Assignment 4 – EJB and JPA
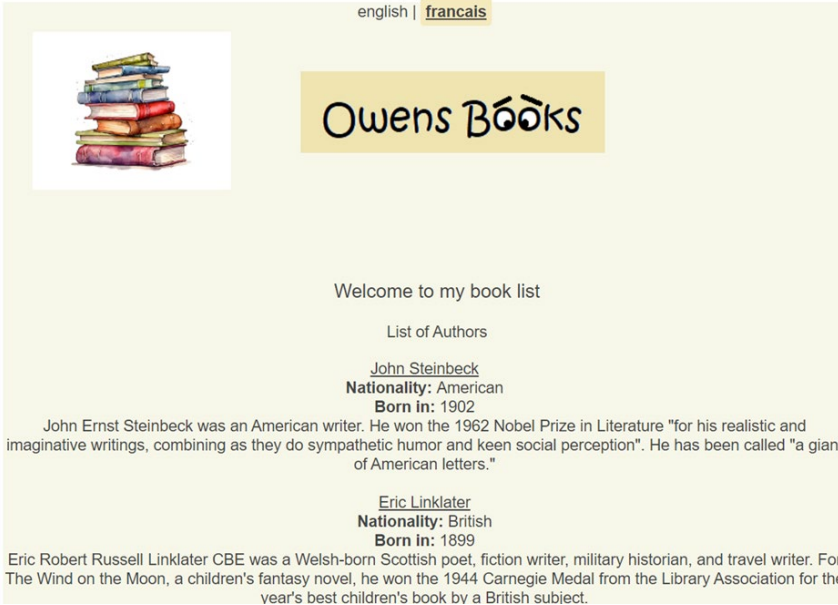
In this assignment, you are given the code! Well almost – you are given a working application which is a mini version of the AffableBean tutorial application. You must then use this as a template for your own solution which will display artists and their works instead.

This sample application which you are given is used to display the contents of a private book list. This is stored in a MySQL database using 2 tables: authors and books. These tables are mapped to 2 entity classes, Author and Book.

The sample application pages

index.jsp

When an author's name is clicked on, it calls the controller servlet, passing the author id. The controller server retrieves the author id from the URL, and uses it and the Façade class to retrieve the Author entity and the collection of Books for that Author. Control is then forwarded to the only other JSP page:
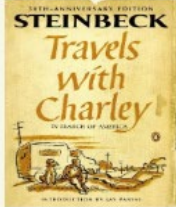
authorBooks.jsp

here the books for the chosen author are displayed.

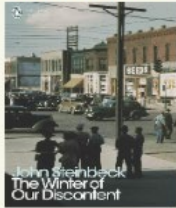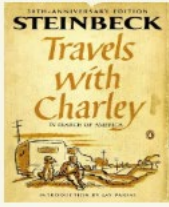On any page, when the language is changed at the top, the text on the page is changed, e.g.:

Your challenge for this assignment

Using the sample application you are given as a template, implement a similar application to display **artists** and their **artworks**. You will need to:

1. Create entity classes for Artist and Artwork, annotated using JPA
   a. Artist minimum information
      i. Name, nationality, year born, biography
   b. Artwork minimum information
      i. Artist, title, description, medium, imagename
2. Create and populate MySQL tables in your database to store artists and artworks
3. Create a persistence unit which provides the JPA with access to the database
4. Create the session bean Façade session bean classes for your entity classes
5. Use <context-param> in web.xml to define the path where artwork images are stored
6. Use <fmt:message key='xxx'> tages in your JSP pages to hold language-specific texts
7. Use resource files (like messages.properties) to hold different language versions of texts (messages)
8. Define the resource bundle (resource files containing messages) using <context-param> in web.xml
9. Implement the controller servlet to handle requests such as for artworks for a specific artist, or to change the language
10. In the controller servlet use the init() method to retrieve the Artist entities (using Façade class) and store them on the session
11. Use your own logos and image files for the artworks– not the ones in the sample application

To submit your assignment:

- Perform a 'Clean' on the project
- Zip the project folder
- Submit (upload) the Zip file for the assignment