

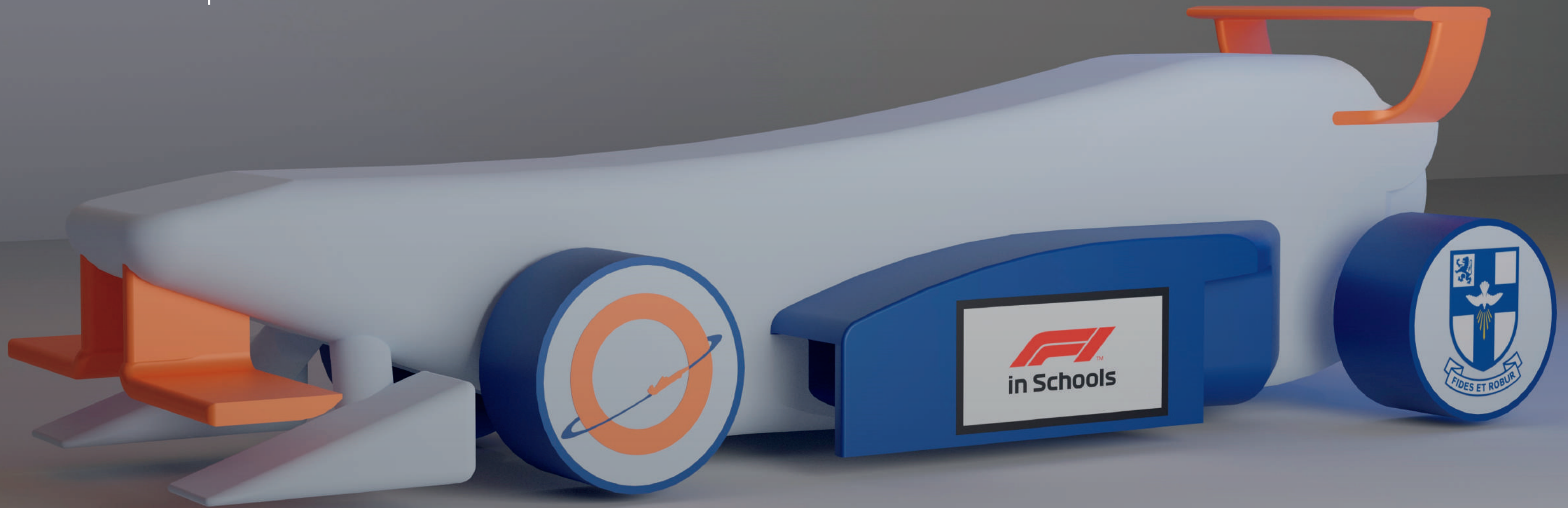
ORBIT
RACING

F1
in Schools
Ireland



Ireland National Finals

Enterprise Portfolio



ENTERPRISE



May 2023 

TEAM MANAGEMENT



Introduction

We are a group of 5 individuals but together create an unstoppable force. Our team was founded on the concept "We each have our own strengths". This means that we all excel in certain areas, and together we create a highly motivated and performance led team. We believe that due to our determination we will be able to represent Ireland at the World Finals.

Each member of our team brings their own qualities to the table. Our roles within the team was based on each of these strengths.

Our Team

>> The Team

Darragh O'Neill



Role: Team Manager
Skills: Adobe Design Suite, Blender, Canva, Meta Business Suite, Microsoft Planner.
Knowledge: Advertisement, Agile Project Management Methodology, Image Composition, Marketing.

Conor Blackburn



Role: Manufacturing Engineer
Skills: Canva, Fusion 360, Simscale, Solidworks.
Knowledge: Aerodynamics, Computer Aided Design, Computational Fluid Dynamics.

Oliver Lee



Role: Design Engineer
Skills: Canva, Fusion 360, Solidworks.
Knowledge: Aerodynamics, Computer Aided Design.

Fiachra Coakley



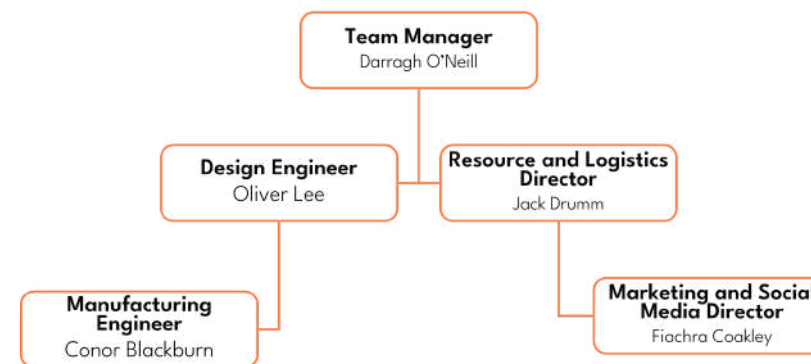
Role: Marketing and Social Media Director
Skills: Canva, Meta Business Suite, TikTok.
Knowledge: Advertisement, Image Composition, Marketing.

Jack Drumm



Role: Resource and Logistics Director
Skills: Canva, Excel, Microsoft Planner.
Knowledge: Canva, Financial Planning Sponsorship Acquisition.

>> Our Structure



>> Team Structure Hierarchy. Credit; Orbit Racing

A well-defined team structure is vital as it establishes clear roles, responsibilities, and accountability. It creates effective communication, efficient workflow, and collaboration. A strong team structure promotes coordination, maximizes our individual strengths, and ensures that everyone works towards a common goal, leading to optimal team performance and success.

We agreed that the best way to assign our roles was due to our previous knowledge, capabilities and interests. Due to nature of the competition being spilt into two categories, these being Engineering and Enterprise, we agreed to create two streams.

Darragh was nominated to be our Team Manager due to his numerous leadership positions within the school. He was seen to have the ability to delegate work and bridge the gap between both streams.

Our Journey

In 2022 our Team formed just a few weeks from us entering our Junior Cycle Exams due to one team member having heard about the competition and another having previously had a sibling compete in the year prior.

We laid the foundations of our team identity as it is today. With Darragh keeping us together and ensuring that we stay on track, Oliver and Conor working on the car, Fiachra directing our public image and Jack handling anything that involved planning and execution.

From the start we have set our aims high, World Champions. Our team was founded on the key principle "We each have our own strengths".

