

IEEE Project Competition

Week 5: BOMs and Project Management





Overview

- This session, we will go over the process for writing and submitting your bill of materials to have parts ordered.
- We will also go over methods of project management and introduce them.
- We will highlight how to create a GitHub account if your project requires.
- We will then end the presentation and assist in what your project needs.

Note: No soldering workshop, go to Anh's he's a pretty cool guy.

Attendance









Change your discord user to your:

• First Name and last initial if you prefer.



BOM Template Guide (Available in discord #learning hub)



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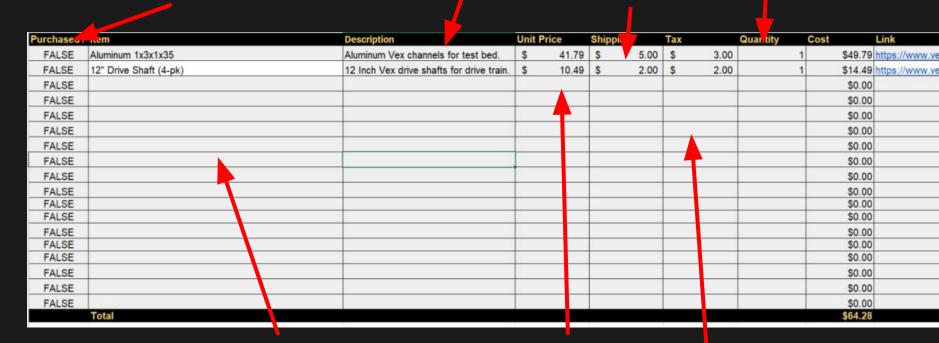
Navigating the BOM!?!

Don't worry this, we will handle it.

Description.

Exclude shipping unless PCB.

Quantity amount, can IEEE put multiple.



Simple name.



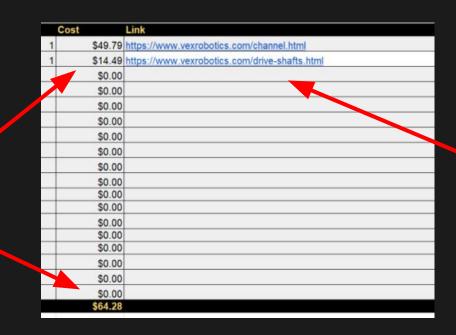
Price.

Exclude tax because nonprofit.

Navigating the BOM!?!

Cost with total.





A link that works! please :)

Navigating the BOM!?! - Submission



internal-comp-announc... Submission in discord # learning-hub # project-discussion group channels # project-updates # github # electric-skateboardmini # block-moving-robot # audio-visualizer 4 0 # arcade-game # floating-magnet # batmobile # led-pitch-changer # climbing-robot # mobile-game # knights-information-pro...





Navigating the BOM!?! - Due Date?

November 30th, we will be checking on progress throughout so be on the lookout!





Questions so far?







- Project management is
 essential in the engineering
 industry to organize, plan, and
 execute projects efficiently.
- It ensures that objectives are met within scope, time, and budget, while maintaining quality standards.





Project Management - Industry

- NASA while complicated has their own project lifecycle implementation.
- Similarly any company such as Space-X, Lockheed all have project lifecycles.

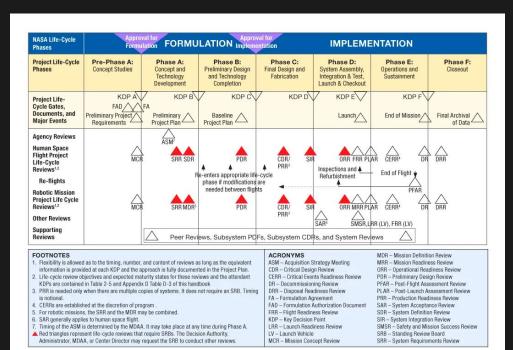
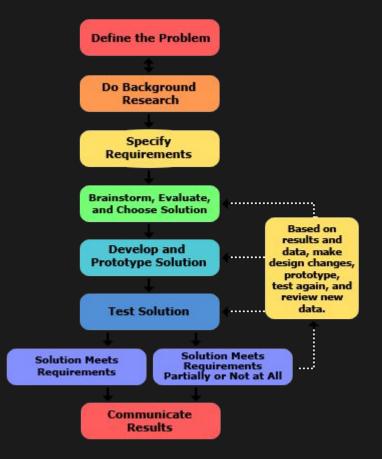


