

INTETICS HELPS MODLIN DEVELOP AND IMPLEMENT A VIRTUAL LEARNING PLATFORM



OBJECTIVE

Create and implement a virtual learning platform for schools in South Africa.

CHALLENGE

Intetics's client Modlin™ – the e-learning company- came up with an idea to create and implement a virtual learning platform for schools in South Africa. The platform was intended to enhance school learning and advance the adoption of personalized learning.

The project had two major challenges – a business one and a technical one. The business challenge was related to the creation of a unique algorithm. It should unveil student education weaknesses and help to create a customized learning path to remedy them.

The development of a platform that effectively operates on outdated hardware and under low network conditions became the technical challenge in the project.

While Modlin™ had both education and technology expertise, they needed additional resources to help create a fully functional customized learning

software. Their learning environment needed to have different levels of access to be used by administrators, teachers, content creators, and students. It needed to be easily usable for students to accelerate learning, but also track their performance to let teachers know their progress. To cover these needs, Modlin™ addressed Intetics with a request to accomplish these objectives.

SOLUTION



The Intetics project team included a Project Manager, two developers, and one QA engineers. Before creating the development roadmap, Intetics actively participated in the requirements' and business analysis to acquire a clear vision of the Client's business objectives and goals.

To adapt to the client mindset and set up the development

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process correctly, the Intetics team worked according to Dedicated team business model and Kanban project management methodology. This empowered a timely delivery and left room for last minutes changes.

The major task of the Intetics team was the creation of the platform that would efficiently perform its functions in severe conditions. To accomplish the business objective and ensure the continuous process of students' learning, knowledge assessment and implementation of adaptive learning at African schools, Intetics created a cross-platform application that leaned on the unique method of data processing. The application followed the process of metadata exchange to avoid the risks of network loss and poor connection with servers. It allowed to download the content and store it locally on a device. The interaction with a server was minimized, which decreased the risk of information loss thus empowered a nonstop educational process.

The created application (Android and iOS), that was also usable on Windows desktop, provided

multi-role access. It allowed students to use interactive learning materials, test exercises and enabled downloads of individually assorted materials. For teachers and administrators, the application synchronized activities o -line and recorded students' progress, which could be custom grouped and used accordingly to advance learning and help individual students. Today the application is implemented in schools as an experimental e-learning addition. It improves student engagement through mobile learning, gamification, and personalization. The app creates an environment for adaptive learning. The solution inspired students and increased learning efficiency. As a result, school administrators and teachers have a better idea of what educational content works best and have a better tool to manage the progress of students.

RESULTS

From the project inception, Intetics had to align its tech vision with the Client mindset. Over the stage of requirement's analysis, Intetics provided tech-

savvy options for development of a high-performing and easy-to-use application.

As a result, the team created a unique algorithm of students' education weaknesses identification based on the day-to-day process used at schools by teachers and lecturers. The application runs the process itself and presents the administrator with the results. The process is gamified. Students get scores while the teachers build education program leaning on the students' achievements.

Along with that, the project management process built as per Kanban strategy made the project more versatile and focused on continuous improvement. It allowed responding agilely to the business needs of the Client, eliminated multitasking, and enhanced team collaboration. All of that, put development quality under strict control thus yielded to more accurate outcomes. The process set up in a such a way helped effectively handle upcoming project challenges without the damage to the final result.