Transferability document Experience box & Data

PSV

Semester name: DDBL

DATASTIC

1. Project Description

1.1. Context

The client for the project is PSV. The company is currently creating a Brainport Experience Box within the stadium where supporters can experience the match in a different way.

The problem that PSV Eindhoven is presently experiencing is that the data collected comes from a number of sources. The customer requires that all data be combined, cleaned, and prepared so that it can be displayed more readily in the app.

The goal of this project is to deliver proof of concept with some advice on how to improve the visitors' experience in the Brain port Experience Box.

1.2. Main research question

How can existing data be gathered, cleaned, and combined with new data based on the user requirements within the PSV Experience Box to enrich the fan experience?

1.3. Sub questions

1. What data could be useful to enrich the fan experience based on the user requirements?
2. How will the available data be used to enrich the fan experience of the stadium?
3. How can the available data sources be combined in a way that it is more manageable?
4. How can the combined data be connected to the interface of the application?

1.4. Results

Portfolio assets: Project Plan, Research Doc, Python script, Database

1.4.1. Project Plan

At the beginning of the project, the group created a Project plan where the most important guidelines of the project were described, including the main research question, sub-questions, the scope of the project, methodologies that were used throughout the project, and set up initial deadlines. The project plan was reviewed several times by the client and by Datastic's coach to provide quality feedback and agree on the terms of the project. When both parties were agreed on provided way of working that was documented in the project plan, it was validated.

1.4.2. Research Document

In the research document all the decisions, research, and findings that were made during the lifespan of the project were documented. The document itself is used as a validation of the results that the Datastic have achieved throughout the project. It also includes the project group's recommendations and advice for the company.

1.4.3. Python script

Datatastic provides Python scripts that retrieve data from Coosto and Ortec APIs, and for processing sound data from Sorama. For Coosto and Ortec, the scripts used are not optimized to refresh themselves

every day or every hour, this will have to be updated when working with real-time data. The scripts used for Sorama are prepared for the way Datastic initially received the data (aprox. 20GB) and is not suitable for real-time data.

The python scripts can be found in the zip file “psv.zip”.

1.4.4. Database

Datastic made an test environment to store the data. Datastic made sure to make the test environment as realistic as possible. To do this a database in Microsoft SQL Server Management Studio was created. PSV has a windows environment with an SQL database as well. Because of time limits, Datastic did not transfer the test environment into the existing one of PSV. This must be done in the future to validate the work created during the project.

The stored Ortec data is validated with the client of Ortec. Datastic and Ortec had 2 review sessions to come to the end result.

1.5. Methodology

The project was realised using the Agile SCRUM working method. Datastic members had weekly meetings with stakeholders from PSV and Fontys Hogescholen ICT. During these meetings the development of the project was discussed and evaluated, and new actions were created to meet the client expectations.

The approach during the research is based on the ict research methods. This method provides support for structuring research activities for each research question.

Subquestion	Research strategy	Methods	How?
1. What data sources could be useful to enrich the fan experience based on the requirements?	• Library • Lab • Field	• Literature Study • Best good and bad practices • Data analytics • Survey	• Do research on what fan experience is. • Research on how other data could be useful by looking at best, good and bad practices • Analyze the data we got provided from PSV. • Send survey to Experience Box customers to get information on what data they would like to see.
2. How will the available data be used to enrich the fan experience of the stadium?	• Field • Workshop	• Interview • Business case exploration • Literature study • Requirement prioritization	• Interview stakeholders on how they want to use the data • Analyze the most viable options or scenarios • Do literature study on how to set up requirements based on interviews.

