What problem it solves:

At-home reading is made simple and streamlined with Amira's easy-to-use, cutting-edge technology that allows multiple students at the same time to benefit from their own personal reading coach. It can be demanding and a time-consuming task to schedule and practice reading with students via video conference tools. Amira makes it possible to provide all students with the individualized attention they deserve –in and out of the classroom.

As a student reads aloud, Amira listens carefully and accurately. Based on the student's reading level, the word being read, and the kind of error made, Amira coaches with 25+micro-interventions to build missing skills and accelerate growth. Each coaching session generates reports on the student's level of vocabulary, comprehension, phonic awareness, decoding ability, and more.

Amira engages each reader with appropriately challenging texts that are connected to their oral reading fluency assessment. During the assessment, Amira notes any errors and screens for dyslexia-risk and alerts the teacher to students who would benefit from additional screening.

What sets you apart/ how it excels above the competition:

Amira:
- Coaches with 25+ micro-interventions to build missing skills and accelerate growth, from anywhere.
- Provides support for parents and caregivers to support the home-to-school connection.
- Utilizes rapid automatized naming (RAN) and employs multiple techniques found to be reliable indicators of brain function associated with dyslexia. An entire class can be screened for dyslexia risk within minutes.
- Is the culmination of 20+ years of reading research and applied reading science from leading universities and researchers from Carnegie Mellon University, Johns Hopkins University, and University of Texas Health Sciences.
- Meets ESSA "Strong" Evidence Criteria.
- Connects reading fluency assessment results directly to relevant core content. Amira's Diagnostic Report uses students' practice and assessment results to recommend relevant Into Reading content.

How the entry excels at each judging criteria (included below with judge assignments):

1. **Adaptive – How well does the solution adapt to each user?**

Based on the student's reading level, the word being read, and the kind of error made, Amira uses artificial intelligence to select from a toolkit of "micro interventions" to build missing skills and accelerate growth.

Amira adaptively levels during the oral reading fluency. Amira uses voice recognition technology to listen to students read and can analyze student's active struggle or confidence in reading. If during the course of the assessment a student's accuracy dips, demonstrates trepidation or if the student fails to make meaningful progress in the passage, Amira adapts to support the student, or intervenes to support the student by providing verbal instruction.

2. **Ease of Implementation – What level of training data or annotation (if any) is required by users in order to make the AI perform as needed?**

Amira aims to make the administration and proctoring process as easy and automated as possible for teachers. The software administers, proctors and scores the assessment so as to relieve teachers of time-consuming tasks and free them to focus on instruction, learning and student growth. There is no training needed on annotation or data compiling, our trainings focus on accessing easily interpreted data and building a foundational understanding of how to interpret data within Amira for instruction.

3. **Feature Set – Does the feature set incorporated within this product appropriately meet the needs of the audience?**

Amira's foundations form the basis of 100's of user tests and validity. Our foundations, in conjunction with UTHealth, the University of Houston, and the McGovern School of Medicine, and our screener have undergone extensive analysis for accuracy and alignment to state requirements with over 4,000 students.

Amira's foundations are strong and based in validity, reliability and market fit, the Amira team prides itself on continual customer engagement and improvement. Regular customer feedback and market analysis ensure that we are consistently delivering and building to enhance the customer experience.

4. **Innovation – Is the product using cutting edge technology, strategies, ideas or features?**

Amira, through its partnership with Carnegie Mellon, uses a speech recognition library that was specifically built using students. Amira's partnership with Amazon and Google, help to enhance the software's ability to detect dialects and accents built into Amira's speech recognition libraries. Additionally, because Amira is driven by Artificial Intelligence (AI) using machine learning, the more students that use Amira, the more the system "learns" how to detect variances in student speech including accents and dialects.

5. **Learn - How well does the system grow subject matter expertise in your apps/ systems? To what extent does the system get smarter over time? Does the system have the ability to improve itself over time?**

Amira is constantly learning and adapting. As a student works with Amira, a real-time frustration index is maintained, based on WCPM and accuracy metrics. When a passage is proving too difficult, Amira will suggest an alternative text, where a more appropriate level of productive struggle will occur. By constantly adapting the reading resources being utilized to the current, ever-evolving skill level of a student (while still enabling students to choose their own stories at their level), Amira helps striving students build grit and engagement, while working within their zone of proximal development.

6. **Platform Flexibility and Accessibility - Is the solution made available through the delivery platforms appropriate to the target audience and use?**

Amira is made accessible from anywhere with an internet connection and accessed through Ed, the HMH Learning Platform. Amira is designed specifically for students with minimal keyboarding skills, they simply read with Amira, no mouse. Amira can be accessed at home, at school with a laptop, desktop or tablet device.

7. **Proprietary - Are the algorithms used developed in-house? If yes, rate 10.**

Yes, Amira's internal algorithms, while based on foundational research are developed in-house. Amira is the digital implementation of a number of the research foundations; thus the AI has been developed internally to track data through AI and provide instructional recommendations to teachers and students.

8. **Relevance to a Target Audience - Does the product effectively solve a specific market need?**

There are about 47 states that have or are introducing legislation that mandate screening requirements, the question for many districts is, "how do we scale?", "how do we administer assessments consistently?", and "how do we not over burden our teachers?" Amira administers, interprets data and provides instructional support to teachers and practice for students, all in one solution.

9. **Usability - Can the user quickly and efficiently interact with the product features to achieve their desired result?**

Amira is fully digital, providing all of the convenience of internet-accessed services and software with access to reports on a simple dashboard. Because the software tests a student's ability to read out loud (ORF measurement) and relies entirely on speech, students are not expected to use a mouse or keyboard to interact with the software. Students are guided both visually and via voice instructions, making the process very seamless and easy to navigate.