Dynamic Documentation & Potentially Perfect Portfolios

#16461 Infinite Turtles
Sanjita Srinath & Devan Shah

Who Are We

Infinite Turtles:

- 2x North Carolina State Championship Inspire Award Winner
- 2022 World Championship Innovate Award Winner
- 2023 World Championship Division Inspire Award Finalist
- 5th year team

Sanjita and Devan

- Senior founding member of Turtles
- 5 years of FTC
- 7 years of FIRST

- Senior founding member of Turtles
- 5 years of FTC
- 8 years of FIRST

Agenda

What is a portfolio and why is it important?

General Tips

Timelines for Documentation

Publicly Released Resources

We've released our Freight Frenzy Portfolios!:

North Carolina State Championship Inspire Award Winning Portfolio

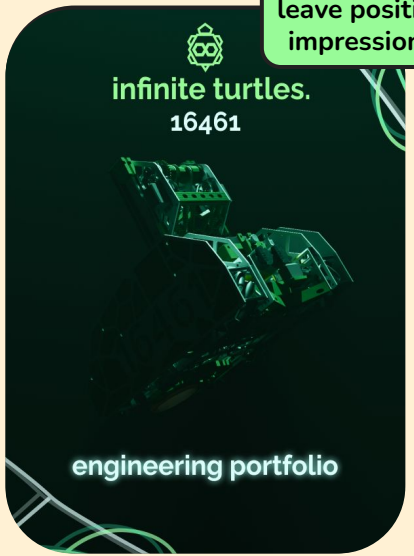
Worlds Championship Innovate Award Winning Portfolio

FIRST's Resources

The manual that dictates how FTC's judging process works is public: **USE IT**

Pore over every single word in the GM1 award descriptions, and use that vocabulary to describe your accomplishments.

Aesthetics leave positive impressions



Check out what GM0 says:

https://gm0.org/en/latest/docs/awards/portfolio.html

What is a Portfolio?

The Basics of your MOST IMPORTANT document!!!!!!!!

What it is:	Why it is important:
- Most important document you will prepare - Detailed overview of your team, season, & accomplishments. - Shows your decision-making, progress, and hard work. - Only 15 pages long + 1 cover page	- First reference for judges to get info on your team - The only documentation used for award consideration (Notebook is no longer used) - ***MOST MOST MOST*** important document you will submit

General Tips

Judges Manual

As we mentioned earlier, the FTC judging manual is publicly available. It is useful to have a few students read this manual cover to cover to understand how judging works and what judges are taught to look for.

https://www.firstinspires.org/sites/default/files/uploads/resource_library/ftc/judge-manual.pdf

Providing Judges Context

Judges have no context. Even if they were your judge at a previous competition, every competition they see you for the “first time” in order to judge everyone fairly.

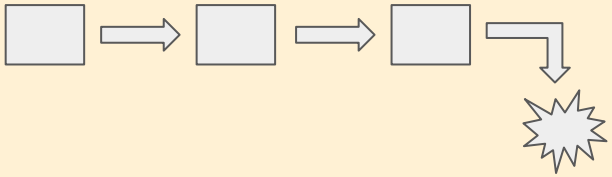
They don’t know your team. They don’t know what you’ve done and they don’t have ANY background knowledge on your decisions, your actions, or your designs.

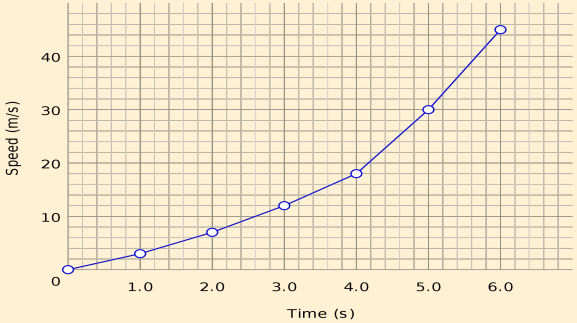
You have to make it reader accessible. This means you might have to simplify concepts that are really simple to you. But striking a balance between detailed and reader-friendly is super important. (Hint: this slide isn’t very reader-friendly)

Context Example (16461 FF Worlds)

