

Improving the F1 Experience at Home

Update 20 September

In deze slideshow:

- 01** Projectplan afgerond
Meeting met Ruud van RacingNews
- 02** Tijdlijn
- 03** Concepting
Available Product Analysis
F1 Available Data
Fan Engagement Strategies(Work in progress)
- 04** Development
ThreeJS-Journey
Node Server
- 05** Portfolio website
Eerste Svelte app!

Project Plan afgerond 🎉

Duidelijke probleemstelling en motivatie na meeting met Ruud



Project Plan

Improving the Grand Prix experience
for F1 viewers at home

S8 Graduation FHICT

4 Sept 2023 - 16 Jan 2024

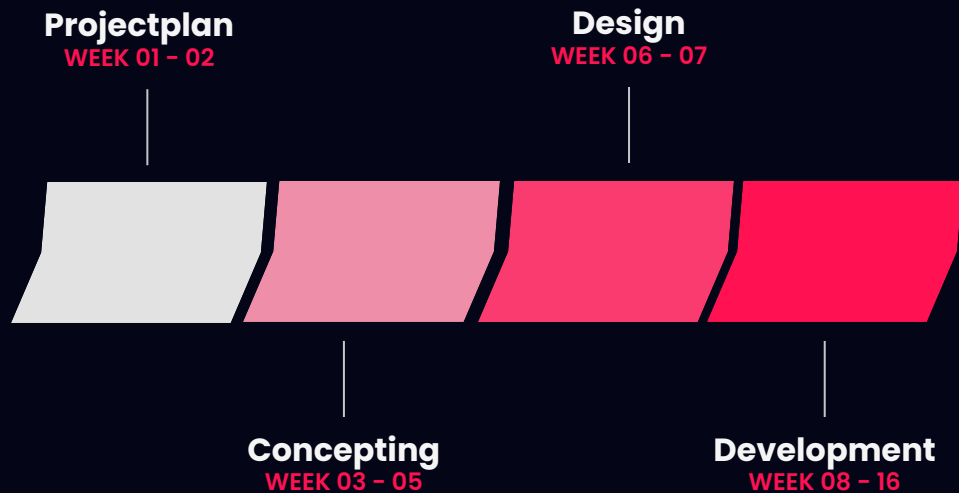
By Jordi Franssen

4 September 2023

www.tde.nl

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Tijdslijn



CONCEPTING

01

Digital Twin

Digital Twins worden al vaak gebruikt om de echte wereld te simuleren. (Metaverse, simulaties, AR/VR)

02

Unity Metacast

Gebruikt green screen met meerdere camera's om een bewegend 3D model te genereren van hoge kwaliteit.

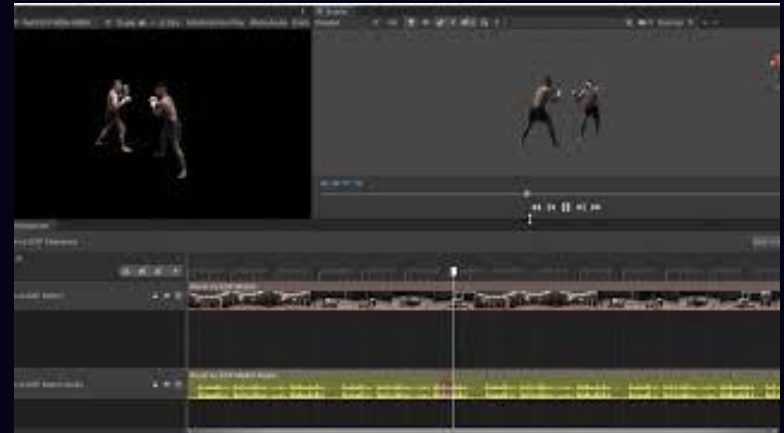
03

Formula Addict – YouTube

YouTube pagina met 3D analyses van Formule 1

www.youtube.com/@formulaaddict

Available Product Analysis



01

Undocumented API

Wordt al gebruikt door RacingNews. Riskant om te gebruiken voor dit project omdat het geen officiële databron is.

02

Ergast API

API met historische F1 data. Wordt na 2024 waarschijnlijk niet meer gebruikt.

03

Fast-F1 API

Combinatie van bovenstaande API's. Alleen is deze gebouwd met Python, wat ongeschikt is voor web apps.

F1 Available Data

01

Waarom fan engagement strategies?

