

End-to-end Internet of Things, mobile and web development for startups, small businesses and enterprise clients

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Project Goals

This client offers an accelerated CDL (Commercial Driving License) tractor-trailer training program with multiple locations throughout Michigan and Ohio. They reached out to TIU Consulting when their manual processes for communicating with students became too inefficient and unwieldy, and it was time for an upgrade.

The overall goal of this project was to create a mobile/tablet application that would replace the client's old-fashioned, manual processes and streamline interactions with their students. This will make the learning process more productive, less reliant on paper, and easier for students to use.

- Primary focus was to build a tablet application that will allow the client to batch their students and work with them on a daily basis. Batching will make the process much less time consuming.
- This application also needed to provide several data sources that can be downloaded into a comprehensive reporting system.

"TIU has built the right application for our needs. Our students are working remotely and this tool makes their earning process (and staff's jobs as well!) much easier and more productive."

B.S., Student Administrator

Actions Taken

TIU's mobile development team has created an application designed to be compatible on all styles/brands of tablets.



User Roles and Security Levels

Each user is assigned a security and access level that allows them to view parts of the application that support their specific roles and needs. Other areas within the application are password-protected.



Finger-tap Friendly

Application was designed with large-scale fonts, icons and tools to allow users to perform tasks with a simple finger-tap.



Easy Batching for Administrators

TIU designed application allows for easy batching of students, tasks and categories, making it much simpler to compile accurate and comprehensive data reports.

Project Challenges

Needed a Major Reduction in Paperwork

The major challenge this client faced was mounds of paperwork. All batching processes were manually done in paper form, and then uploaded into the online system. This extremely time consuming method. made it very difficult to store huge amount of data in one place and easily access the data.

No Reliable System for Recordkeeping & Reporting

The lack of updated software applications made it impossible to generate the desired reports.

Recordkeeping and reporting was not comprehensive and was very time-consuming.

Online training for non tech-savvy users

Many students in the school were unfamiliar with online learning systems, so it was important that training be available to assist them in learning those processes and applications.

Project Results

TIU has developed an efficient and simple to use tablet based application for this client that has greatly reduced the scheduling and logistics workload for the instructors. Now they can focus on the education and training of new CDL holders resulting in better trained truck drivers and the ability to increase class size.

Easy to capture data for records and reports

• Instructors have easily retrievable data on each student so they can monitor a students progress and work on areas of need.

Real-time access to completed coursework for students and instructors

 Instructor and students have immediate ability to review and initial each classroom completion.

Streamlined operational systems and procedures

 Operational procedures have been greatly enhanced allowing the same number of staff to handle a greater number of students.

Digital Tools & Technologies











Solution Process

TIU built this application for tablet use in order to allow client's students to perform all functions on just a finger tap. To build this application we have used the following web development tools:

- a. PHP 7 (code igniter 3)
- b. Mysql 5.6 (database)
- c. HTML 5 with Bootstrap 4.

Code versioning is being maintained using repositories in bitbucket. Each developer has his own branch where the code is pushed from the local machine. Once we identify that the code is working properly it is then merged in the master branch and then to the server.

Future Plans

Online Payment features and options.

Future projects include creation of an online portal to allow students to pay tuition and fees online. A secondary feature of this portal will be a search and application function for student financing options throughout the US.