Individually we are not the strongest in every aspect of this competition, each of us has the opportunity to excel at what we are good at. But we have the ability to bring a group of people that are highly motivated together and create the strongest team in the competition. This idea has shown itself through all areas of the competition.

This portfolio is a collection of all of our hard work and dedication over the past 12 months towards F1 in Schools and the experiences, challenges, problems and opportunities that came with it.



>> Hybrid Team Meeting. Credit; Orbit Racing

Social Media

Social media is vital for any team, enabling us to showcase our achievements, engage with our fans, attract sponsors, and maximize success on and off the racetrack

Our objectives have created a clear pathway to the finish line for us. Initially, we prioritise our objectives by creating foundation goals, such as turning Orbit Racing into a big, well-known competitor and brand. We do this by creating characteristics specific to us e.g. our brand colours and fonts. But also, how we reach out to our audience is more personalized and still efficient. We do this by keeping in touch with the outside world and real-time events. We are also unique in the way we post on social media, making sure not to overload people with unwanted information. We get straight to the point and stay on topic. This is so our audience can stay informed without having to bore themselves with unwanted, text-heavy material. We like to stick to this way of thinking and keep on track.

Creating interest and awareness in this field is also very important to us. Many teams can keep fans informed, while we strive to spark interest in new minds. We do this with our social media strategy. When people who have not yet heard of F1 in schools come across our posts and want to find out more about F1 in schools, we gladly inform them of everything going on. We encourage them to send us a DM on Instagram; from there, we let them know everything and show them our progress and our posts.

Our Target Audience

We plotted a graph, as seen below, on who our targets are and how we are able to best communicate with them.

Targets	Traits	Marketing Tools	Goals
Students	12-18 Local audience All gender identities	F1 interest Peer influence on our fellow students Grassroots marketing Student Presentations create an interest in potentially participating	Increase F1 audience in Schools
General Public	Any age Global audience All gender identities F1 interest in social media Newsletters	Fast, easy informing Entertainment and publicity for Orbit Racing as a high-achieving team	Entertain the public
Sponsors	30+ Local audience All gender identities	Brand and name History Authenticity, Investment and respect	Create connections to the competition

Target Audiences Credit; Orbit Racing

Instagram gives us insights to help us with our research. These include our content outreach and how well some posts are doing compared to others. We are able to record these and learn what is most growth effective. We have found out that our majority of followers are male, so we have attempted to appeal to females more so that we can balance out our followers.

Instagram Posts

Credit; Orbit Racing



Social Media Activities

Our Appropriate Platforms

After researching various social media platforms, including Tiktok, Facebook, Twitter and Instagram, we initially posted on all four. However, we later found that Instagram and Facebook yielded the best results, prompting us to prioritize quality in our social media strategy. Eventually, we transitioned to using Instagram as our primary communication platform, benefiting from its efficiency and user-friendly interface.

Our Content Calendar

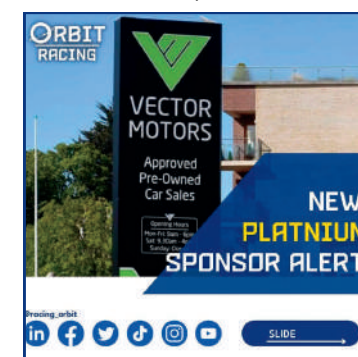
It took us a while to get into consistent posting habits, so, after some research, we discovered how easy it becomes after we build a content calendar. After a bit of practice, we managed to build a consistent content calendar. We ran into issues such as posting too much, leading to displaced engagement across posts, and posting too little, leading to the algorithm not picking our posts enough. We learned a healthy balance that works for us while still allowing us to post enough for our audience to stay up to date. Over time, this built an unspoken connection with our followers so that they could get their 'dose of F1 in schools' on time. To ensure we have a steady stream of content going onto Instagram, we actively update and use our content calendar

Our Showcasing

Throughout the competition, being able to share all of our exciting progress has been incredible. A lot happens behind the scenes and we enjoy giving our audience a taste of what we are doing. This can be as simple as a random meeting, or it can be as exciting as getting our car milled! And of course, we love showing off our online milestones, with our most recent one being when we hit 750 followers on Instagram! We also enjoy showing off our team's individual achievements, like when three of our team members ran a 5km charity run. We enjoy letting our followers get to know who we are as people, as they have probably already gotten an idea of who we are as a team.

Our Contests

We have completed various competitions ranging from small to large, including guessing games and full-scale creative competitions. We love to reward our audience as a little thanks from the team. We also feel like our followers start thinking and get creative with their F1 minds. We have increased the value of our prizes as more and more people participate in our competition. Some of our competitions are about our team's history because we make sure we are rewarding our long-term, loyal audience, while we also welcome newcomers and encourage them to take part

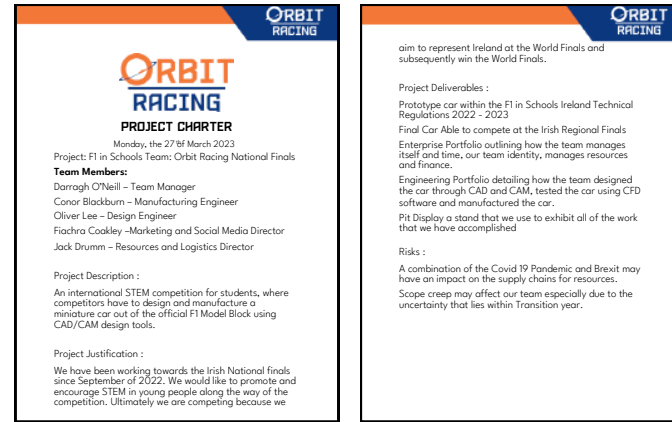


PROJECT MANAGEMENT



Initiating Process

The initiating process began with a statutory meeting and a project charter. These were carried out having received the news regarding the national finals. We then made a stakeholder register to consolidate all contact info.



Project Charter for NF23
Credit; Orbit Racing

Agile System

Our Scrums

Scrum is a framework for teams. It provides the basic structure for regular meetings, items of work, and delegation of work. We divided ourselves into scrums of 4 categories each with their own goals and aims. These were Manufacturing, Enterprise, Engineering and Resources.