60% van de sportfans is bereid extra te betalen voor een ervaring met hun favoriete team of atleet.

02

Wat zijn fan engagement strategies?

Manieren om publiek te trekken voor, tijdens en na de wedstrijd.
Dit kan door (persoonlijke) content, gave technologieën en meer.

03

RacingNews365

Hoe kunnen deze strategieën toegepast worden in het project?

Fan Engagement Strategies

DEVELOPMENT

01

TDE logo in 3D

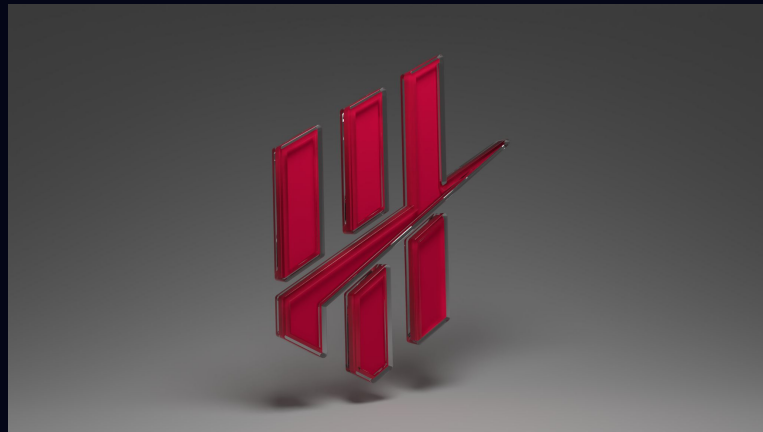
SVG omgezet naar 3D model in blender en ingeladen in ThreeJS

02

Onderzoek naar mogelijkheden

Eigenlijk is alles mogelijk, maar het is wel moeilijk

ThreeJS-Journey



01

Laatste race eind november!!

Node server gebouwd die een eventuele live-data API kan opnemen en opnieuw afspelen voor testen.

Node Server

PORTFOLIO WEBSITE

s8-graduation.jordifranssen.com

Improving the F1 Experience at Home

Update 2 October

In deze slideshow:

01 Focusgroep discussie

9 October

02 Tijdlijn

03 Concepting

Available Technologies Analysis

Fan Engagement Strategies

Survey

Target audience analysis

Expert interview strategie (gepland)

04 Design

Meeting huisstijl RacingNews

05 Development

POC Yuka.js

POC Racebaan

06 Portfolio update

Contentpagina gemaakt

07 Persoonlijke ontwikkeling

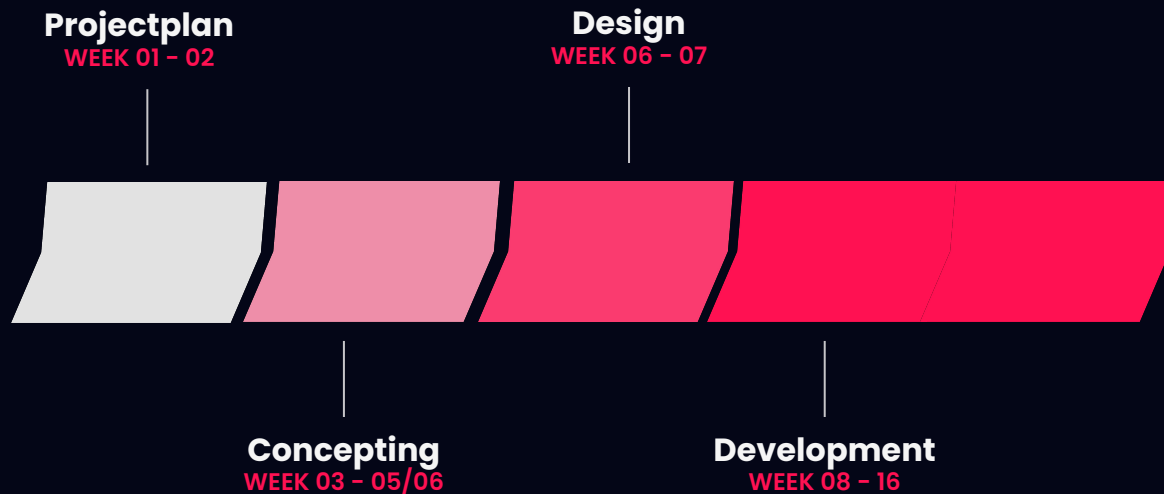
Persuasive Communication



Focusgroep discussie

9 October – Definieren concept

Tijdslijn



CONCEPTING

01

Available technologies analysis

ThreeJS, Blender, React-three-fiber, Yuka.js

02

Fan engagement strategies

Zorg voor een interactief product dat uniek is voor fans

03

Survey

14 Reacties, data voor focusgroep

Concepting

04

Target audience analysis

Interessante conclusies Google Analytics. Later data survey toevoegen voor personas, customer journeys, empathy maps