Information Density

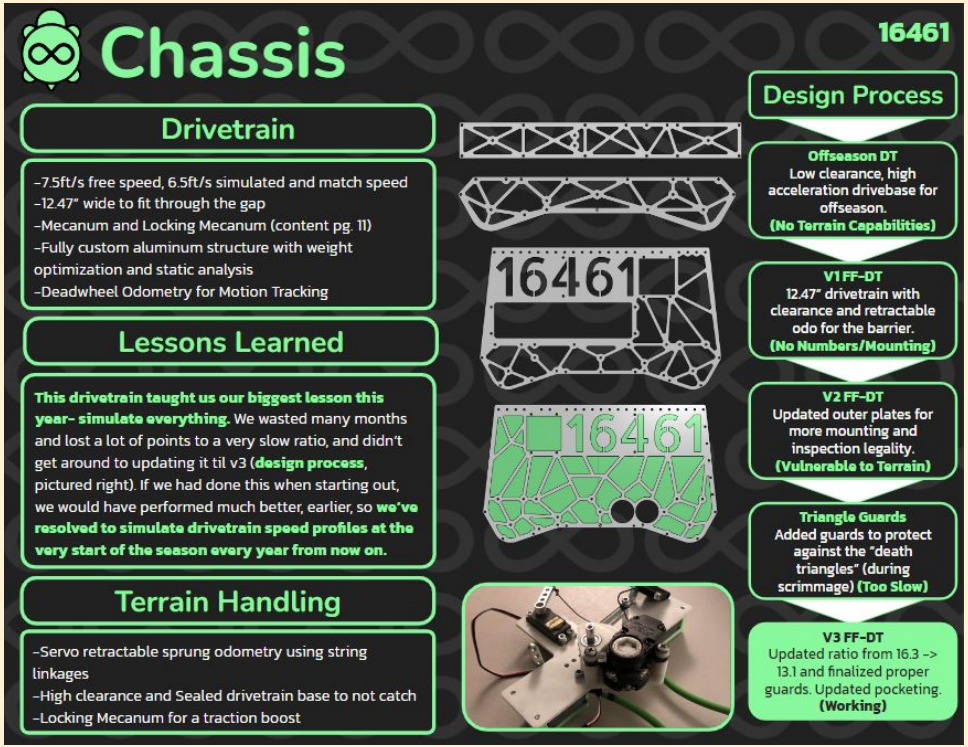
The judges don't want to read an essay on every page, so in order to make it interesting, add pictures, graphics, and charts!





Another thing to do is padding your sections, don't have everything side by side all congested space out your information. So it's easier to read. Flow charts are always interesting

Information Density Example (16461 FF States)



Timelines for Documentation

Season Timeline

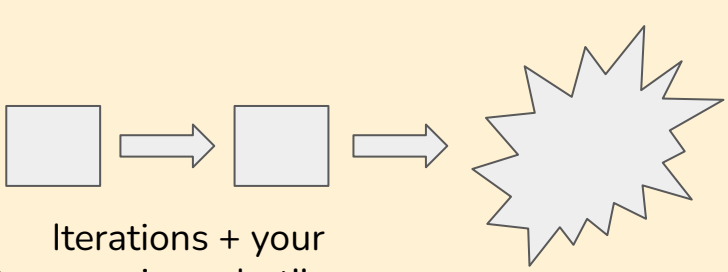
Right Around Kickoff (or before): Team Structure & Goals

Questions your team should figure out:		
Who is your team? **What is your brand image?** **What do you represent?** **What are your goals?**	These are all super important questions to have answered before you get overwhelmed with all the technical details and work that begins to flood in after kickoff. Know your team, know your goals, and start filling those parts of your portfolio out.	Once you have these questions answered, it's time to start building the structure of your portfolio. Remember you only have 15 pages to share your entire story.

During the Season

Prime Portfolio Updating Time:

Your team is working super hard and you're SUPER proud of the robot you've made so far. It's amazing. Your intake/drivetrain/insert part has gone through so many iterations and you think this just may be the one. However, as the season progresses, it's important not to leave everything till the week before to update your portfolio. Judges want to see progress and when you rush stuff at the end, you WILL miss something.



Iterations + your amazing robot!!

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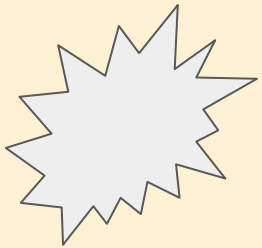


Just your amazing robot :(

During the Season

Key Components:

Software:

1. Goals
2. Design Process
3. Unique techniques you use
4. Vision, Controls Engineering, Code structure, etc.
5. New things you've learned
6. Highlight what makes **you** special!

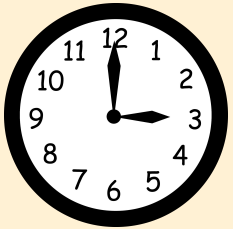
Mech:

1. Goals
2. Design Process
3. Iteration
4. Breakdown on drivetrain
5. Breakdown on scoring
6. Lessons learned
7. Highlight what makes **you** special!

