that the HTML of your pages conforms to the HTML standard.
- 5. This website may be installed on any server supporting PHP / Mysql technology. This will facilitate the evaluation of the site.
- 6. External resources. Students must work in pairs. Pairs can collaborate. Internet resources can be used. The aim is to master the submitted project. It is not prohibited, on the contrary, it is advisable to consult and use the solutions available on the web to this type of problem.
- 7. The project is over 22, you will get 3 points in addition if you use any of the PHP frameworks (Laravel, Codelgniter, ...).

Deliverables:

The deadline for filing projects is Friday 15 January 2019. Each group will present their project on a CD, as well as a report written in MS Word and printed (paper version and electronic version in the CD) which explains and highlights the most important parts of its project. A template will be provided.

The report should be short and useful. Consider putting information that draws the attention of the corrector to the work you are proud of. Think of taking advantage of it to raise your score. Put serious information on it, not filling it. Give a good impression.

Your report must also include a schema of your database, realized with software, such as MySQLWorkbench.

Review:

Each student will present a project exam by his own on his own laptop. The student has 1 hour in the laboratory to prove his capacity in the project delivered. In the exam, you will be asked to perform a particular task, for example, add an option to your application, change something, or even program another application (simple and similar, of course). The purpose of the exam is to verify your mastery of your project. Each student is expected to know all the details of their project. You have to bring your own laptop.

The project note will essentially depend on the laboratory test score. A poor grade on the examination suggests that the student in question is not the author of his own project, and deserves a zero on the total score of the project (zero out of 25).

References:

https://canvasjs.com/php-charts/

https://jpgraph.net/

https://laravel.com/

https://codeigniter.com/

https://userspice.com/