Device registry

Project 2

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Information and communications technology

Tekijä

Ryhmätunnus / titteli

Koulutusohjelma /ala / yksikkö /tukipalvelu

INTRODUCTION

The goal of the project was to create a device registry for Savonia University of Applied Sciences to be engineered as a web application.

The university was lacking a proper method of keeping track of all of its devices, thus loaning devices for students and faculty was unpractical. This led us to develop a web application for managing devices and loans.

PROJECT DESIGN

At the start, we wrote out a plan of the project to keep track of our progress and also to inform our supervisors. The project was developed in cycles (aka “sprints”), each lasting for two weeks’ time, divided over a period of four months. The project was divided equally for each sprint, each sprint having its own goals and deadlines. At the end of each sprint, we wrote a report on the progress we had made and made a plan for the next sprint.

The programming languages and technologies we used were ones commonly used in web application development. For the layout and styling, prominent in the user interface, we used HTML (Hyper Text Markup Language) and CSS (Cascading Style Sheet) together with Bootstrap & jQuery libraries, to create a scalable and simple interface to be used in both desktop and mobile devices.

For actual functionality, we used JavaScript with jQuery and AJAX (Asynchronous JavaScript And XML) on the client side, and PHP (PHP: Hypertext Preprocessor) on the server side to manage all http requests sent by the user. The database was created using MySQL, and the database structure was carried out as a relational database for maximum flexibility.

As our development environment, we used a program called WAMP (Windows, Apache, MySQL and PHP), where we could test and troubleshoot our product. As for editors, we mainly used Notepad++, but also some Sublime.

CONCLUSIONS

We managed the project fairly well. Each sprint had its own difficulties and occasionally pushed certain deadlines further to the next sprints. In addition we underestimated the workload of certain features.

Despite all these issues we managed to develop the application to a releasable state in time.

The application includes all the features the client requested and they work as they should. The development team had high morale and high coding standards. The code is easy to read and modify, as the code includes helpful comments to aid future developers and administrators.

There were some features that didn’t make it to the final product. For example, a way for students and faculty to discuss about loans and reservations in a private chat. This way students could ask questions regarding device availability, loaning etc.

Overall, the project was educational, as we got to further our knowledge in a wide range of programming languages and technologies. The project also introduced us to setting ourselves sub goals to achieve each sprints necessary objectives.

BRICKBATS AND BOUQUETS

Our supervisor was unclear on the specifics of the project. Therefore at the start there was a little bit of uncertainty on what features to include in the application. It was good practice, however, as we were told by our supervisors that it is not very uncommon to have clients, who don’t know what they want in their product.

Special thanks to Savonia UAS for providing us this interesting project.