05

Expert interview strategie gepland

Concept strategisch bespreken met Michiel

Design

01

In voren werken op Design

Huisstijl RacingNews

Design



Development

01

Proof of Concept Yuka.js

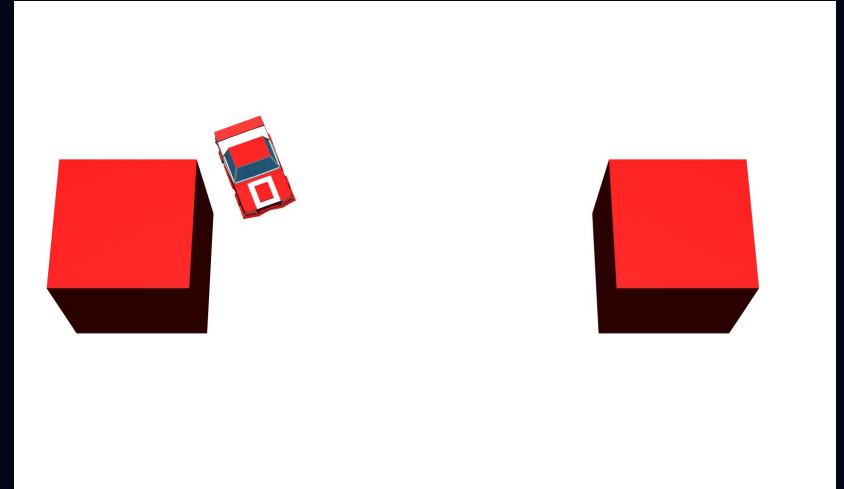
JS library om het gedrag van auto's te simuleren

02

Proof of Concept racebaan

POC mogelijkheid om meerdere auto's over een circuit te laten rijden. In voren werken voor development

Development



PORTFOLIO UPDATE

s8-graduation.jordifranssen.com

Persoonlijke ontwikkeling

01

Persuasive Communication

Strategieën om overtuigender te kunnen presenteren en communiceren.

A.I.

Hoe kan A.I. me helpen als designer en developer. ChatGPT, Github Co-pilot etc.

Persoonlijke ontwikkeling



N E B U L A



Improving the F1 Experience at Home

Update 13 November

In deze slideshow:

01 Tijdlijn

02 Concepting

Meeting met Ruud voor feedback

03 Design

Design testen bij RN365 (vandaag)

Feedback iteratief proces

04 Development

Real-time communicatie methodes

Front-end framework gekozen

Development-API

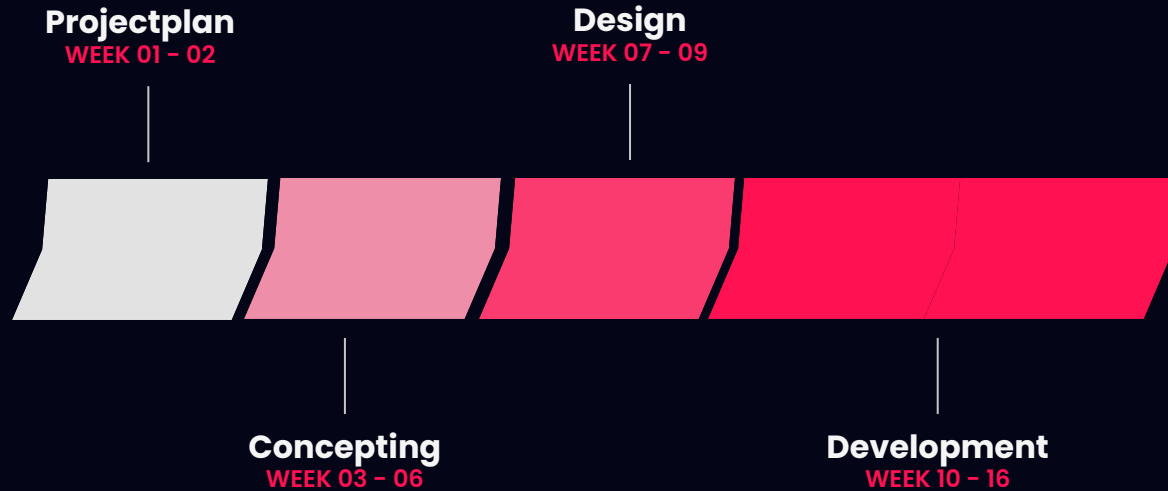
Architectuur / Hosting en plan van aanpak