Each scrum has three roles the Scrum master, Product owner and Developer. The Scrum master's role is to hold the team together and assist in daily tasks. They also mitigate as many blockers as possible that stop the team from progressing; they are the glue. The Product Owner sets the goals and direction of the scrum, they understand what qualities the final 'product' should have; they set the direction. The Developers are anybody who works within the scrum in any aspect; they deliver the 'product'.

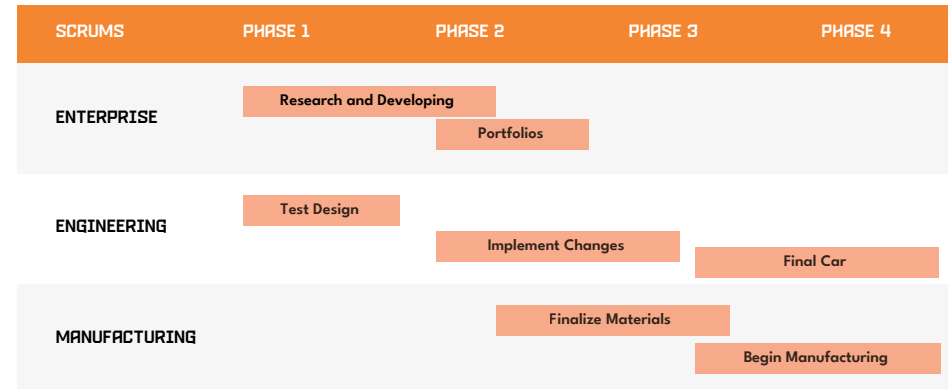
Scrum	Scrum master	Product owner	Developer/s
Enterprise	Darragh	Jack	Fiachra
Engineering	Oliver	Darragh	Conor
Manufacturing	Conor	Jack	Oliver
Resources	Jack	Darragh	Fiachra/Conor

Scrum Table. Credit; Orbit Racing

Our Sprints

Sprints are sharp, time managed periods of work. Each sprint allows the scrum to work as efficiently as possible while also assuring a high level of quality. The most important part of a sprint is having a clear direction of what needs to be accomplished, this is an item that the Product owner takes responsibility of. The direction of the sprint is clarified during our bi-weekly stand-ups.

A key part of our sprints is evaluating what work needs to be done during our sprints and what items may need to be prioritised. For example ensuring that we are prepared for a sponsor meeting may be more important than organising a group post for Instagram.



Sprint Timeline. Credit; Orbit Racing

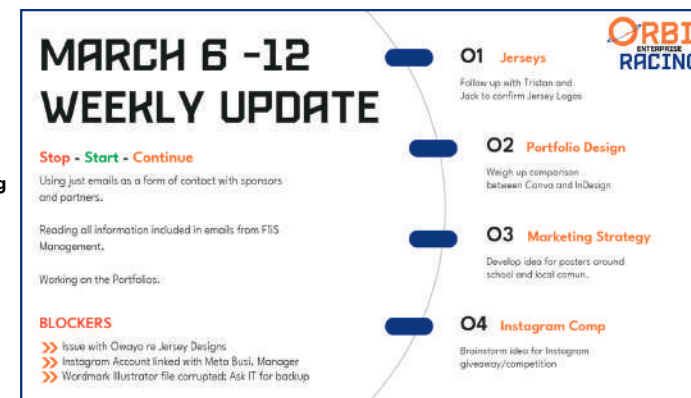
The Stand Ups

Our bi-weekly stand-ups were short, meetings every second day to discuss our development and identify blockers. Due to Agile being an adaptable framework we were able to incorporate a risk assessment into each of our stand-ups as we got closer to the competition date.

During each stand-up we would all use a PowerPoint to present any notes that we had. We also implemented our Stop-Start-Continue system from the start of the year, at its core we would briefly discuss what we needed to stop, start and continue doing; what isn't going well, how we can improve that and what are we doing well. The continue aspect turned out to be extremely important as it allowed us to highlight the hard work that we had done.

PowerPoint Slide from a Weekly Update

Credit; Orbit Racing



Defining Scope

A project's scope helps you define its boundaries and the precise objectives, due dates, and project deliverables you'll be aiming to achieve. Understanding a project's scope allows you to meet your project goals and objectives without running late or missing deadlines for your project.

Title	Orbit Racing
Project Manager	Darragh O'Neill
Project Justification	Orbit Racing will be competing at the Irish National Finals in 2023 The team aims to develop its Soft Skills Promote and encourage young people in STEM
Project Scope Description	STEM Competition that requires competitors to produce several artefacts including portfolios, cars and a pit display.
Key Deliverables	Formation of a team - Highly structured team with clear and defined roles Prototype car - Design the Minimum Viable Product with the aid of Autodesk Fusion 360 within the FI in Schools Ireland Technical Regulations 2022 - 2023 Final Car - Build and deliver 1 final car that is within the regulations and able to compete at the Irish Regional Finals Enterprise Portfolio - A 10-page document outlining how the team manages itself and time, our team identity, manages resources and finance. Engineering Portfolio - A 10-page document outlining how the team designed the car through CAD and CAM, tested the car using CFD software and manufactured the car. Pit Display - A stand that we use to exhibit all of the work that we have accomplished. Presenting a combination of enterprise and engineering
Acceptance Criteria	All project deliverables must be approved by the team as a whole and then additionally by the Project Manager. Final Car - Weighs 50g, all aspects of Return on Investment are completed, is able to race, meets regulations Enterprise Portfolio - Contains all Enterprise project elements, 10 pages Engineering Portfolio - Contains all Engineering project elements, 10 pages Pit Display - Within regulation, consistent branding, presents combination of enterprise and engineering aspects
Constraints	Budget Time limitations Resource limitations Support from school staff may vary COVID-19/Brexit may still impact resources and price
Project Objective	Represent Orbit racing at the National Finals and subsequently the World Finals Represent Ireland at the 2024 World Finals and become World Champions
Project Assumptions	We take part in the 2023 FI in Schools Irish National Finals.

Statement of Scope. Credit; Orbit Racing

The Statement of Scope is the document that is created when you define scope. It entails all of a projects KPIs and Risks involved. One of our KPIs would be the production of the final car and a Risk would be the time restrictions and limitations. Due to the Statement of Scope it is extremely easy to refer back to a goal or a key deliverable.



