TDE
DIGITAL CREATIVES IN SPORTS

Developing the Improved Liveblog

Improving the Grand Prix experience for F1 viewers at home

S8 Graduation FHICT

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By Jordi Franssen

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Introduction

Over the past few weeks I have been busy developing the front-end of the newly improved liveblog. This part of the project is the core business and I elaborated this into an MVP. I assumed this part of the project would be the most difficult as the project contains all kinds of languages and technologies that I haven't used before. However, I was able to finish it much earlier than expected.

This document contains an overview of the activities during the realization of the front-end. I have included topics like my approach, what went well and where I needed help from colleagues.

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Technologies and Languages

RN365 is based on multiple coding languages that somehow work together. The front-end is built in Svelte, the backend and CMS runs on PHP. The CMS also needed to be modified, TwigHTML is used in combination with Sass.

One particular complex page was the liveblog page in the CMS. This page uses TwigHTML and Sass for the components of the liveblog editor, but uses Svelte to visualize the liveblog itself. To communicate between these components I had to do a lot of DOM manipulation, which is not the most neat way of coding, but it works.

The mix of these languages result in a project that's quite complex. Fortunately, I have plenty of experience to figure out how to find the files that I need to modify. By using the development options in Google Chrome, I was able to find class names and ID's that I could use in the IDE's search feature to find the correct files.

A technology that was new to me is DDEV. The project runs in Docker containers to simulate the environment as if it was running on the actual server. However, Docker is quite complex and needs a lot of commands to run the project. This is where DDEV makes life easy for developers. DDEV makes sure Docker containers will always start by using only one command.

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Approach

My company coach John gave a brief introduction to the project and explained how the file structure works. From there on, I was able to do all my work myself. Some backend functions were fairly complex, so I asked a backend developer to help with these modifications. How the backend exactly worked is still quite complex, but I do know what files and functions to modify in case I need to add some features in a later stage of the project.

Ad Hoc Method

I haven't used scrum to develop the improvements of the liveblog. This is because I simply started with orienting myself in the project, trying to make some changes and see how it goes. From there on, I assumed that I could estimate the backlog for a scrum board more easily. But the development went so smoothly that I was already halfway finished building the liveblog when I considered it was time to set up a scrum board. Since the development went so well, I decided to apply the Ad Hoc Methodology for the remaining part of the development process. This on-the-fly project management method aligns perfectly with this part of the project as the complexity of the project caused a high level of uncertainty while the goal was still quite straightforward.

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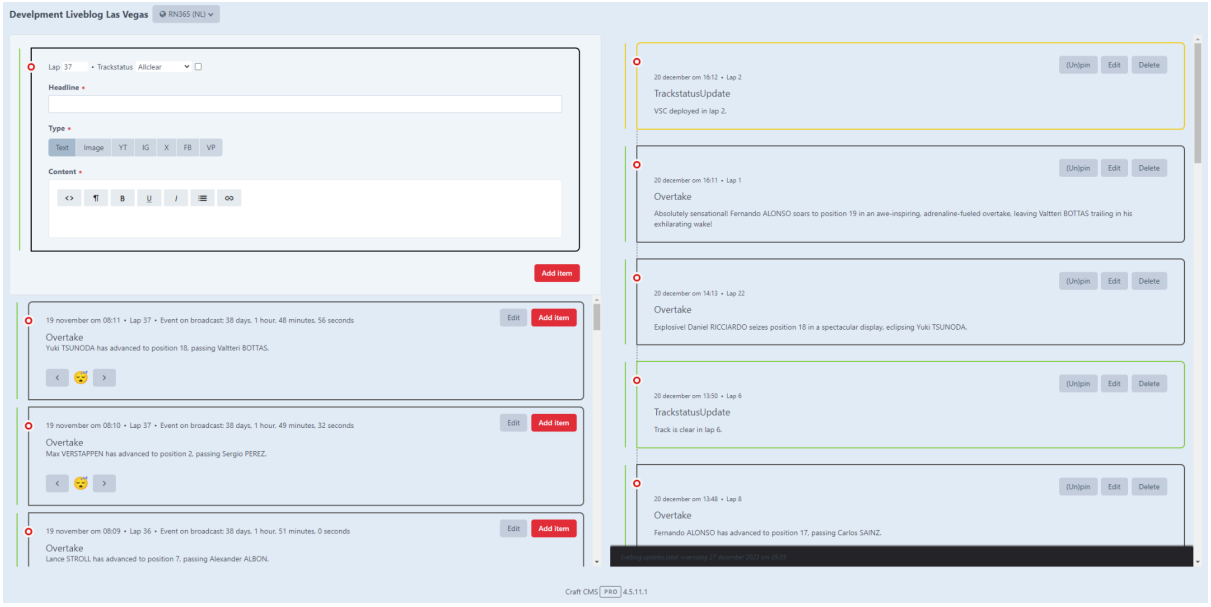
Result