05 Randzaken

Retrospective conceptingfase

Overtuigingstechnieken

Tijdlijn



CONCEPTING / Design

01

Ruud enorm enthousiast

- Concept besproken
-

02

Gevaar gebruik FIA API

- Extra risico analyse
-

03

Om 13:00 weer meeting

- Bespreken CMS liveblog
 - Usertestjes design
-

04

Feedback John

- Iteratief proces
-

Development

01

Real-time communicatie naar cliënt

- Server sent events (Dus toch geen websockets!!)
-

02

Front-end framework

- Svelte / SvelteKit/ Threlte
 - Direct implementeren in RN365 (Svelte want routing)
 - Threlte als module
-

03

Development API

- Simuleert real-time datastream
 - Komend weekend live data testen Vegas
-

04

Positiedata POC (demo)

- Data deugt
 - Niet helemaal soepel
-

05

Architectuur / hosting en PVA

- 400.000 users die 5kb per seconde ontvangen
 - Terabytes per race
 - Plan van aanpak development
-

06

Beginnen met bouwen

Randzaken

01

Retrospective Conceptfase

02

Tussendoor overtuigingstechnieken

- Toepassen terugkomdag
-

03

Portfolio update

- Loop een beetje achter, maar werk ik deze week bij!
-



Improving the F1 Experience at Home

Update 27 November

In deze slideshow:

