

Maths Pathway delivers personalized learning with the help of Apache Cassandra® and Instaclustr

Overview

Maths Pathway is a company founded by a couple of classroom teachers who were sick of seeing some of their students left behind. They knew that there was a way of applying technology to the problem and ensuring that the learning needs of each student could be met in a more analytical and automated way.

The Maths Pathway solution helps educators structure the right maths course for their students by determining a student's individual learning abilities and automatically assigning personalized work tasks. The solution also performs formative assessments to continually refine the learning program for the student.

Use Case:

Personalization and Recommendation

Technology:

Open Source
Apache Cassandra® on Azure

Sector:

Education Technology

Website:

<https://mathspathway.com/>

“Instaclustr has enabled us to get underway quickly, the support team have been there from the beginning helping us to get it right the first time with our schema and architecture.”

Richard Wilson
Co-Founder
Maths Pathway

Challenge

Maths Pathway is a company in startup mode, but they wanted a database and infrastructure that would grow with them. The team has some very ambitious growth plans and there was a need to implement the right technology the first time.

The team at Maths Pathway was also looking for a solution that enabled the analytical tools to perform a highly personalized solution for each of their end-point customers—the students, their teachers, and their schools. Being a startup, the team from Maths Pathway was also looking for a managed service to look after their database and the backend infrastructure so that they could concentrate their resources on their application and customer acquisition.

Solution

Maths Pathway have taken the typical personalization use case of Cassandra to deliver a solution that enables the tailoring of individual maths learning programs for individual students. The performance of their database enables analytical computation and delivery of the ongoing individualized solutions for the students. Maths Pathway has achieved an amazing 180% growth since inception and are currently providing personalized assessments for over 15,000 students.

Cassandra has delivered the seamless scaling that the team is looking for, building the database for the future to ensure that the underlying infrastructure and technology will be able to grow rapidly with the company and future plans. As they add more regions, schools, and students they just add more nodes. Having a managed service looking after the Maths Pathway Cassandra clusters has also allowed them to concentrate on continually refining algorithms and the Maths Pathway solution.



About Instaclustr

Instaclustr helps organizations deliver applications at scale through its managed platform for open source technologies such as [Apache Cassandra®](#), [Apache Kafka®](#), [Apache Spark™](#), [Redis™](#), [OpenSearch®](#), [PostgreSQL®](#), and [Cadence®](#).

Instaclustr combines a complete data infrastructure environment with hands-on technology expertise to ensure ongoing performance and optimization. By removing the infrastructure complexity, we enable companies to focus internal development and operational resources on building cutting edge customer-facing applications at lower cost. Instaclustr customers include some of the largest and most innovative Fortune 500 companies.

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