QuickScore | Grading Solution

Solution involving 3 button clicks that saves 66 hours of time

Team Members

- 1) Raahul Vignesh (Software Developer at IBM)
- 2) Deva Dharshini Ravichandran Lalitha (MS in CS at ASU)
- 3) Aswin Ravikumar Rangasamy Veerasamy (MS in CS at ASU)

Track 1: Best use of RAG with document and query generation modes

Current Challenges in Grading

Time-Consuming

Manual Labor Intensive, Delay in Results

Potential for Human Error

Inconsistency, Errors in Marking

Lack of Immediate Feedback

Delayed Learning Opportunities, Reduced Engagement

Impact on Professors and Students

Productivity Decrease, Increased Workload, Delayed Academic Progress



QuickScore

A comprehensive solution that automates the grading process, offers to increase the productivity of the professors/teachers/graders.

Avg. time spent on evaluation = 10 mins

Avg. No. of students = 50

Avg. No of exams per subject = 4

Avg. No of subjects per semester per user = 2

So, in total 66 hours of 640 hours is spent in evaluation per semester.

Market Potential: Total Addressable Market (TAM)

- As of 2023, **global educational software market** = around **\$250 billion**
- Only expect to Increase as digital and remote learning enhances.
- Moving towards 5G and AI era = More advanced digital education

Market Potential: Serviceable Available Market (SAM)

- Our Serviceable Available Market = online grading and assessment tools.
- Growth in this area due to increasing need for remote learning capabilities and digital transformation in education.

our **SAM = 4%** of the TAM = **\$10** billion.

• Expected to reach \$23 billion by 2030 - (12.1% CAGR)

<u>References</u>

https://www.coherentmarketinsights.com/market-insight/assessment-services-market-5935#:~:text=The%20global% 20assessment%20services%20market,from%202023%20to%202030

Market Potential: Serviceable Obtainable Market (TOM)

• education institutions in North America.

initial TOM = around **15%** of SAM = **\$1.5 billion**

• New market with the emergence of LLM.

• expect the TOM to increase atleast to 30% (less-competitive market as of now)

Market Value = <u>\$1.5 billion to \$3 billion</u>

Sustainable Revenue Streams

- Subscription model for institutions
- Pay-per-use for smaller entities
- Additional services (e.g., customized report generation or integration support)

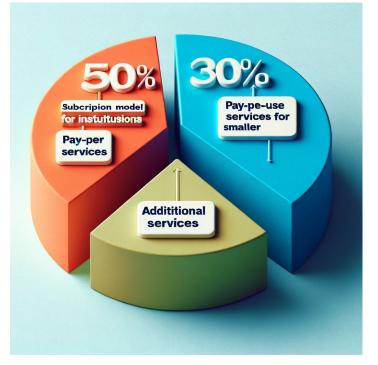


Figure: A pie chart showing revenue distribution.

Subscription Model

Target Audience:

Primarily aimed at larger educational institutions like universities and colleges.

Flexible Plans:

Tiered subscription plans based on the volume of graded assessments and unlimited plans per semester (Fall, Spring, Summer) basis.

Features:

Tiered feature availability for wider market adaptation, increasing the buying power.

Eg. Hand-written Text based grading will be available for higher priced tiers compared to entry level typed text grading.

Pay-Per-Use Model

Target Audience:

Smaller institutions, individual educators, or those who require occasionally. Credits-Based Pricing:

Credits are offered for paying upfront and used for evaluations based on features. Features:

Advanced Features cost more credits compared to entry-level capabilities.

Eg. Hand-written Text based grading will cost 3 credits compared to entry level typed text grading costing 1 credit for same number of pages.

Additional Services

Customized Report Generation:

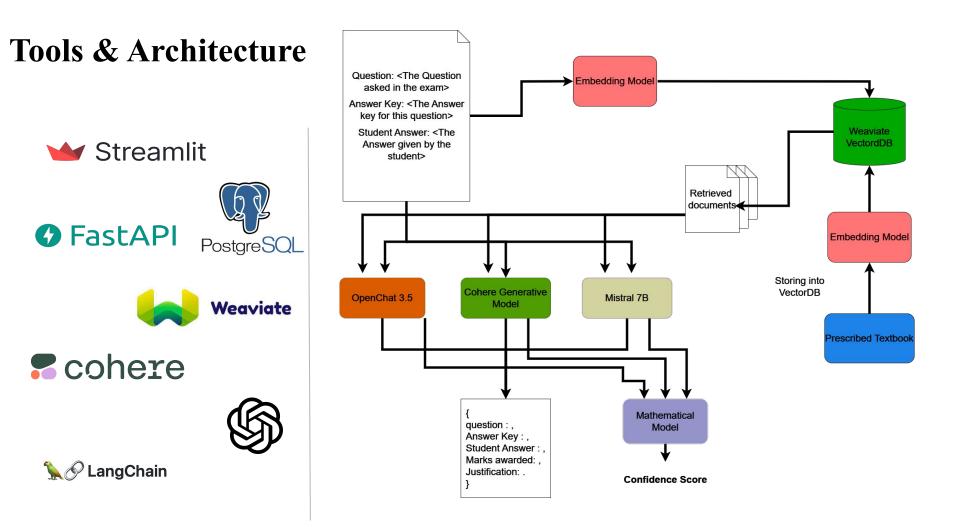
Offer advanced analytics and customized report generation (deeper insights into student performance) for an additional fee.

Integration Support:

Provide API based integration support to existing application with diff. Pricing model

Misuse detection:

Starting from plagiarism, to Question Set tampering could be alerted. Added as an extra-integrated product for an additional fee.

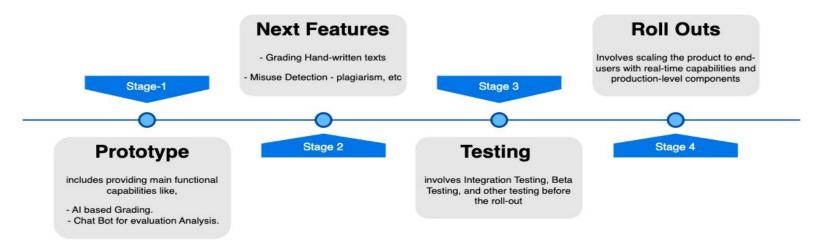


What's Next: Our Roadmap

Next features

- Grading Handwritten Texts
- Misuse detection plagiarism, etc
- Personalized Feedbacks based on student performances

Roadmap



Thank you!