

Contribution to the development of a Java EE application dedicated to conception and diffusion of teaching material

Internship at TiceTime
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Master's Degree in Information Technology – Software Development

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During that internship, I joined a running project, launched few months ago and which will continue a few more once I'll be left. The application on which I've worked is called Elaastic. It's a tool for teaching content writing and diffusion. Its main goal is to allow teachers to write their course once and export them in several formats to broadcast them to their students directly from Elaastic or using their university's LMS.

TiceTime wanted to propose this offer of internship to progress on this project using more labor force. So, I joined the team that works on this project composed with :

- John TRANIER : Technical director at TiceTime ;
- Vincent TERTRE : Student in block-release training for 2nd year Master's Degree in Software development at Paul Sabatier University.

Concerning work methodology and conditions, I made this internship remotely from home. The main reason for that work model is that TiceTime has no working office. The company has currently two members full-time. Because they aren't often in Toulouse, office would not be occupied all the time. Besides, we met sometimes together at La Cantine¹ when all the team was in Toulouse.

From a technical point of view, Elaastic is a web application developed in Groovy using Grails framework for the body and back end. Front end is developed in Javascript using AngularJS framework.

My actual work on this project was to develop new functionalities to improve Elaastic and bring it toward its final goal. I participate to the improvement of the course exportation system adding new target formats like IMS Content Packaging that is compatible with the Moodle platform.

I also allowed the user to add new elements to a course like interactive questions so the students can answer them and share their results with their class.

Then, I worked on a broadcast system to allow students to access their teacher's course in the several exportation formats available.

Finally, I set up a cache system on the course transformations to facilitate mass retrieving by one or more group of students of the same piece of course.

¹La Cantine is a co-working space in Toulouse town center.