Outreach:

1. Not just the numbers...
2. Why was what you did impactful and what exactly was your impact?
3. Who did you reach out to and what did you learn?
4. QUALITY OVER QUANTITY

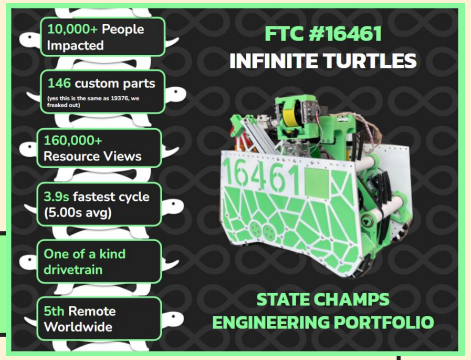
Right Before Competitions

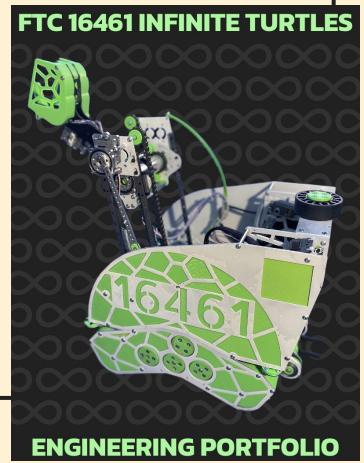


Your Team should Figure Out		
What are the best parts on your robot How did you design those parts What is your overall design process What is cool about your code What have you done for outreach Who have you connected with in the field	Remember... stick to your brand image. You need to be able to present to the judges as a cohesive team, and your brand image and portfolio is a HUGE part in that!	It’s time to start editing all this information in your portfolio. Over the last couple weeks of the season, you’ll have stored this information. Now it's time to make it pretty!

After Competitions

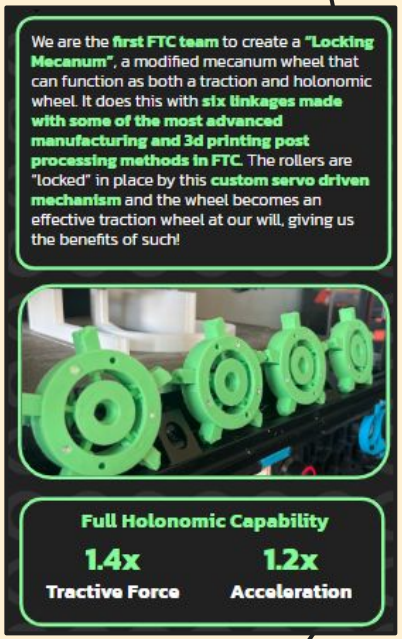
Your Next Steps:	
How were you received? **Did judges like your portfolio?** **What feedback did they have?** **What do you want to improve?**	Congratulations! You just competed! Whether this means the end of the season or there's a next step waiting, it's time to evaluate your portfolio. You will receive feedback from your judges so look at it! You can utilize this feedback for your next portfolio.





Rapid Fire Tips

- **Wording is everything**, and how you frame something can change how it is perceived entirely. Don't say that you just *"started a new FLL team and mentored them"* when you *"took them through their entire registration process, got them started as a team, supported their weekly meetings, made yourself available for questions any time of day, and cheered them on at competition"* (of course keep space in mind). A portfolio is not a place to undersell what you have accomplished (but it is also not a place to oversell).
- **Make Things Stand Out:** Numbers, statistics, and cool things you've done should **pop** on your page and be the first thing judges have their eyes drawn to. Hook them into a page with a number, then back that number up with a solid description. (Example on right)
- **Put the Engineering in Engineering Portfolio:** Part of quite a few awards is engineering content. Think, Design, Control, and Innovate all award various forms of this. Document your engineering process, and most importantly, show how you used your other STEM skills like Math to make informed decisions throughout this process.



@infiniteturtles_16461

Contacts and Help

We are both from 16461, a team based in Southeast Charlotte, and are occasionally able to help in-person in the Charlotte Metro area.

We can be contacted with our emails at **sanjita@mcr.club** and **devan@mcr.club**, please CC a coach on your communications.
We can be contacted on discord **@sanjita** and **@savck** , preferably being pinged on the NCFTC or 16461 discord.

Teams can join our discord and gain access to a help channel at https://discord.gg/nEFb7X5BUR
We recommend teams join the NCFTC discord for help from other state teams at https://discord.gg/cEhWHYBmvU
We also recommend teams join the global FTC discord, partially moderated by our team, at https://discord.gg/first-tech-challenge

This presentation and all other 16461 kickoff presentations can be found on 16461's website at https://16461.mcr.club

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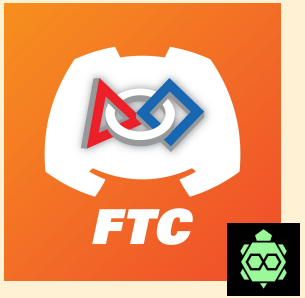

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