https://s8-graduation.jordifranssen.com/img/liveblog.png

Above you can find a screenshot of the CMS of the improved liveblog. Starting in the upper left corner, you can see the improved editor. The editor used to be a boring form, but I applied the styling of a liveblog item so the person who edits the liveblog can visualize what the new liveblog item will look like. This is especially useful for the track status indicator. The styling changes color when the editor chooses a different trackstatus, just as it is visualized in the actual liveblog for the users at home.

Moving on, below the editor you'll find the list of events that have been automatically detected by the backend. The styling of a liveblog item is applied here as well. For each event type, the editor is given 20 options to express this event in writing ranging from least exuberant to most exuberant. I used emojis to indicate the level of exuberance for each option. Next the editor is given the option to directly add the item, or to edit if necessary. Since the events are detected about 25 seconds before they appear on the broadcast, a 25 second countdown clock is running to indicate

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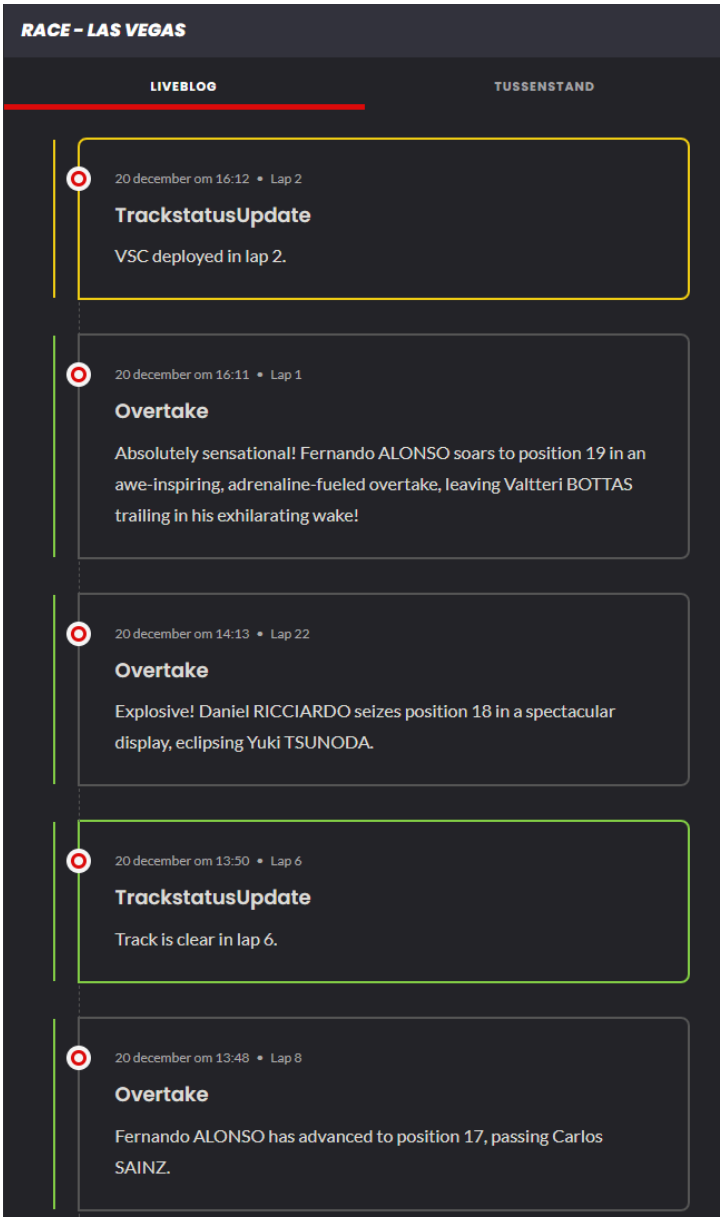
how many seconds are left before this event is happening on the broadcast. This way, the editor can deliver a truly live experience for the liveblog users at home.