Managing Stakeholders

Understanding that our stakeholders are a fundamental part of our team was necessary to achieve the highest standard of communication and execution. Some of our stakeholders are international, this posed a unique opportunity for us to create channels of communication between us and them. We created a stakeholder register that documented the below:

- » Stakeholder's name.
- » Stakeholder's role in the project.
- » Stakeholder's contact.
- » Stakeholder's organisation.
- » Stakeholder's preferred comms channel.

Stakeholder Register

Name	Role in Project	Organisation	Contact	Comms Channel
N. Drew	Team Facilitator	Blackrock College	ndrew@blackrockcollege.com	Orbit Racing MS Team and Direct MS Teams Messaging
P. O'Neill	TY Coordinator	Blackrock College	4dean@blackrockcollege.com	MS Teams Comms
R. Faulkner	Sponsor	Vector Motors	richie@vectormotors.ie	Email comms & Phone
J. Leyden	Sponsor	Bizquip	jiml@bizquip.ie	Email comms
P. McGowan	Sponsor	Seaspray Financial	paul.mcgowan@seasprayfs.ie	Email comms
J. Roe	Sponsor	Roe Autocraft	Redacted	Email comms & Phone
G. Leturio	Strategic Partner	Simscale	gleturio@simscale.com	Email comms & Phone
T. Baney	Strategic Partner	Boca Bearings	taylor@bocabearings.com	Email comms
M. Rudinsky			michael@bocabearings.com	
A. Weldon	Strategic Partner	Owayo	alison.weldon@owayo.com	Email comms
T. Heindl			tristan.heindl@owayo.com	
M. Reilly	Strategic Partner	Trinity College Dublin	mireilly@tcd.ie	Email comms

» Stakeholder Register. Credit; Orbit Racing

» Our Internal Communication

Communication is key within a project. Within the competition's context, this is the exchange of knowledge, skills and experience. See the communication methods and channels index below:

Microsoft Teams
Functionality: Team Communication; Dedicated Engineering and Enterprise Channels
Stakeholders: Team Members and Advisors
Frequency: Used Daily

Microsoft OneNote
Functionality: Allows collaboration and annotation of designs and ideas.
Stakeholders: Team Members and Advisors
Frequency: Used once a Week

Microsoft Outlook
Functionality: Sharing of Team documents and communication with FliS Management
Stakeholders: Team Members, Advisors and Sponsors
Frequency: Used Daily

Snapchat
Functionality: Informal Team Communication used to for organising work or calls outside of School hours
Stakeholders: Team Members
Frequency: Used Daily

Quality Acceptance

To ensure that every element that we delivered during the project was delivered to the highest standard possible we created a table in MS Excel that allowed us to insert tasks and track a deliverable's lifecycle. We use this in conjunction with a RACI Matrix. RACI is an acronym for the roles that Stakeholders play in our Team. R = Responsible, the people assigned to a task. A = Accountable, the person responsible for approving and signing off on work (Usually our Team Manager). C = Consulted, the people who give input to the task. I = Informed, the people who are updated, they do not contribute directly to the task.

Workstream	Task	Darragh	Conor	Oliver	Fiachra	Jack	Start	End	Status
Sponsorship	Acquire Sponsors for Nationals	A	I	I	I	R	23-03-23	21-04-23	Complete
Enterprise	Create Budget for NF 2023	R	I	I	C	A	23-03-23	27-04-23	Complete
Enterprise	Design Jerseys	A	C	C	C	R		15-02-23	Complete
Enterprise	Design Pit Display	A	C	C	C	R			Ongoing
Engineering	Designing FINAL Car Body	A	C	R	I	I		15-05-23	Complete
Engineering	FINAL Car CFD Testing	A	R	C	I	I	15-05-23		Ongoing
Engineering	Render of FINAL Car	R	C	R	I	I	15-05-23		Ongoing
Whole Team	Verbal Presentation	R	R	R	R	R	21-05-23		Open

» RACI Matrix. Credit; Orbit Racing

» Our Risk Management System

Every project brings its own unique set of risks. At the beginning of the project, we sat down together and completed an initial risk analysis.

In our risk register we created classifications to describe the risks, High, Medium and Low. We took each item of the project and classified the area of impact regarding Quality, Scope, Timing and Resource. Each risk was reviewed individually at the start of each week and at the end during our team meetings.

Category	Description	Impact HML	Probability HML	RAG Status	Owner	Resolution	Risk Score
Design Risk	Car fails to meet requirements	H	M		Oliver		4
	Dimensions are incorrect	M	M		Conor		3
	Parts don't fit	H	L		Conor		3
Finance Risk	Not getting sponsors	H	L		Darragh		3
	Over Spending	H	L		Jack		3
	Cash Flow Problems	H	L		Jack		3
Manufacturing Risk	Components Don't Arrive	H	M		Jack		4
	Material Ineffective	H	L		Conor		3
Marketing Risk	Brand Identity	H	L		Fiachra		3
	Merchandise Delayed	H	M		Jack		4
Project Management Risk	Contracting Covid	H	H				5
	TY Exchanges	H	H				5
	Fall behind schedule	H	M		Darragh		4
	Miss printing deadlines for portfolios	H	M		Darragh		4
	Miss deadlines for milling	H	M		Conor		4
	Miss deadlines for car printing	H	M		Conor		4
	Team Member Conflict	H	M		Darragh		4
Competition Risk	Don't Follow Competition Regs	H	L		Darragh		3
	Pit Dimensions Wrong	H	L		Fiachra		3
	Miss Pit Display Print	H	L		Darragh		3
	Equipment damaged during transport	H	L		Conor		3
	Car breaks during race	M	M		Conor		3
	Reaction Time						



Introduction

Once we had generated a rough budget, we decided to come up with a strategy for how we intended to source the sponsors to fund this project. During this planning we made a few crucial decisions that have worked well for us so far. We made it certain that we wanted to avoid a titular sponsor, we did some research into how other teams have operated in the past and we saw that some named their team after one of their sponsors.

Our team agreed that it would not be worth it to allow a company to take our name because we were very happy with how our brand and image were developing. We also made sure that when we approach a potential sponsor, we wanted to be able to have a good business relationship that we would be able to maintain, we would do this by figuring out what they were looking for from us and then adjust one of our packages or create a package based on what they were looking for.

