Reading Guide

S6 Media Design – Research Based Learning

Contents

PSV Media Platforms

Approach

During the project we worked with Trello. In Trello we worked Scrum; meaning we would post tasks/activities that needed to be undertaken for each sprint and when the tasks/activities were completed we reviewed each other's work. Reviewing often happened during the stand-ups (Monday and sometimes Wednesday morning) which were online via MS Teams. On Tuesday we met on location to discuss and/or review work. On Thursday we each worked individually on our portfolio. Friday was often working from home individually. Google Drive was used to store all our research work and a GitHub organization was created to manage code.

Project method

After the scoping of the project, we assigned a specific user story to each project member to work on. I decided to apply the Design Thinking method, because it's a very flexible method where you can start with prototyping if needed and then go back to a phase that normally would be explored earlier (e.g. empathizing). I predicted that I would probably have to make POC's early on to explore the technical possibilities for my user story so using Design Thinking would be a safer option than the less flexible Waterfall method for example.

Sprint 0 - Project Kickoff & Orientation

On the introduction day, groups were made and linked to assignments of clients. Our group was linked to the assignment of PSV.

Context

PSV is a Dutch sports club and is mainly known as a football club. PSV wants to offer its fans and followers a good and relevant experience on every device and at any time. PSV currently has a website and two native apps to provide this.

Problem/opportunity

Technological developments are moving fast and there are now countless possibilities for setting up digital platforms. Setting up and maintaining a custom-built app requires a relatively large amount of work and investment, because you have to develop everything separately for android and ios. At the same time, the possibilities of mobile websites are increasing. This all lead PSV to wonder how PSV can best organise its digital platforms with regard to what they want to offer fans and followers.

Goals

The main goal of the project is to make the PSV app more valuable to PSV fans in a future-proof way. PSV originally wanted to let us research what technologies a new PSV app should use. In addition, we (the project group) saw an opportunity to also research and redesign some of its most attractive/valuable features/concepts so that more value could be added to the PSV app in the future.

Debriefing & Project Plan

In the debriefing meeting we listened to what the client had to say. PSV told us about their problem. Based on the information from the debriefing, the first version of the project plan was created.

Researching software architecture

While waiting for meetings with PSV to update the project plan, we were doing research on the current situation. I did literature research on what entities the architecture of PSV's media platforms consisted of. This would help give us an overview on what could be improved while keeping into account the existing software architecture (e.g. API's) and stakeholders. The knowledge was used to create a software architecture diagram using the C4 model.

Sprint 1 - Empathize & Define

After everything regarding the scoping of the project was clear, it was time to define a target audience and understand their needs.

Target Audience

"Who is the target audience and what are their needs/experiences/goals/frustrations?"

The current PSV app has lots of features/sections we weren't sure of that they're useful to their target audience. This is why we decided to only work on features that would add real value to PSV fans. A mobile app is most valuable to have when you're not at home behind your desk. For this reason we selected the loyal/more hardcore PSV fans as our target audience. These type of fans often go to the Philips Stadium to watch a game. An app that can save your ticket so that you can scan it at the stadium's entry is useful for the target audience.

Interviews

To understand the target audience we each searched for PSV fans that fit within the target audience (loyal/more hardcore fans) and interviewed them to gain insight in what their annoyances/struggles/goals/needs are. The insights from the interviews were helpful later on when we started working on user stories.

Sprint 2 - Ideate & Prototype

In the previous sprint we focused on a more concrete target audience, and through interviews learned what frustrations/goals/needs they had. Based on this information, user stories were formulated and assigned to each project member.

User Stories

I decided to work on two user stories. I reformulated these user stories into one since the first one was too generic and not concrete while the other was too limited.

The new user story became: "As a PSV fan I want to receive notifications that give a more clear context when something happens that's related to a (PSV football) game so that I can keep up with what's happening and be more invested in the game". In my plan of action, I formulated a fitting main research question and design challenge.

Researching PSV's notification system

My first research for the user story was researching the current notification system of PSV's app. The main question was to research what the notifications system looks like, meaning how it works on a technical level and what it looks like from the user's perspective. I learned what design was used to display notifications and the notification settings by using the app for several weeks. This gave me a good understanding of the user experience and how much the notification system contributes to the immersion/game experience.

