

Good evening, everyone.

Today, I'm excited to share a project from my master's thesis, that directly addresses a critical challenge in programming education: enhancing the code quality of students.

Imagine a platform where students can not only submit their programming assignments but also receive feedback on their code quality. That's exactly what I'll develop. My module easily integrates into existing educational systems to provide both dynamic and static analysis of student code submissions.

What does this mean in practice? It means that a student submits their code, my module gets to work, analyzing it for efficiency, readability, and adherence to best coding practices. But it doesn't stop at just identifying issues. Module provide students with a detailed report on potential refactoring opportunities, including suggestions for improved formatting and structure. This feedback is not abstract; it shows exactly what changes can be made and even offers a score on code quality to help students gauge their progress over time.

Why is this important? Because learning to code isn't just about getting the right answer. It's about developing the skills to write clean, efficient, and maintainable code. This is a vital skill set for any aspiring software developer.

My goal is to empower students to improve their coding skills through self-reflection and iterative learning.

In summary, this project represents an important step forward in programming education. It's about providing students with the tools they need to succeed not just academically, but in their future careers as software developers.

Thank you for your time.