The final decision we made before we started creating draft emails and packages was that we would aim to work with companies that are aligned with our values and mission, Companies that promote Science, Technology and Engineering and Companies that promote STEM education in primary schools. We put these choices into action consistently throughout the project.

»» Our Strategy

We saw the importance of sponsors for our team to progress far in the competition, so we wanted to build good relationships with the companies from the start. We had several ways that we would try to contact a company the main one was through email.

We created a excel spreadsheet with a mix of large and local companies that had relevance to our team or our values. We then either sent them an email, gave them a call or walked into one of their locations near us we would try to give a summary of the competition and what we were looking for from them. If they expressed interest in sponsoring our team, then we would show them our sponsorship prospectus which gave them more information.

»» Our Prospectus

The sponsorship prospectus was one of our most valuable documents because it was an integral part of our sponsorship strategy. We worked hard to make it look professional and of high quality to give the best impression, we did this by using a similar design to our five-page plan.

In the document we first talk about the competition making sure they understand what F1 in Schools is. We follow this by introducing the potential sponsor to our team, this included talking about our team values, our team members and what their money would go towards funding.



»» Sponsorship Prospectus Cover and Opening Letter Credit; Orbit Racing

»» Our Priorities

We did not email every company we could find looking for sponsors, all the places we contacted with a reason. We would do some research into the company, looking at their values and environmental impact making sure that they aligned with our brand and with our values. Another reason we chose companies was locality and our local communities.

We used our in-person sponsorship strategy with several local places and found that it was much more effective than emails or phone calls, the reason we thought it was more effective is because of the fact that we were able to better explain the competition and how it worked in person than over email or call.

»» Our Return on Investment

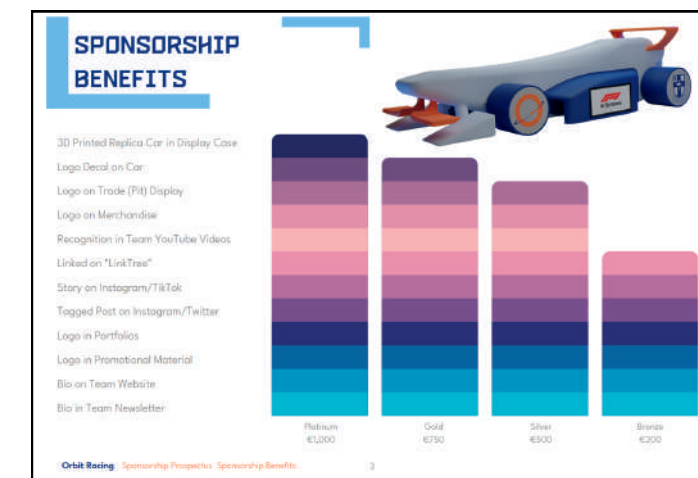
Creating the sponsorship benefits system was an idea that we developed based on our research into marketing and sales tactics so that we could assure the sponsors were getting a good return on investment.

We believed that it was important that our sales pitch was short and efficient so that we could communicate who we are and how we could benefit the company, this is where the benefits system came in.

This system allowed for us to easily determine what the company wanted from us and what they were willing to bring to the table. One thing we made sure to include in our packages was as much publicity through our accounts as we could and in general a lot of association with our brand.

We are sure that this would appeal to companies because of something called CSR (corporate social responsibility). This is a business model that companies use so that they appear, to their investors and to the public, as though they are positively impacting all areas of society.

We knew that realistically at this stage of the competition we were only able to give so much helpful advertising to the company so we wanted to stress how a company being associated with us would help their brand image by supporting students in stem.



Sponsorship Prospectus Benefits and ROI
»» Credit; Orbit Racing

Case Studies

»» Owayo

Owayo is a German support clothing design store that is known for its support of the environment and its high-quality premium shirts. The software that they used on their website to customise the uniform was easy to use and gave us huge amount of freedom.

This company was the perfect place to source our team uniform from, so we contacted them about a possible discount in return for a strategic sponsorship. They weren't able to offer anything over a five percent discount but due to their quality we agreed to work with them.

»» Boca Bearings

Boca Bearings was the first sponsor we got on this journey, and they have been nothing but helpful from the get-go. This was when we decided we were willing to step outside the boundaries of the tiered system if a company was offering something other than money, bearing was going to be a major expense for our team and Boca offered us 50% off all products once we had arranged a deal that they were satisfied with.



Financial Management

At the start of the project our team needed to generate a plan on how we would spend our money to avoid overspending and running out of funds. If we did not prioritize financial responsibility in this aspect of the project correctly it could result in us not raising enough money and not being able to fund our project.

We took several carefully planned steps to help prevent this from happening, we calculated how much the project could cost us, we set up a bank account so that we were prepared, finally we planned how we were going to source our inflow and track our outflow.

»» Our Planned Expenses

The planned expense budget was a vital first step in our financial planning, we created this at a point in the competition where we were still unaware of a lot of the details of the project but that did not stop us from being able to think of how much money we were willing to spend on each specific area.

This was rather easy to do as it required only a small amount of research into what we needed and the costs of those things, this also helped us develop a better understanding of what was required from us in this competition. The reason that this was such a vital step was because we really wanted to be able to set our goals early and knowing how much we needed to fund the project allowed us to plan our sponsorship strategy.

When we couldn't be sure on the exact cost of a resource, we would do some research into how much it typically cost and make an educated estimate, we would always estimate more than the average so that we were more likely to have excess cashflow for world than to run out of money.