01 Concepting

Eerste paar wireframes CMS

02 Design

Kleine aanpassingen liveblog

03 Development

Live data test / analyse

Inhaalactie script geschreven

Development environment opgezet

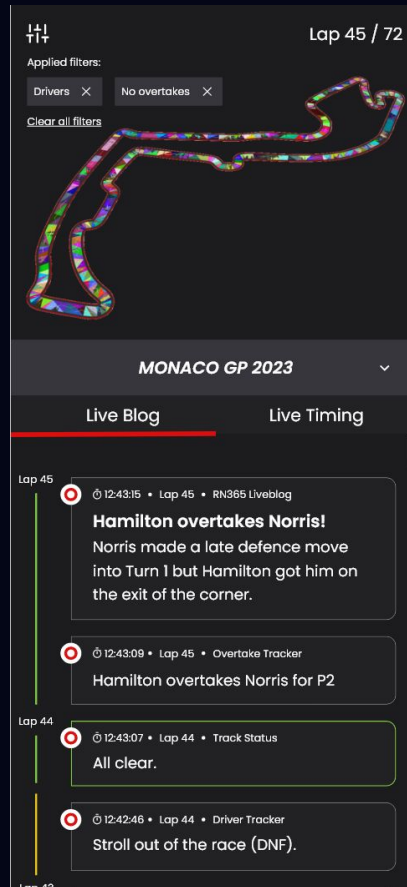
04 Randzaken

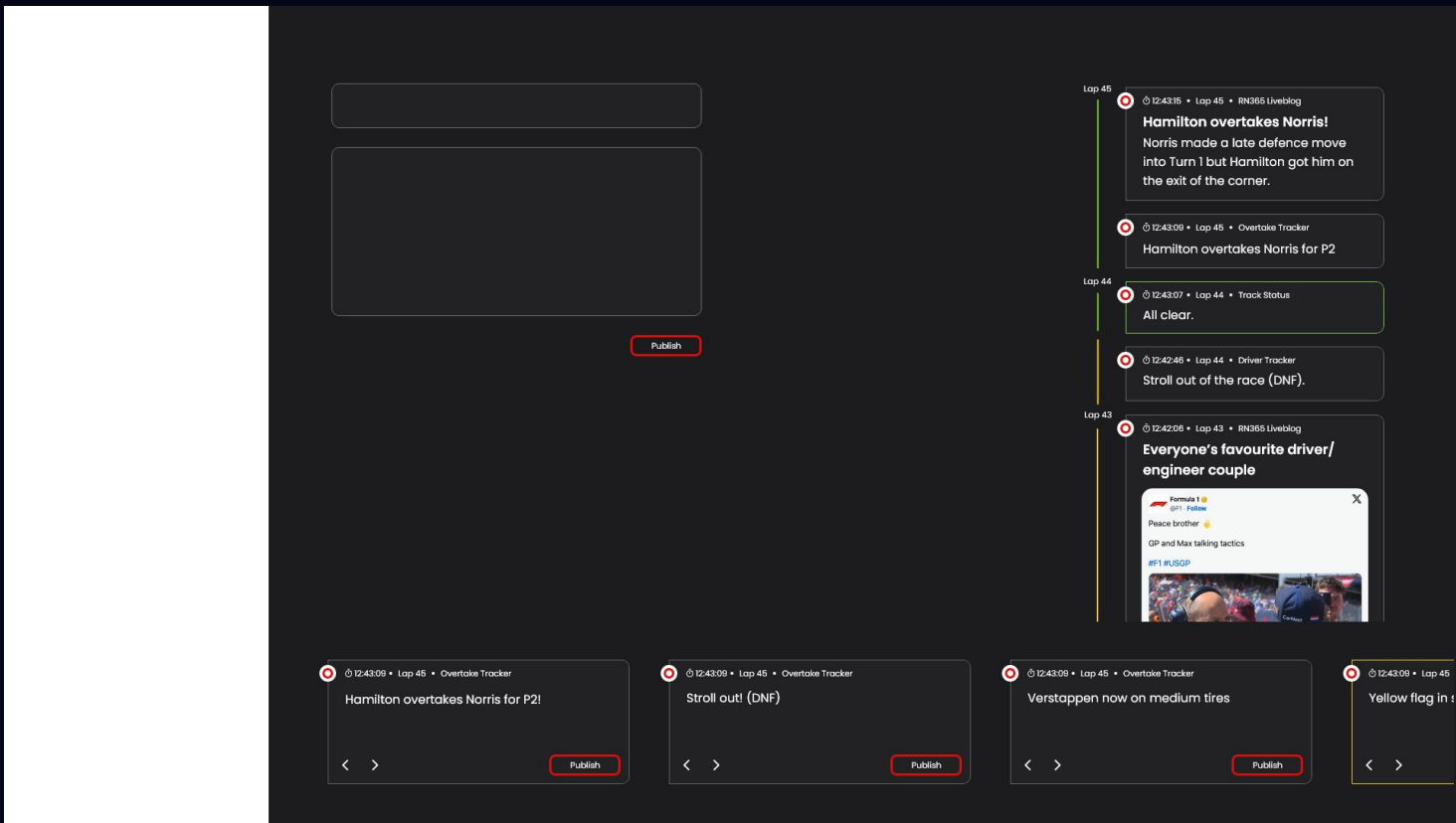
Gebruik API legal / ethics

Eigen GPT gemaakt

WeyWeyWeb 2023

CONCEPTING / Design





🕒 12:43:09 • Lap 45 • Overtake Tracker

Verstappen now on medium tires

< >

🕒 12:43:09 • Lap 45 • Overtake Tracker

Hamilton overtakes Norris for P2!

< >

🕒 12:43:09 • Lap 45 • Overtake Tracker

Yellow flag in sector 2!

< >

🕒 12:43:09 • Lap 45 • Overtake Tracker

Stroll out! (DNF)

< >

🕒 12:43:09 • Lap 45 • Overtake Tracker

Verstappen now on medium tires

< >

Lap 45

🕒 12:43:16 • Lap 45 • RN365 Liveblog

Hamilton overtakes Norris!
Norris made a late defence move into Turn 1 but Hamilton got him on the exit of the corner.

🕒 12:43:09 • Lap 45 • Overtake Tracker

Hamilton overtakes Norris for P2

Lap 44

🕒 12:43:07 • Lap 44 • Track Status

All clear.

🕒 12:42:46 • Lap 44 • Driver Tracker

Stroll out of the race (DNF).