Trend analysis football score apps

While I was researching PSV's notification system, I also started trying out other football score apps that were popular and had good reviews. This way I could compare the notification systems with PSV's notifications system and see how other apps create immersion/atmosphere through the use of notifications. The goal, therefore, is to understand how other football apps create more immersion/atmosphere around games for their users through the use of notifications. I concluded that showing images of the game, sending frequent notifications of events and adding custom sounds improved the immersion.Flutter notifications research

Flutter notifications research

During the Sprint 1 presentation I advised to research the capabilities of Flutter in regard to notifications. This was needed since PSV wants to keep using notifications in the app. I researched what the functionalities and best practices of Flutter's notification capabilities are by applying desktop research and the literature study method.

Designing

After gathering enough info about the target audience and trends, I started designing. Figma was used to create the designs. I started wireframing so that I could quickly decide what type of layout was needed and what information the screens/pages would need to contain. When I had my wireframes ready, I started creating a high-fidelity prototype based on the wireframes. This meant adding colors, fonts, effects and interactivity. During the wireframing and high-fidelity process I applied basic design principles/guidelines and the branding guidelines of PSV. The basic principles/guidelines were; menu layouts, icons, content alignment and content management. The applied branding guidelines were; typography, color palette, icons.

Sprint 3 - Testing & Final delivery

This sprint was mostly about getting the project ready to be delivered to the client and present our findings and advice to them.

Testing design

While I was designing I began thinking about what would needed to be tested. Of course the main goal of the user story was to create more immersion for PSV fans through notifications, so I made a test plan to be able to see if the design I created would create more immersion. Unfortunately I was not able to get all the resources in time to carry out the test plan. In my test plan I wanted to make a prototype that would simulate the current notification system of PSV and compare it to my own designed notification system prototype. Sadly, I needed to spare time for finishing the high-fidelity prototype and transfering the project to the client correctly.

Final delivery

The last 1-2 weeks we wrapped up working on our user stories and discussed what the best way to deliver the project was. We figured it was best to create a well-organized folder in which we would include the most valuable research and a 'delivery/transfer' document. This document contained references to where they could find specific research in the folder, the link to our Figma designs, link to the GitHub organization and finally our advice to PSV with a conclusion and recommendations. This folder was handed to PSV in an email after we presented our findings at TQ.

Value of the project

For PSV this project is just the beginning of a bigger project. Our work will serve as inspiration and push PSV in the right direction. PSV will want to take our advice, research and designs and continue from there.

Evaluation

Looking back at the project I must say I'm happy about our process as a group. The start was rough, because the initial assignment wasn't 100% fit for ICT & Media Design students. However, after a lot of discussing with the client we agreed on the scoping. From then on we applied our expertise and kept a good communication going with the client. The communication within the group was good, but could have been better. For example, a few times project members failed to show up for the weekly Monday stand-up, because they forgot it was planned (despite it being scheduled in MS Teams). Next time I will send reminders on Sunday or advise my project members to set a reminder.

If I were to describe my role in the project I would say that I was a project member that made sure the communication was consistent and that others knew what to do. In short, I had a leading role which I'm pleased about since it's a useful skill to learn in the ICT industry.

From this project I learned that understanding an assignment and agreeing to a scope can be complicated, so it’s good to not rush it, but to keep discussing until everything is clear and agreed upon by the client and the executive party.

On a technical level we didn’t manage to do as much research as PSV would have liked. In the future when I’m working as a full-time front-end developer, I expect I will have to do more technical research, so in future projects I would like to put more time into that aspect when possible. On the other hand I did do quite a lot of designing during the project. Not only on an individual level, but also on a group level since our designs had to match, which is experience that can be useful for a front-end developer.

International Project

Preparation Week

In this week, me and other students studied the metaverse as preparation for the international week. In our first meeting we discussed the first assignment which was about understanding the metaverse. For the second assignment we each made a metaverse avatar that represents ourselves, and as final assignment we made a group photo of the avatars, discussed how we created our avatars and what our joint opinion of the metaverse is.

International Week

In this week we started brainstorming metaverse concepts for a selection of clients. We achieved this by doing desktop research on the clients to understand what products/services they offered and then writing down metaverse ideas on a whiteboard that could improve those products/services. After voting, we chose to continue with Boymans.

Context & Concept

For Boymans museum we came up with a potentially valuable metaverse concept. This was accomplished by applying group brainstorming as a method.