FIGURE 3.0-1 NASA Space Flight Project Life Cycle from NPR 7120.5E







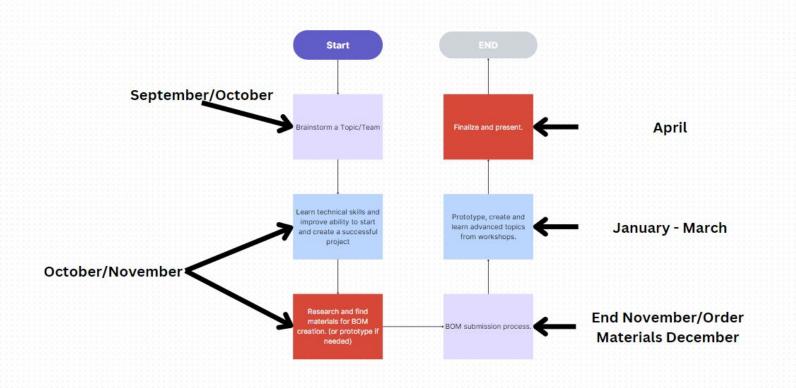
Project Management - IEEE UCF



- For IEEE projects we use Bi-Weekly Meetings, meeting minutes and follow a general structure for meeting times/establishing goals/budget request process.
- For internal project competition it will be more straightforward.

Our Metric









Tips and Tricks

- 1. Research! Watch youtube videos learn about how something similar if not the same is being made.
- 2. Look in the description of videos for part numbers and item links.
- 3. Update the excel sheet for what you find.
- 4. Talk to us and ask questions! We are knowledgeable on these things.
- 5. Don't rush it, BOM creation is also a technical skill!
- 6. Feeling lost ask us, AI or just browse a search engine for ideas on where to start.
- 7. Keep accountable of each other the more work you put in the more you get out and the more comfortable you are in industry.





But How Do You Make GitHub

1. Go to https://github.com



3. Do what it says



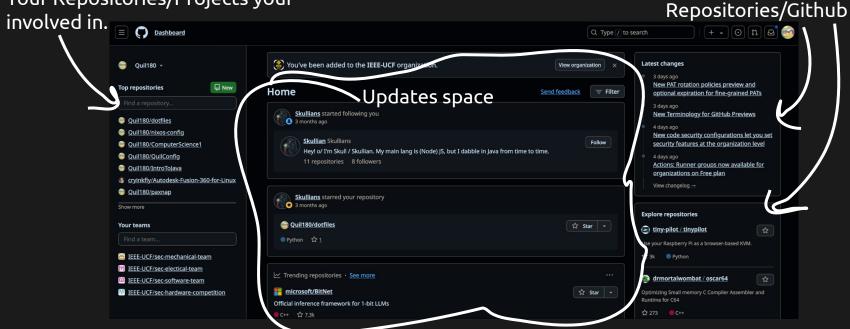




News from other

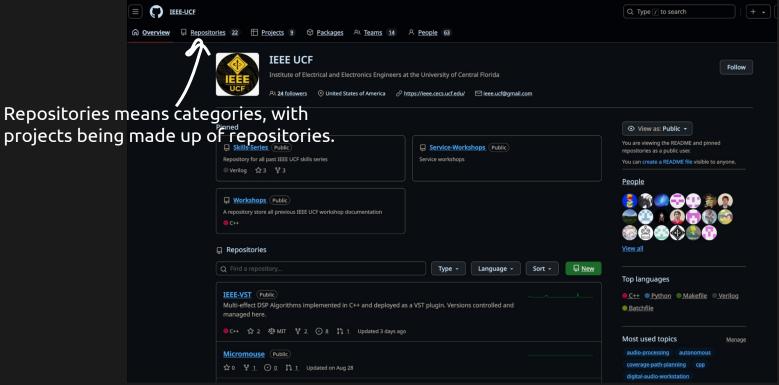
But what in the world is this???

Your Repositories/Projects your





What about when in a Organization/Repo Group?