PLANNED EXPENSES	JAN	FEB	MAR	APR	MAY	JUN	YEAR
Enterprise							
Team Uniform			€385.90				€385.90
Carbon Offset				€50.00			€50.00
Sponsorship Benefits				€100.00			€100.00
Subtotal		€385.90	€385.90	€150.00	€0.00	€0.00	€535.90
Manufacturing							
3D Filament				€210.00			€210.00
Model Blocks				€100.00			€100.00
Bearings				€450.00			€450.00
Milling Costs							€0.00
Decals				€75.00			€75.00
Paintjob				€30.00			€30.00
Adhesives				€15.00			€15.00
Subtotal		€0.00	€0.00	€880.00	€0.00	€0.00	€880.00
National Costs							
Led Light Strips				€0.00			€0.00
Desks/Tables				€0.00			€0.00
Poster Boards				€400.00			€400.00
Flights				€400.00			€400.00
Travel Costs				€150.00			€150.00
Subtotal		€0.00	€0.00	€950.00	€0.00	€0.00	€950.00
Additional Costs							
Cash Flow for Worlds						€400.00	€400.00
Merch						€170.00	€170.00
Subtotal		€0.00	€0.00	€0.00	€0.00	€570.00	€570.00
TOTALS							
Monthly Planned Expenses	€0.00	€385.90	€1,980.00	€0.00	€570.00	€0.00	€2,935.90
TOTAL Planned Expenses	€0.00	€385.90	€2,365.90	€2,365.90	€2,935.90	€2,935.90	€2,935.90

»» Orbit Racing's Planned Expenses for NF 23 Credit; Orbit Racing

Team Banking

»» Our Budget tracking

The budget was something that needed to be constantly updated as the event went on and we were able to determine the exact price of all the resources. To be able to reliably track the budget we created an in depth excel spread sheet with one page as the planned expenses and another containing how much we spent in the end.

Jack, our resource and logistics director, had most of the responsibility over the finances but because of we were dealing with huge amounts of money we wanted to make sure the responsibility was solely on one person. Oliver controlled the bank account, and we were all responsible for tracking where the money went. This meant we could guarantee both ourselves and the sponsors that the money was being put to the correct use.

»» The Bank Account

For our bank services we wanted to use AIB because more than half our team were already AIB customers, and we were familiar with their services making the process much easier to set up. It was still a frustrating process as we originally planned on setting up an unincorporated entity account because we could use their monthly business statements to keep track of our finances for our sponsors, but we did not fit the legal requirements.

We set up a separate personal account under Oliver Lee's name and everything has worked perfectly, all members of the team have access to the account, and we are easily able access the account history and details. Without the bank account we were not able to finalize several sponsorships this encouraged us to work hard to fix the issues that arose in setting up the bank account.

»» Our Inflow Tracking

As well as tracking our spending we needed to make sure we did not lose track of the money that was entering our account because this could result in a severe misplacement of funds, so we added another page to the excel document this page contained our planned income throughout the competition and was constantly changing as we got confirmed sponsors. We needed to prioritise communication so that all team members knew when money was entering the account.

As well as prioritizing communication it is important that we also do not get to a point where there is no money in the account, assuring that we were prepared for the unlikely event that we needed to make an emergency purchase. In the budget we reserved a cashflow for world so this meant an additional amount that we would not spend unless we were in urgent need of a specific resource. We were confident that our sponsorship strategy could provide us with the additional funds so added the cashflow into the initial expense budget.

TEAM IDENTITY



Overall Team Identity

Our Team Identity is vital as it distinguishes our team from other competitors, communicates our values, builds trust, and fosters our extended community. To foster our team identity we had to agree on how we would be viewed externally.

Orbit Racing

>> The Name

Our team's name, Orbit Racing came from several brainstorming sessions. We were given a key piece of advice from a previous competitor to not "Sell your team name" to a title sponsor i.e. Oracle Red Bull Racing.

One name that stuck for the first month as a team was "Typhoon Racing" but this was reconsidered. We agreed on a key theme "Outer Space", we then got our name that we love today "Orbit Racing". Another key element was making sure that no recent team had competed under the name Orbit or Orbit Racing during our research we were not able to find any teams so we proceeded.



>> The Logo

A logo is vital as it creates a visual identity for a brand, enabling recognition and differentiation. It communicates the brand's values, builds trust, and enhances credibility. A well-designed logo captures attention, promotes memorability, and establishes a strong foundation for effective brand marketing and communication strategies.

We knew that creating a logo that hit all of the above requirements would be a challenge. To combat this we each created our own idea and sketch for the logo.

We then took turns presenting our sketches to the team and explaining the symbolism behind our designs. This helped us to create the instantly recognisable logo of Orbit Racing. See some of the initial designs below:



Original digital and hand-drawn sketches of the Orbit Racing Logo

>> Credit: Orbit Racing

While using our primary Headings Font we designed our primary logo, "The Wordmark", this logo displays our primary colours. We believed that a wordmark logo was the best option for our brand as it allowed for several variations but still portrayed the same message and feeling. Several companies use wordmarks as their logos.



>> Various Wordmarks Credit: Alphabet Inc, FEDEX CORP, & F1 Ltd

The "O" part of the wordmark is extremely significant, It has a miniature race car "Orbiting" the "O". This "O" is then used as our logo on our social media accounts, favicon on our website and any image needed in a 1:1 ratio.

We created several alternatives of our wordmark and logo to ensure that our brand and team would be represented correctly in every scenario. These were the Mono Positive & Negative, Standard Mono & Negative, Full Colour and Specialty variations.



Various versions of the Orbit Racing "Wordmark" and "Orbit" >> Credit: Orbit Racing

>> The Colour Scheme

Our team's core colours are a Blue and Orange Combination. We use other colours to complement our pallet. Our colour scheme is bold and easily identifiable. Colours are a key part in any brand's identity. We ensured throughout the project our colours were correct by sticking to the correct Hex Codes.

	Orbit Blue #09347a RGB (9, 52, 122)		Orbit Orange #ff7538 RGB (255, 117, 56)		Orbit L. Blue #87bfff RGB (135, 191, 255)
--	--	--	--	--	--

>> Orbit Racing Colour Palette Credit: Orbit Racing

>> The Typography

The typography of our team plays a vital role in communicating our personality, tone, and message.

The appropriate selection of fonts ensures consistency and aids in establishing a unified visual identity. Typography distinguishes the brand, boosting recognition and setting it apart from others.

We chose a group of bold and contemporary fonts, similar to our colour scheme they are bold and easily identifiable, this creates "Orbit Racing Fonts".