Designs & video prototyping

After concepting we made visualizations of what we imagine the concept would look like. I made visualizations of the concept with Photoshop that would be used in the video prototype. The video prototype would be perfect as a pitch of our concept.

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Preparation Week

From this project I learned a lot about the Metaverse which I believe will be the main technology trend in the future. I expect every business will want to be part of the Metaverse. For me as ICT & Media Design student and front-end developer, this means learning skills like 3D modelling and designing in the context of 3D spaces in general will be useful. In addition, I gained more experience in cooperating with international students and communicating with international teachers.

Individual project

Define

Context & Problem/Opportunity

As a Formula 1 fan I need the race schedule. During each weekend there is a schedule that may differ in terms of times. Recently I have seen a lot of positive tweets from the F1 Twitter community about F1 widgets. The widgets allow you to quickly see the schedule of the upcoming race weekend and view the championship standings between teams and drivers. Widgets can be placed on your phone's home screen so that you can get the information fast. Opening an app to view the schedule takes around 5-10 seconds longer and a lot more taps & swiping.

However, there's currently no app for Android that provides F1 widgets while lots of F1 Twitter users have an Android.

Project plan

In the project plan I defined the goal of the project, stakeholders, scope, main question and design challenge.

Target audience

In the project plan I defined the goal of the project, stakeholders, scope, main question and design challenge.

Empathize

Interviews & Survey

Through interviewing F1 fans and sharing a survey on F1 Twitter, I gained insights on how the F1 community gets the schedule info currently and what their experiences with widgets are.

Prototype & Test

Software Architecture

After technical research I prototyped POCS to test how efficient it is to develop a widget with some of the researched technologies.

Widget Design & Testing

I've had several design iterations and tested some of these through 5 second design testing.

Evaluation

My goal for this project was to learn how to make widgets and how to use an API to transfer data to a widget since this is useful if you want to become more experienced as a front-end developer. Because I couldn't find an expert in developing Android widgets I had to spend more time researching what the most efficient way to make an Android widget is. This meant I had less time actually implementing my design so I mostly learned about the theoretical aspect of widgets and only a bit of the practical aspect by making POCS. I would like to continue this project in my free time, because it feels unfinished.

Learning Outcome	Proof
User interaction (analysis & advice) You analyse the user, the interaction, and the user experience, also taking state of the art interactive technologies into account. You select a suitable design process to be able to advise on UX interventions based on a validated UX design. *By analyse, we mean that you carry out research and record the conclusions.By state of the art interactive technologies, we mean that you investigate the latest technologies that may be relevant to the project.By a suitable design process, we mean that you make a justified choice for your design process and describe the different phases of this process for your project.*	**PSV Group Project** Target Audience Interviews ->* Together with the other project members I helped define the target audience so that we could find the right people to interview. This was part of the empathize phase, which is part of the Design Thinking process we used. Flutter Notifications ->* I investigated the possibilities of notifications with a relatively new hybrid framework, Flutter. This included research into what public libraries/widgets would be usable and in what ways they could be beneficial. **Individual Project** Software Architecture ->* I did research into what technologies are most efficient at creating Android widgets. Target Audience ->* I did research into the target audience by interviewing and creating a survey. **International Project** Preperation Week ->* I researched the metaverse on a technical and ethical level. **PSV Group Project, Individual project** Design Thinking ->* In the reading guide I describe the different phases of the project process and why we chose design thinking.
User interaction (execution & validation) You execute and evaluate the user experience of an interactive product. You document the development process for the stakeholders.	**PSV Group Project** High-fidelity Prototype ->* I made a high-fidelity prototype so that I could test if/how well the users can accomplish their