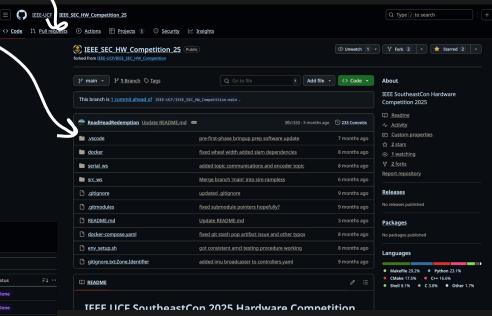
Pull Requests are requests made by others to change code/files in the repo.



You can see the files in the repository.

The projects tab shows tasks and their progress (like Trello, if you're familiar with it)

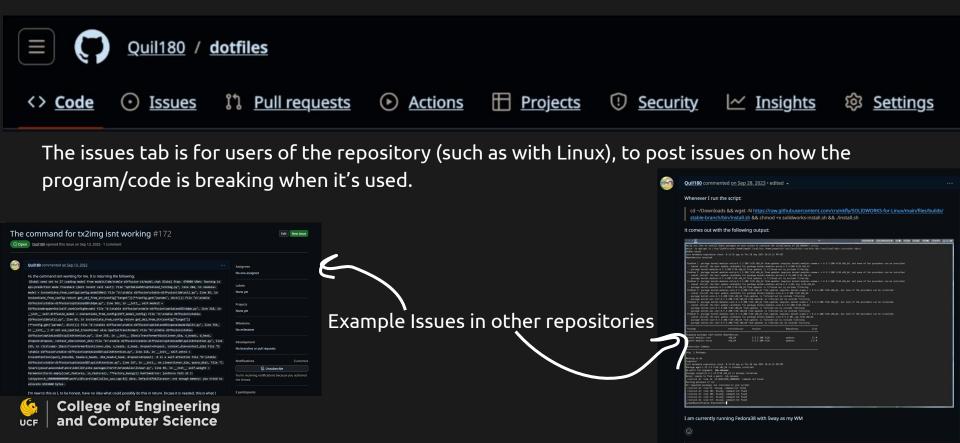








If you're in a public repository, you'll have more tabs





But how do you upload to Github?

You have 2 Options (of which will be covered in the Git/Github Workshop):

- 1. Use GitHub Desktop (for a GUI approach)
- 2. Use Git CLI for a (terminal/console approach)

Both have pros and cons:

- GitHub Desktop is more user friendly but more limited.
- 2. Git CLI is harder to use but faster and has more freedom.

Timeline and Important Dates



Weekly Meetings - Estimated Timeline

Week-1	Week 2	Week 3	Week-4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10
Introduct ion	Microco ntrollers -Erik	Fusion 360/Soli dworks - Matias	KiCAD -Tino	General Project Manage ment Skills/ Github/ BOM's	Technical Assistanc e Focused	Git and GitHub Worksh op	Technic al Assistan ce Focused (Veteran s Day)	Intro to Sensors	Winter Break (BOMs due 30th Nov)





Reminders

- Please check discord channels for your respective project.
- Recruit if you want! The more the more you may learn and get out of the project!
- Next week technical assistance focused workshop, week after is Git/ GitHub workshop.
- Talk to us beforehand if you think your design will require a custom PCB.
- GBM this week!
- BOM's due November 30th.

Finalized Teams



Electric Skateboard (Mini) - Beginner	Block Moving Robot - Advanced	Audio Visualizer - Beginner (individual)	Arcade Game - Advanced (individual)	Floating Magnet - Beginner (Individual)	Batmobile - Beginner	LED Pitch Changer - Beginner	Climbing Robot - Beginner	Mobile Game - Beginner	Knightboy- Advanced
Evan Eichholz, Bree	Eric Segrest, Abdiel, Mike (maybe)	Alexander	Aldem	Joshua Guo	Amy Diaz, Liani Garcia, Jennifer	Landon Luke, Ryan Moran, Samuel Hustin	Viviana, Frankey, Rolando, Keya	Joshua, Jacob, Jason	Scott
Airpodsred, breemars56	MrE9000, thebackdimple , _dasanii	limes1	syndric	tallasian0 281	Tedpluto, lenedinal	Landonlu ke, rmoran24	LanceEvo ,Madeem, amnotkt	Espial7, Funnmy, jasr321	.planky.





To get your started here are some suggestions:



