Hi, i’m Lisa, I worked in chemical laboratories and now i’m doing a professional reconversion in web development at Elan formation.

The goal of this project (is to create a forum) develop a functioning structure of a forum. Moreover, we will recreate a framework like Symfony (Symfony is a php bookstore and a php framework) based on MVC pattern, this would allow us to better understand Symfony later.

This project must follow specifications:

The use of HTML, CSS on client side, PHP on server side, PDO (PHP Data Object) for the exploitation of the database in the PHP code, and MySQL for the database.

PHP is a popular general-purpose scripting language that is especially suited to web development.

A framework is a working environment proposing a tool set which allows to make developer work easier. Because of his technical structure and logic, the developer must respect certain practices and development standard.

The first step in this project was to make a schema entity-relation on JMerise. JMerise is a method of analysis which allow design and management of a informatic project. We create a conceptual data model (MCD), this is a schema representing the structure of the information system, from a data perspective like relations between several data. In this project there is 3 entities (object): post, topic and user each one having properties. Then we convert MCD into MLD (logical data model) which with MCD contains, precise the structure and the data organization. Then JMerise convert this MLD into a script that we inject into Laragon to create a database.

Then we had to make a mock-up of the future website, analyzing the flow of navigation and the arrangement of the information blocks presented to the user. This allow to evaluate the ergonomics of the site.

A design pattern is a general reusable solution to a commonly occurring problem within a given context in software design. The most of the frameworks use the MVC pattern that’s why here we use the MVC.

The Model View Controller is a software design pattern. This pattern is used to designing the layout of the page. There is 3 components :

* The Model, is a component which contains data,
* The view, is a graphic interface which can contains information, form and button
* The controller, deal the user action’s

The user makes a request at the controller. The controller ask data to the model. The model recovers data in the database with a SQL request and return the data to the controller. The controller return the data to the view which return a graphic interface to the user.

The PHP Data Objects (PDO) is an extension defining the interface to access a database with PHP. It is object-oriented. It is a layer of abstraction between, the PHP application and a database management system (MySQL).

We had to secure our website to prevent vulnerabilities like XSS flaw. This one consists in injecting an arbitrary script into a page to cause a well-defined action. Other users execute the script without realizing it when the page is opened. This script can transmit data from one site to another. To prevent this XSS flaw, we must use php functions like “htmlspecialchars()” (that filter the “<” and “>” )or “htmlentities()” (that filter the html entities).