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Revolutionizing Education:

Pulse – The AI–Powered Teacher Assistant Built to Support and Enhance the Educational Journey of Students!

Case Study:

Pulse – AI Teacher Assistant for Region 13

Built with Sembix Studio

What is ESC Region 13?

ESC Region 13 is one of 20 Regional Education Service Centers (ESCs) in Texas that provide training, support, and resources to school districts and educators. ESCs help bridge the gap between the Texas Education Agency (TEA) and local schools, ensuring best practices and innovative solutions reach classrooms efficiently.

Overview

Pulse, an AI–powered assistant designed for teachers in Region 13, was developed in six weeks using Sembix Studio, achieving a level of development efficiency well beyond industry norms.

Leadership Perspective

"Pulse is a transformational tool for educators. With Sembix Studio, we completed in weeks what usually takes several months. This efficiency allows us to equip our teachers with advanced resources at an unprecedented rate."

Dr. Rich Elsasser
Chief Executive Director
Ed.D. in Educational Leadership

What We Built

The AI-Powered teacher assistant is an interactive dashboard and chat-based tool designed to provide enhanced support for educators. It provides a set of powerful tools for assessment tracking, assignment management, attendance analysis, and peer relationship monitoring, all integrated into an intuitive, responsive dashboard.

With features like automated performance reports and attendance insights, the platform leverages data visualization and early warning systems to further empower educators to seamlessly use data to focus their approach to facilitate individual student success. Weekly data-driven insights and personalized feedback ensure teachers have access to tailored recommendations supporting each student's educational journey.

Sembix Delivers Unmatched Development Speed vs. Industry Standards

- ⊘ Delivered at a pace up to **18 times faster** than traditional software delivery methods.

- ⊘ A delivery process that typically spans months was condensed to **just 32 days**.

- ⊘ Typically, this would require a team of up to 19 developers to match Sembix's output.

Cost Efficiency and Savings

By leveraging Sembix's approach, Pulse was delivered at just 15.8% of the traditional cost, saving 84.2%.

Key Milestones

During the six week delivery timeline, the project provided:

- **A Robust Cloud Infrastructure Configured:** Built a scalable and secure AWS environment.

- **Feature-Rich Development:** Successfully implemented 12 critical functionalities.

- **Optimization for Expansion:** Designed for seamless statewide scaling.

- **Automated Deployment:** Streamlined release cycles with continuous delivery pipelines.

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