StratusLite - Project Summary

What I Built

StratusLite is a C# automation tool that wraps common dotnet commands. Simple concept but implemented properly with good practices.

Technical Stuff I Used

Core Development

- **Process Management**: Used Process.Start with async/await to run shell commands
- **Cross-Platform**: Had to figure out Windows vs Unix shell differences (cmd vs bash)
- **Error Handling**: Proper exception handling and user feedback
- **Clean Code**: Tried to keep it readable and well-structured

DevOps

- **GitHub Actions**: Set up CI/CD that actually uses the tool to build itself
- **Multi-Platform Testing**: Runs on Ubuntu, Windows, and macOS
- **Documentation**: Wrote a decent README with examples

Testing & Quality

- **Unit Tests**: Used xUnit for testing the main functionality
- **Project Structure**: Proper .NET solution with separate test project
- **Git Practices**: Meaningful commits and proper branching

Technical Details

- **Language**: C# with .NET 8
- **Architecture**: Simple console app with modular design
- **Testing**: xUnit framework
- **CI/CD**: GitHub Actions
- **Platforms**: Cross-platform compatible

What It Shows

- I can write clean, working C# code
- I understand process management and system integration
- I know how to set up proper testing and CI/CD
- I can create cross-platform applications
- I follow good software engineering practices

Skills Demonstrated

- C# language features (records, pattern matching, async/await)
- System programming (process execution, platform detection)

- Testing methodologies
- DevOps practices
- Technical documentation

The project is small but shows I can build something from scratch with proper architecture, testing, and deployment. It's the kind of tool I'd actually use in real development work.