The same Svelte component is used in the liveblog in the CMS as in the front-end of RN365. Therefore, the front-end was also finished from the moment I finished the CMS.



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Feedback

I visited RN365 to get some feedback on the progress and things I made. I spoke with Jan and Jesse, both were very excited about the things I made. The main thing I wanted to discuss is automation. Right now, events end up in a list after which the editor can choose from 20 different lines of text and post the liveblog item right away, or to edit the item and add a custom text. This automation works perfectly for RN365. More automation would mean a loss of control over the liveblog and it might also post too many items to the users. We discussed the 3D visualizations. They indicated that a little map to indicate where an event happened would be quite important, so I am going to implement this in the CMS. We also decided to reverse the emojis back to numbers. Numbers don’t say much about what the buttons actually do, but once you know, numbers indicate better what the exuberance is of the text.

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More feedback

John and Erik suggested removing the buttons entirely and replacing them with a range slider. Before, the user needed to click through 20 iterations of the content. With the range slider, this is reduced to once single action. Using a range slider means a slight loss of control, as it is a bit more difficult to select a specific option of the 20 options available. However, this doesn't matter as there's basically no difference in exuberance in option 5 or 6 for example.

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Summary

I assumed developing the improved liveblog would be the most difficult and time consuming stage of the project as a combination of technologies and coding languages make the project fairly complex. Fortunately, development ran smoothly and I was finished before I knew it.

My plan was to simply start developing and see how easy it goes. This way I assumed it would be easier to estimate a backlog for a scrum board. However, before I knew, I was already halfway finished. Because of the complexity and straight forward goal of the project, I decided to use the Ad Hoc method instead.

I ended up with a modified page of the CMS that receives the event detected by the backend. The editor has a variety of text options to choose from ranging from least exuberant to most exuberant. The editor can add an item straight to the liveblog, or edit it if necessary. A countdown clock is added so the editor can time the posting of a liveblog item to deliver a truly live experience for the liveblog user.

I visited RN365 for some feedback on the things I made. Both Jan and Jesse were very pleased with the liveblog as it is. The most important thing I wanted to know was if the automation was right. Jan indicated that an edit button and an add button is exactly how he would want it. We also discussed 3D visualization. This feedback will be applied in a different phase of development. In a different feedback moment, it was discussed to change the emoji buttons with a slider. I applied this feedback.

Learning Outcome clarification

- Learning Outcome 1: Professional Duties
- Learning Outcome 2: Situation-Orientation
- Learning Outcome 6: Targeted Interaction

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Learning outcome 1 applies to this deliverable as this is a professional duty on a bachelor level in the activity of Realize and Manage&Control, as I realized the newly improved liveblog in the shape of an MVP and used the Ad Hoc method to manage the tasks in this stage of the project.

Learning outcome 2 applies to this deliverable as I used multiple technologies and coding languages that TDE uses to develop their projects. Therefore, I adapted to the processes and way of thinking of the company. My work is also relevant and valuable as this is the core business of my project. I also worked in a methodological and structured way, as I used the Ad Hoc management method to manage tasks in the development process.

Learning outcome 6 applies to this deliverable as I communicated appropriately with colleagues and got help with tasks I couldn't complete on my own.