Simplify Coding Instruction with Web-Based IDEs:

Accessible, Secure, and Time-Saving Tools for Every Classroom

Anthony Barba / 26' CSTA Impact Fellow / June 15th / 9:45 am

What! A session on Web-Based IDE's...

... will it be worth my time?

Session Goals:

- Learn how JuiceMind's free web-based IDE can streamline program development and grading, including free AI tools!
- Explore strategies for maintaining academic integrity and accessibility.
- Walk away with tools and classroom practices to make CS instruction more efficient and equitable.

Welcome and

...

Primarily a teacher at ...

... in Yakima, WA
but also ...

CSTA Washington

CSTA IMPACT Fellowship

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Disclaimer: I do not work for...

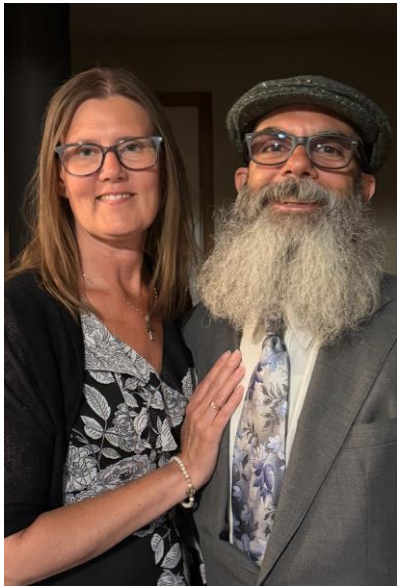
JuiceMind

But I 💙 the platform!

This is my Classroom

This is my Family

This is my Summer Plan



Framing the Problem ...

Software IDEs in a classroom introduce challenges:

- Often too complex for beginners
- Over-dependence on features like autocompletion
- Plagiarism/AI-generated code concerns
- Compatibility issues with classroom management platforms
- Students may not have access to software at home
- Teachers often depend on their IT department for technical issues

What I want in a web-based IDE …

Easy to Grade!

Plagiarism Tools

LMS Integration

Comment on Code

Multiple CS Languages

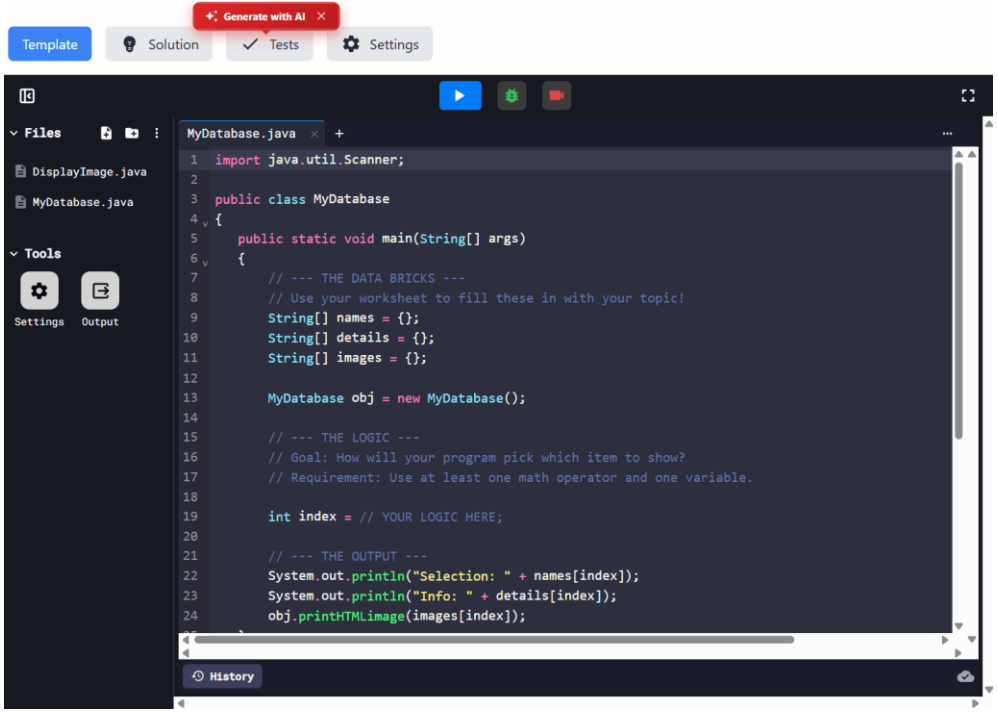
Accessibility

GUI Capability

AI Teacher Tools

The best solution I have found is ...

JuiceMind Online IDE | Quizzes | Coding Curriculum



In this session we will:

- Explore the JuiceMind IDE and other platform features
- Apply CS Practices in Real-Time
- Navigate Student Coding Development w/Feedback
  - Live demo of automated grading and test case setup
  - Show AI-detection, version-tracking, and instant feedback systems
  - Discuss how this promotes equitable, scalable feedback for large classrooms
- Model Pedagogical Strategies and Classroom Implementation