			• Make a MoSCoW table of possible solution
3. How can the available data sources be combined?	• Library • Workshop	• Literature study • Community research • IT architecture sketching	• Research on how to combine data • Search for the problem in trusted online communities • Sketching the high-level architecture
4. How can the combined data be connected to the interface of the application?	• Library • Field	• Document analysis • Community research • Expert interview	• See what the interface of the app consists of • Search for the problem in trusted online communities • Do an interview with an expert on how to connect the data to the interface of the application

2. Handover

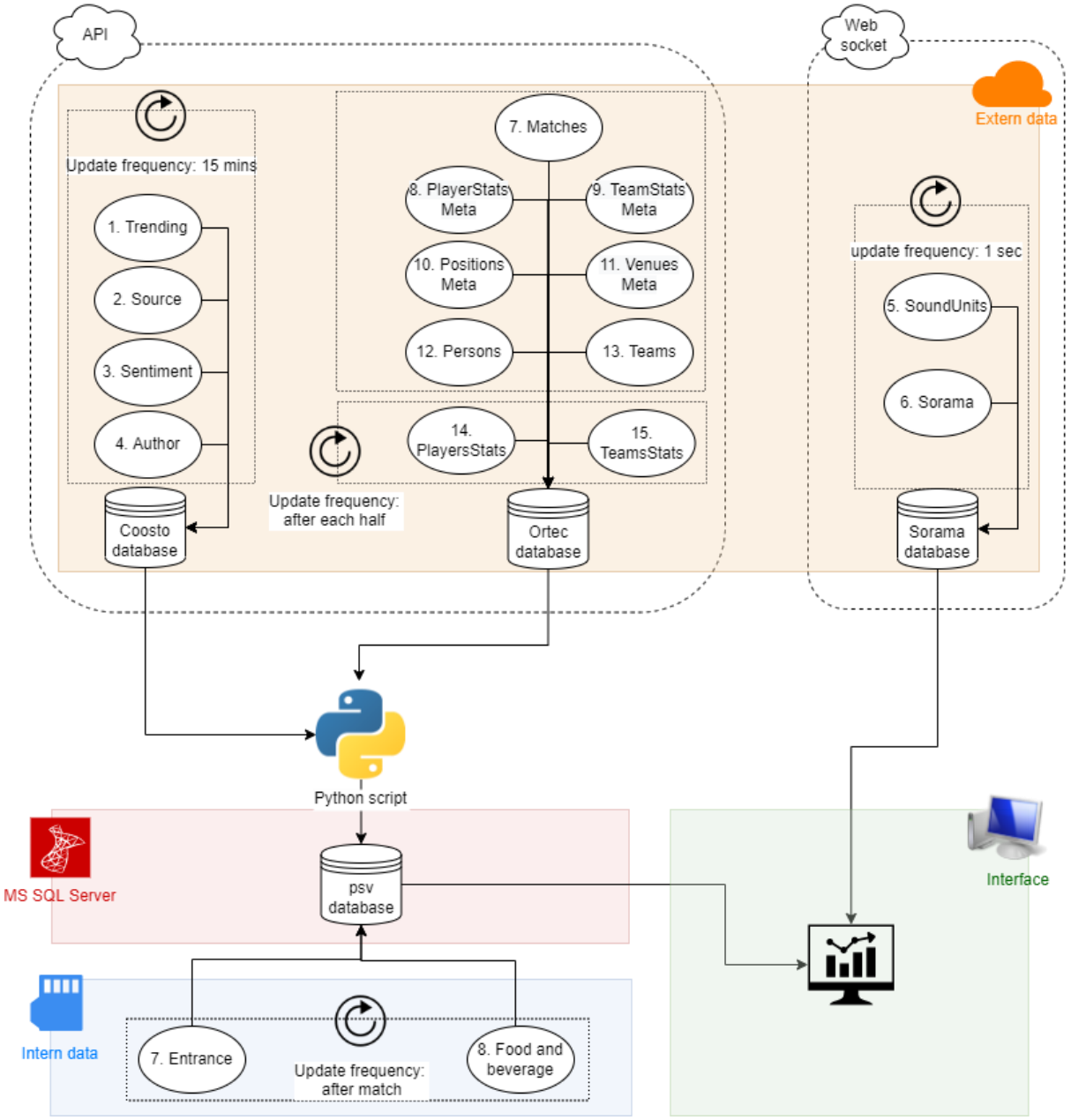

Figure 1 IT Architecture

Figure 2 MoSCoW method