By execute, we mean that you produce a high-fidelity prototype you can present to users.By evaluate user experience, we mean that you not only put forward the user friendliness of a product, but map the total user experience.By document, we mean that you can explain the choices you make in relation to user experience to stakeholders effectively.	goals. Furthermore, I explain how my design choices support user friendliness. Interviews ->\ I mapped what the user experience is like for the current PSV app users by interviewing them. Flutter Notifications ->\ I researched what the best Flutter practices are in relation to the development/maintaining process of the notification system, but also in relation to how it affects the user experience. Design & Testing ->\ I documented why I made certain design choices in relation to the user experience. **Individual Project** 5 second A/B testing ->\ I mapped what the user experience is like with different kinds of widget designs. Target Audience ->\ I mapped what the target audience currently experiences (how they currently get info)
Software design You design and evaluate a software system with existing components or libraries using predetermined quality criteria. *By you design, we mean that you provide a schematic representation of the whole software system (for example ER diagram, architecture, flowcharts, UML diagram).By you evaluate, we mean that you determine the quality of the (software) design using established quality criteria and a predetermined test design.By existing components or libraries, we mean that you have investigated which of those is best suited to the project.By quality criteria, we mean that you have predetermined the criteria the*	**PSV Group Project** Software Architecture ->\ I researched an existing software system and based on the findings I created an architecture diagram. Current Notification System ->\ I investigated what the current notification system looks like. I talked to the stakeholders to get more information about the system and their wishes. Flutter Notifications ->\

system must meet in consultation with stakeholders. For example, scalability in the event of increased data and/or use, security aspects and different types of devices.	I investigated the possibilities of what public libraries/widgets would be usable and in what ways they could be beneficial. **Individual Project** Software Architecture ->* I researched what components were needed based on set criteria, designed the software diagram based on the C4 (level 2) diagram criteria.
Future-oriented organisation You carry out a problem analysis and on that basis, you determine the definitive problem and elaborate on this in a project plan. *By problem analysis, we mean that you identify the stakeholders and the context of the assignment based on methodical research.By definitive problem, we mean that you ascertain the question behind the question and formulate the primary question.By project plan, we mean that you describe in a document how you are going to answer the primary question, documenting your sub-tasks, planning, quality and budget, amongst others.*	**PSV Group Project** Project Plan ->* The problem was determined by planning multiple debriefing meetings, asking questions and researching the media platforms of PSV. In addition, the primary question and sub-questions were formulated. A planning was made, risks were noted down, etc. **Individual Project** Project Plan ->* The problem was determined by monitoring F1 Twitter. The primary question and sub-questions were formulated. A planning and delivery plan were made.
Investigative problem solving You formulate sub-questions pertaining to the primary question and answer these using relevant research methods. You use the conclusions of the sub-questions to justify (design) choices. *By formulating sub-questions, we mean that you split your primary question into a number of sub-questions in order to answer the primary question step-by-step.By research methods, we mean that you make a substantiated choice of DOT framework/CMD methods, using triangulation through relevant research patterns.*	**PSV Group Project** Project Plan ->* I formulated fitting sub-questions that helped answer the primary question. User Story - Plan of Action ->* I formulated a primary question and fitting sub-questions that helped answer the primary question. **Individual Project** Project Plan ->*

	I formulated fitting sub-questions that helped answer the primary question. Design & Testing ->\ I applied multiple research strategies (workshop, lab, field research) and methods (interviews, 5-second A/B testing) to discover what type of design the target audience needed. 'Why' I used a specific research pattern is explained in the Project Plan
Personal leadership You methodically reflect on your professional identity and personal development. *By reflect, we mean that you look back on your own work and actions and subsequently look at possibilities and opportunities you can utilise in your future career.By methodical, we mean that you select and use a reflection methodology to shape your reflection and on which basis you subsequently carry out a good analysis for follow-up steps.By professional identity, we mean the role you envisage for yourself in the media landscape and what role you play in a team, and that you document this in your portfolio.By develop, we mean that you consciously look at what you still want to learn.*	**PSV Group Project, International project, Individual project** Products ->\ I reflected upon each piece of research. Reading Guide ->\ I reflected upon my work and actions during and after the projects and what impact these actions would have on my future career. Delivery & Peer Feedback ->\ Applied peer feedback, the retrospective method (starfish-method) and reflected upon the role each project member played within the project. **Individual project** Project Plan ->\ In the project plan I described what I wanted to learn during the project and why (in regard to my ambitions).
Goal-oriented interaction You communicate with different stakeholders and team members about the ICT assignment, taking into account an international context. *By communicate, we mean that you ensure the desired impact and execution.By stakeholders,*	**International project** Preparation Week , Metaverse concepting , Metaverse prototyping ->\ I got to know international students and worked together with them when ideating valuable concepts for potential stakeholders

we mean that you consider various collaboration partners.By international context, we mean that you are able to work with and consider people from diverse cultures.	and prototyping a concept for stakeholder Boymans museum