PRIMARY HEADINGS FONT

Name: Kensmark.03

Features: Eye Catching, Distinct, Uppercase

Use: Primary Headings

Primary Sub - Headings font

Name: League Spartan Semi-Bold

Features: Accessible, Modern, Geometric

Use: Primary Sub-Headings

Primary Body font

Name: League Spartan Light

Features: Legible, Elegant, Variable

Use: Primary Body Text

>> The Examples



- This document uses 2 variations of our Wordmark.
- All 3 fonts
- 2 Primary Colours from our scheme

Project Charter for NF23 >> Credit: Orbit Racing



Branding Guidelines

>>> The Document

Having a branding guidelines document is of utmost importance for maintaining consistency and coherence in brand representation. This comprehensive document outlines the visual and verbal elements that define a brand's identity. It provides clear instructions and examples, it ensures that all brand materials across various platforms adhere to our desired aesthetic and messaging. This promotes brand recognition, builds trust, and establishes a strong brand presence. Our well-crafted branding guidelines document has served as a valuable resource for the team, enabling us to accurately represent the team and maintain its integrity in all communications. See below what is included in our branding guidelines.

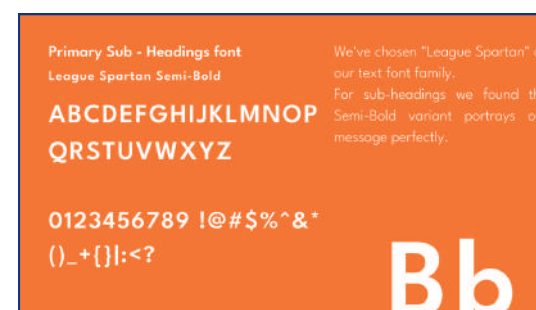
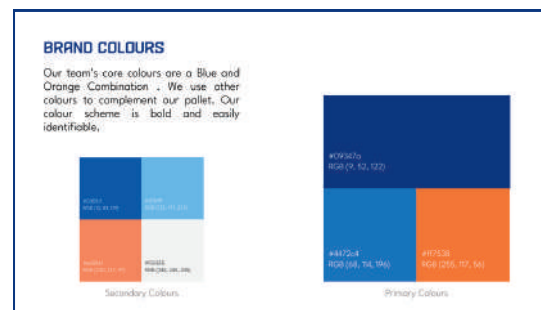
>>> Appropriate Logo Use

>>> Color Palette

>>> Link to our Brand Kit

>>> Typography

>>> Imagery



>>> Orbit Racing's Branding Guidelines v4.1 Cover, Colours and Sub-Headings Page Credit; Orbit Racing

Brand Identification

>>> Our Team Jerseys

Having team jerseys is vital for us as it aligns with our brand identity and reinforces our visual representation. The jerseys showcase our brand colours, logo, and sponsors, creating brand visibility and recognition. They contribute to a professional and consistent brand image, strengthening our brand identity wherever we go.

The design process of our team jerseys involved careful consideration and collaboration. We had several calls with one of our Strategic Partners, Owayo based in Germany.

They helped us match our colours to fit within our guidelines and branding. Working with an international supplier was an enriching experience due to us having to overcome challenges during the design process. After 2 months of designing and modifying we finally settled on a design.



Front and Back views of the Orbit Racing Jersey

>>> Credit; Orbit Racing & Owayo

Each Gold and Platinum sponsors were put on the Jersey offering a unique ROI opportunity. We added our job titles and initials on the sleeves this was easy to implement as we could use the "Special" variation of the Orbit Racing Wordmark. There is also an intricate spiral design faded in the background

Community STEM Outreach Project

>>> The Competition

While researching how we could promote STEM through fun and exciting methods, we discovered the "F1 in Schools Primary STEM Project". The next step was trying to pitch the idea to our local primary school. After having several meetings with the school's management our program was given the green light. We ordered the supplies needed from Denford's Irish Distributor "Central Technology Supplies". For two months, we would go down to the primary school every Monday, Thursday and Friday. To assist us during the sessions we created a workbook for the students to use.

Students developed their "Soft Skills" during the course of the project. Some of these skills were: Communication, Critical Thinking, Leadership and Teamwork. They also expanded their Presentation Skills, at the end of the project each team had to create a presentation to our Enterprise team. This gave students a chance to show off what they had learnt, enjoyed and challenges that they overcame during the project.

The Project was broken down into a series of sessions, each containing specific learning objectives, to ensure each team was in a position to race their finished car at the end of the course. We were invited to work with 108 students in 3rd Class spread over 4 classes, The students worked in groups of 4, each taking on a different responsibility within the team, exploring activities such as design, testing, manufacturing, marketing and promotion, all the essential roles in a real F1 team.

After more than 55 classes over the space of 2 months, on Friday the 9th of December we finally had our "Race Day". During this day the students got the chance to present their final presentations to our Enterprise team while our Engineering Team was up in the school gym sending their cars down the 20m track. We are extremely proud that we introduced a younger generation to the F1 in Schools challenge and maybe even ignited a love for STEM



Race Day Track



Primary STEM Car



Class in Session



Photos from the project. Example of a car built by the students The workbook all the students worked in..

>>> Credit; Orbit Racing



Team Management

Our team management has demonstrated several aspects that have contributed to our overall success. The team has displayed exceptional communication skills, allowing for effective collaboration and the smooth flow of information. Meetings have been well-organised, with clear agendas and active participation from all members. Furthermore, the team has showcased strong leadership, with individuals taking ownership of their roles and responsibilities. However, there are areas where our team management could improve. Firstly, there is room for enhancing delegation skills. By empowering team members with more autonomy and responsibility, we can foster a sense of ownership and initiative. This could result in greater creativity and innovation within the team. Additionally, providing more opportunities for skill development and training would further enhance individual and collective capabilities.

Overall, our team management has demonstrated many strengths, but there are areas where we can focus on improvement. By enhancing delegation and providing opportunities for more leadership roles within the team, we can further optimise our team's performance and achieve even greater success.

Marketing and Social Media

Our social media and marketing strategies have yielded positive outcomes, but improvements can be made. We have established a presence across multiple platforms, with an engaged following and well-received content. However, we need to focus on consistency and frequency of posting to maintain audience engagement. Implementing a content calendar has shown positive results, and we should continue this approach.

However, we can enhance our target audience identification by gaining a deeper understanding of their demographics and preferences. This will allow us to tailor our content more effectively and improve the impact of our marketing campaigns. Exploring collaboration opportunities with influencers and complementary brands can also be advantageous. Partnering with influential individuals and aligning with relevant brands will help expand our reach and attract a wider audience.