Lap 43

🕒 12:42:06 • Lap 43 • RN365 Liveblog

Everyone's favourite driver/engineer couple



Lap 42

🕒 12:41:21 • Lap 42 • Pitstop Tracker

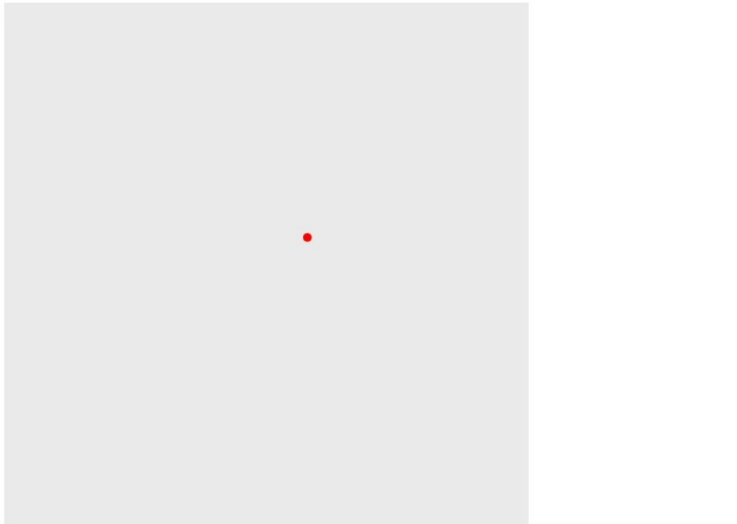
Verstappen made a pitstop for medium tires.

Development

SSE client

127.0.0.1:5500/index.html

Gmail YouTube Maps Translate Drive



Windows PowerShell

```
./LivePositionData/RaceAllData/2924.json
./LivePositionData/RaceAllData/2925.json
./LivePositionData/RaceAllData/2926.json
./LivePositionData/RaceAllData/2927.json
./LivePositionData/RaceAllData/2928.json
./LivePositionData/RaceAllData/2929.json
./LivePositionData/RaceAllData/2930.json
./LivePositionData/RaceAllData/2931.json
```

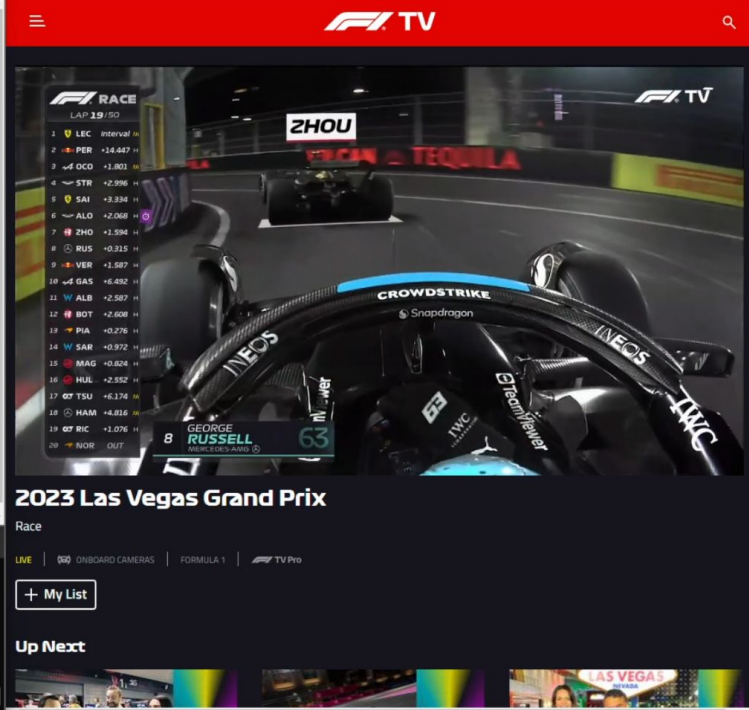
Search

F1 TV | 2023 Las Vegas Grand Prix

f1tv.formula1.com/detail/1000006868/2023-las-vegas-grand-prix?action=play

Gmail YouTube Maps Translate Drive

F1 TV



F1 RACE	
LAP 19/30	
	Interval
1 LEC	+14.447 H
2 PER	+1.801 M
3 OCO	+2.996 H
4 STR	+3.334 H
5 SAI	+2.068 H
6 ALO	+1.594 H
7 ZHO	+0.315 H
8 RUS	+1.587 H
9 VER	+6.492 H
10 GAS	+2.587 H
11 ALB	+2.608 H
12 BDT	+0.276 H
13 PIA	+0.972 H
14 SAR	+0.624 H
15 MAG	+2.552 H
16 HUL	+6.174 H
17 TSU	+4.816 H
18 HAM	+1.076 H
19 RIC	
20 NOR	OUT

