THE INTERNATIONAL INSTITUTE OF

SUPINFO

INFORMATION TECHNOLOGY

Introduction to Java Enterprise Edition

Academic Year – 2013 - 2014

SupCrowdfunder

Context

Do you know Crowdfunding? This system allows everyone to become famous thanks to our works!
You make an offer, people bet on it and when you gather enough money you launch the product.
Givers will then be rewarded by advantages or products.
Here are a definition and two examples:

- http://en.wikipedia.org/wiki/Crowdfunding
- http://www.mymajorcompany.com/
- http://www.ulule.com

Please take the time to browse these websites to understand this project.

SUPINFO wants to create its own crowdfunding service and need you to develop it. Because it needs to be powerful and scalable you naturally choose to use Java Enterprise Edition Technologies.

This project must be done by groups, each containing 3 or 4 students maximum. Working in a bigger group will be sanctioned by penalties points.

Specifications

The first version of the website will be composed of several functionalities listed below:
- As anonymous:
    - View current projects and information about them in the index page
    - View projects ordered by categories on the categories page
    - View projects' information one by one thanks to a dedicated page
    - Register as a new user, authenticate himself

- As a registered user:
    - Contribute on projects
    - Create a project
    - View and edit his profile
    - Log out

- As an administrator:
    - Overall platform view with an easily usable dashboard
        - View all important data
        - Create, Read, Update, Delete items

You have to use Servlet/JSP implementing JSP Model 2 Architecture and JPA implementing good practices (DAO, Factories...).
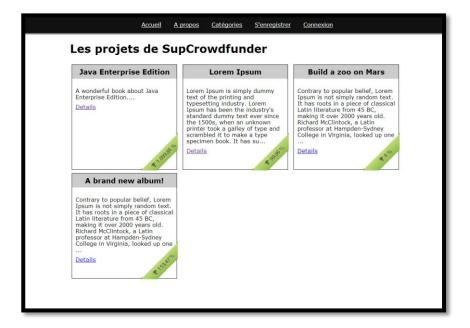
1. Data Structure

Before starting the project, draw an UML class diagram representing the JPA Entities you will need with their relationships.

This diagram will be useful for you and for the team that will develop the next version of the platform.

The class diagram must be returned in *jpeg*, *png* or *pdf* format (otherwise your STA will hate you!).

2. Index page

The index page must show projects' name, truncated description and completion percentage. A navigation area must be displayed.

3. Categories page

Similar to index page, this one must display projects ordered by categories. A filter must be available to display only projects related to the selected category.

4. Project details page

For index and categories page, each project must have a link redirecting to its details, including its creator, its category, the creation and the completion date.

5. Register and authenticate

When registering, users have to give some details about them, like first name, last name, email address, and password. Or course, you'll have to check user input. When the user registers him, it must log him in too.

The user can authenticate by a dedicated log in page with email address and password.

6. Contribute on projects

You'll be in charge on this website user experience. It's up to you to provide an easy way to contribute on projects. Of course, this project is currently not registered in any bank, no need to implement a credit card transfer system.

7. Create a new project

Authenticated users can also create a new project, with all fields showed in the fourth chapter of this document.

8. View and edit his profile

Users can view a profile page in order to change their details without any confirmation. You've been told that on a later version this panel will include billing information and other stuff, but that's none of your business at the moment.

9. Log out

This functionality must log the user out.

10. Overall platform view with an easily usable dashboard

This page is very important. Administrators must be able to view quickly how the platform is going. Number of projects created, for a chosen amount of time, the same for registered users.

As the business model is working on users' contribution, view how much money were spent is crucial. Think about an easily usable dashboard, putting together all data you're working with.

11. CRUD on entities

Of course, in this administration panel you'll also be able to administrate data. Create dedicated pages for creating, viewing, updating and deleting users, projects and categories. These functionalities are for support purposes. As a result, for project creation, find a way to set another user as the creator.

Instructions

- Plagiarism is forbidden.
- Make accessible his code on a public sharing platform (as GitHub) before the end of the evaluation is forbidden.

Don't abiding by these rules will result in suspension of your assessment and will be considered cheating.

Notation

Functionalities	Points
Data Structure	4
Index page	2
Categories page	3
Projects details	2
Security (register, auth, log in/out, filters)	4
Contribute on project	2
Create a project	2
View and edit profile	3
Administration panel	8
Administration CRUD operations	5
Design	3
I18n on labels (Bonus)	3
Code Quality & Conventions	2
TOTAL	**45/40**

Return

Return your graded exercise as a ZIP archive named as follows:
3JVA_SupCrowdfunder_Campus_IdBooster.zip.
For example: 3JVA_SupCrowdfunder_Lille_10000.zip
Not following this convention will result in point loss.

You will send the archive **to your STA SUPINFO email address only** and **before the 27th November 2013 at midnight**. After that delay, your graded exercise **will not be corrected and the mark 0 will be assigned to you**.