In summary, by addressing posting consistency, refining target audience identification, and seeking collaboration opportunities, we can elevate our social media and marketing efforts, reaching our desired audience and achieving our marketing goals more effectively.

Project Management

After receiving a poor score in our 5 Page Plan under the Project Management section of the scorecard, we made it a major objective to improve our project management skills and methodologies. Our project management has demonstrated strengths in a number of areas, but there are still places where it can be strengthened to achieve even greater success. With specific project goals and schedules, we have shown that we are skilled planners and organizers. Our team has worked well together to meet project milestones, demonstrating good coordination and collaboration.

Furthermore, incorporating lessons learned from previous projects can contribute to continuous improvement.

Evaluating past successes and failures can provide valuable insights to refine our project management approach.

The project team's communication might also be improved. In order to improve information flow and reduce misunderstandings, it is important to establish frequent, unambiguous channels of communication both vertically and horizontally. This entails encouraging comments, encouraging active listening, and giving stakeholders frequent information.

In conclusion, while our project management has demonstrated strengths, there are areas where improvements can be made. Improving communication and implementing lessons learned can lead to more efficient and successful project outcomes.

Sponsorship

We consider all our sponsors as members of the team and it is one of our main priorities to keep the sponsors happy throughout the competition not just before the transaction is made, we keep them updated on what their money is being used for.

We have managed to stay in contact over email and social media and this has benefited us as much as it has benefited them. Being in contact with business owners often experienced in the world of stem has unlocked a wide range of information that has been just as useful as their funding.

The sponsorship aspect of the project went remarkably well, but in the beginning of the project we were rather disorganised and unsure of how to act or communicate on a professional level with our sponsors, we have learned a lot from when we first contacted boca bearings. The fact that we were able to start into this area of the project so early on meant that our skills were given a huge amount of time to develop resulting in our success.

Fiance

Finance was an area of the project where we did a huge amount of planning and were incredibly prepared for things to go wrong which we think was a very intelligent approach. Although nothing went durastcally wrong in the finance department it is so important that we are extremely careful when dealing with large amounts of money that companies have trusted us with. There is quiet a lot of laws and legal requirements when handling this kind of money that we did not know about prior to the competition, especially with the bank account but it has been a learning experience for everyone on the team and we are now prepared for any future financial aspects of the project.

»» Our Overall Evaluation

From the start we set our aims high, World Champions. Our team was founded on the key principle "We each have our own strengths" and we believe that we have continued that principle through the entire project. We have learnt so much over the past few months, the F1 in Schools competition has allowed us to grow and develop new skills in opportunities we would never had gotten without it. Although we have the put in the work to back our desire to become World Champions, we know that we should be extremally proud pf what we have achieved so far and that we should keep up our high standard during the rest of the competition.

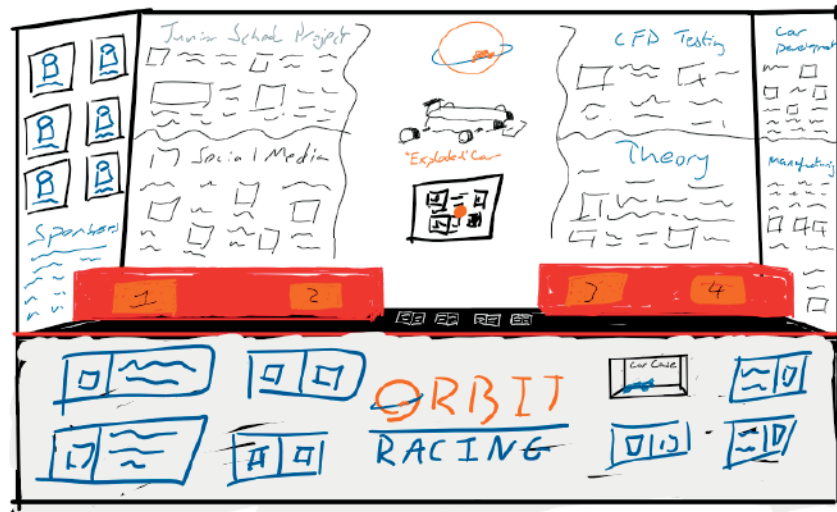


Design Process

»» The Inspiration

We did a huge amount of research when designing our Pit Display, We spent hours going through previous team's Instagram's and Website trying to see what made each Pit Display stand out. After our research these are the features that we believe make a great Pit Display:

- »» Excellent mixture of text and graphics
- »» Professional
- »» Multimedia
- »» Strong Colours



»» First Digital sketch of our Pit Display Credit; Orbit Racing

»» The Importance of Technology

We wanted the pit display to look professional and appealing, but we also wanted it to contain as much information as possible about our team without overloading it with objects. We are using our computers to help with this, they will be open in the pit display and anyone who comes along can have a look through various documents that we will have open on our devices. This allows us to keep the pit display organised and very professional looking while still containing all the information about our team. The devices will include an interactive



»» Digital Render of our Pit Display Credit; Orbit Racing

»» The Importance of Technology Cont'd

3D model of our finished car that people can zoom in on to examine what the car looks like without us needing to build an additional car, a document talking about the evolution of our team's brand and logo, and our portfolios in digital form to provide anyone with all the information about our team.

»» The Logistics

After looking over quotes from several printing companies both online and local, we decided to not get our Pit Display printed directly onto PVC Boards.

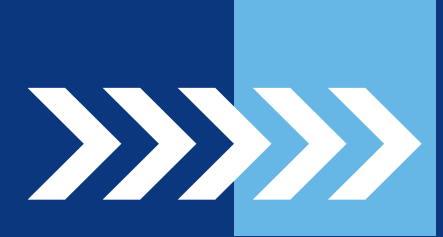
Instead we decided to purchase 4 2m x 1m, Corriboard Boards from an online retailer based in Ashbourne, Co. Meath.

We then used the same print shop that will be printing our portfolios to print the posters needed to cover our Pit Display.

Finally we used an adhesive to stick the posters to the Corriboard Boards.

This is what why we believe this was a very economical and creative solution.

- »» Extremely cost effective, 120% less than the traditional methods.
- »» It allowed us to have a greater amount of creative freedom with the design of our Pit Display.



Ireland National Finals

Enterprise Portfolio



ENTERPRISE



May 2023