2023 Las Vegas Grand Prix

Race

LIVE ONBOARD CAMERAS FORMULA 1 TV Pro

+ My List

Up Next

```
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows

PS C:\Users\jordi\Development\Development-API> node client.js
Driver 1 gained position from 2 to 1
Driver 20 gained position from 8 to 6
Driver 14 gained position from 9 to 11
Driver 77 gained position from 8 to 10
Driver 11 gained position from 13 to 10
Driver 27 gained position from 15 to 11
Driver 22 gained position from 20 to 12
Driver 81 gained position from 19 to 13
Driver 3 gained position from 18 to 15
Driver 44 gained position from 16 to 14
Driver 4 gained position from 19 to 17
Driver 24 gained position from 20 to 16
Driver 55 gained position from 20 to 18
```

Randzaken

01

Gebruik API legal / ethics

- Meeting Lennart
 - Meeting Ruud
-

Preperations and Management

Preparation and management are pivotal to a project's success. They ensure clear objectives, efficient resource allocation, and anticipation of challenges. Proper preparation sets the stage for smooth execution, while effective management keeps the project on course and ensures quality outcomes.

- 1 Project Plan
- 2 Project Management

Orientation and Concepting

Orientation and concepting anchor a project's direction and vision. By thoroughly understanding the problem statement, we ensure relevant solutions. Defining the concept provides a clear roadmap for development. Together, they guide a project from vague ideas to focused strategies, ensuring alignment with goals and audience needs.

- 1 Available Product Analysis
- 2 Available Data Analysis
- 3 Fan Engagement Strategies
- 4 Available Technologies Analysis
- 5 Online Survey
- 6 Target Audience Analysis
- 7 Focusgroup Discussion
- 8 Feasibility Study
- 9 Concept Validation

UI Design

A good user interface is key to a good user experience. With this project phase, the concept visually comes to life and starts to function as close to a real product as possible.

- 1 RacingNews365 Visual Audit
- 2 Design Validation

Development

Geen lorem ipsum text

- 1 item1
- 2 item2



You

Score Jordi's internship for each learning outcome



Jordi's Internship Manager

Based on the information provided in your documentation, here's the assessment of Jordi's internship for each relevant learning outcome:

1. Professional Duties

- **Level:** Advanced
- **Feedback:** Jordi demonstrated a high level of proficiency in professional duties. He effectively analyzed technologies relevant to his project, advised on their use, and produced professional deliverables in line with IT-area User Interaction. His work reflects a deep understanding and application of professional standards at the bachelor level.

2. Situation-Orientation

- **Level:** Advanced
- **Feedback:** Jordi effectively applied his knowledge and skills in a new and authentic context, delivering relevant and valuable results for the project. He adapted to the company's processes, undertook significant research, and developed a validated concept, demonstrating methodological and structured work. His contributions were clearly relevant and valuable to the project's orientation phase.

3. Future-Oriented Organisation

- **Assessment:** Not explicitly mentioned in the provided documentation. Based on available information, it's not possible to accurately assess Jordi's performance in this learning outcome.

4. Investigative Problem Solving

- **Level:** Advanced
- **Feedback:** Jordi exhibited excellent investigative problem-solving skills. He approached his project from different perspectives, identified problems, and found effective approaches to them. His use of varied research methods and the successful application of findings in his project, such as adjusting the project course based on new data findings, signify his advanced capability in this area.

5. Personal Leadership

- **Assessment:** Not explicitly detailed in the provided documentation. However, Jordi's approach to project phases, his reflections, and the personal challenges he navigated suggest a strong sense of personal leadership. He showed initiative, adapted to new environments, and effectively managed personal and project challenges.

6. Targeted Interaction

- **Level:** Proficient
- **Feedback:** Jordi demonstrated effective interaction skills, particularly in collaborating and communicating with his team and external stakeholders. His ability to receive and integrate feedback into his project, as evidenced by his adaptability in project meetings and focus group discussions, shows his competency in targeted interaction.

These assessments are based on the detailed reflections, project activities, and outcomes Jordi documented in his internship report. Jordi has shown considerable growth and skill development in multiple key areas of his internship.

