

The Great PC Building Challenge

THE PLAN (AKA WHAT WE'RE DOING TODAY)

You've been hired by Mystery Inc. to build custom PCs for the gang. Each member has different needs, and it's up to you to create the perfect machine for each of them within their budget. Oh, and watch out for any ghostly interference!

Your Tasks:

- 1. Scooby's Snack Station** (Budget: \$800)
 - a. Scooby needs a basic PC for ordering snacks online and watching dog videos.
 - b. Must be quiet (Scooby scares easily!)
 - c. Implement effective cable management for easy maintenance.
- 2. Velma's Research Rig** (Budget: \$1500)
 - a. Needs high processing power for solving mysteries and running complex algorithms.
 - b. Lots of storage for her massive mystery database.
 - c. Implement an overclocking strategy for extra performance.
- 3. Shaggy's Gaming Goliath** (Budget: \$2000)
 - a. High-end gaming PC for when he's not solving mysteries.
 - b. Must have fancy RGB lighting (it helps him calm his nerves).
 - c. Implement advanced cooling solutions for optimal performance.
- 4. Daphne's Design Dynamo** (Budget: \$1800)
 - a. Powerful machine for video editing and graphic design.
 - b. Must look stylish (it's Daphne, after all).
 - c. Implement a dual-boot system with Windows and Linux.
- 5. Fred's Trap Tinkerer** (Budget: \$1200)
 - a. Decent all-rounder for researching trap designs and video conferencing with the gang.
 - b. Must be portable for on-the-go mystery solving.
 - c. Implement a small form factor build without sacrificing performance.

How to Complete Your Mission

1. Use PC Building Simulator to create each build.
2. Take screenshots of your completed builds.
3. Create a document with the following for each build:
 - a. Screenshot of the completed PC
 - b. List of components used
 - c. Total cost
 - d. Brief explanation of why you chose these components (2-3 sentences)
 - e. Detailed description of how you addressed the special requirement (cable management, overclocking, cooling, dual-boot, or small form factor)
4. Ensure you come in under budget on all builds without sacrificing performance.

Additional Requirements

- 1. Cable Management:** For Scooby's build, provide an additional screenshot showcasing your cable management and explain your approach.
- 2. Overclocking:** For Velma's build, provide details on your overclocking strategy, including which components you overclocked and why.
- 3. Cooling Solutions:** For Shaggy's build, explain your cooling setup in detail, including why you chose specific cooling components.
- 4. Dual-Boot Setup:** For Daphne's build, outline the steps you would take to set up a dual-boot system and why you chose specific partitioning.

5. **Small Form Factor:** For Fred's build, discuss the challenges of small form factor builds and how you overcame them.

SUBMISSION

Submit your document to the "Great PC Building Challenge" dropbox on D2L by next class.

Grading

- Each correct build meeting basic requirements: 8 points (40 points total)
- Special requirement implementation and explanation: 8 points each (40 points total)
- Creativity and justification of component choices: 10 points
- Successfully staying under budget on all builds: 10 points

Total possible points: 100

FINAL THOUGHTS

Remember, future tech heroes, in the world of PC building, there's no such thing as a bad build - only opportunities for upgrade! This challenge will test not just your basic PC building skills, but also your ability to implement advanced concepts and solve real-world PC building challenges. Have fun, be creative, and may the best builder win!

P.S. If you hear any spooky noises while building, it's probably just your PC fans... probably. 🤖