Development and improvements to modules for a microcredit platform

For Tafi, the Rootstack team developed new modules on its merchant platform and improved several errors on its portal.

About Tafi

Tafi is a platform for managing microcredits digitally. It is a Panamanian company that makes loans to people in businesses associated with the company. Clients can access it through their cell phones or through the Tafi portal to make their requests.

Rootstack's work with Tafi

Microcredit systems

A microcredit system is a financial tool that provides small loans to people or microenterprises that generally do not have access to traditional financial services. These loans are usually low in amount and are designed to encourage entrepreneurship and improve the living conditions of people in vulnerable situations.

The main flow process of a microcredit system includes application and evaluation of the credit, disbursement, monitoring, risk management and finally, closing the credit once it has been paid.

Project background

Tafi was working with another vendor, who helped them make some developments, but they decided to change to Rootstack. A group of Rootstack developers came in to cover the roles that Tafi needed and thus manage their Merchants and Clients portal.

Mi Jornada Module

Different modules and fixes have been created on their current sites. **One of the most relevant is the Mi Jornada module, which is used by merchants, specifically salespeople**, to keep a list of all the

transactions they make, whether they are collections or sales.

Within this module, **the seller can see the transactions they made, they can generate a PDF file where the transactions are downloaded in detail.** The module allows registration of all the sales made by the retail companies that are associated with Tafi.
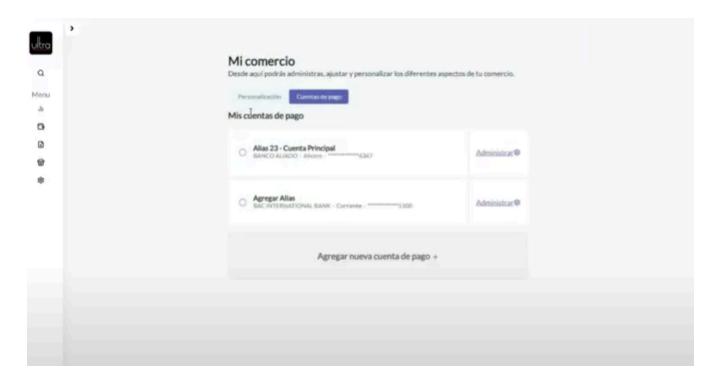
In this module, you can also see a **"summary of my day"** which gives the business a summary of what was done that day: all sales and collections, with description and type of transaction, which generates a PDF report that can be delivered to whoever requires it.

Work was also done on generating the balance letter, with which a person can request a personalized letter from Tafi saying that they have already paid a loan or that they currently have an active loan, which can be addressed to an institution or to whomever it concerns.

Mi Comercio Module

Another module where Rootstack worked is the My Business module, where Tafi associates can define the information they want to show: either the image, name, and payment accounts where Tafi will send the money to this business. Accounts can be managed and new accounts added.

Other functions within the Tafi portal

Another of the functions that the Rootstack development team worked on was credit cancellations: when a credit is requested, this goes through several processes and there is a specific area within the portal that is for credit cancellations. Here, a person, from WhatsApp or the portal, makes the cancellation request, this is passed to the merchant site and this is then passed to the site of Tafi's agents, an internal system, where the credit cancellation is evaluated, where there are the options of Tafi bearing the expense or the merchant bearing that expense.

Work was done on the development of a module to configure several devices per merchant, linking a single-use code, so that each merchant can have as many devices as they need for customer service, such as a telephone or computers where they can log in.

Work has also been done on various improvements and fixes to the site, all of which were required by Tafi throughout the project. Among the fixes: buttons were moved, text corrections were made, and some models were changed.

Working on the backend

Within this project with Tafi, we also worked on the backend of the commerce portal, specifically on the development of APIs and error correction, in addition to the development of components such as reports and services. New integrations were also made.

From the backend, reports were developed for daily sales of the businesses, the downloading of balance letters, and the downloading of credit cancellation letters. Errors on the Tafi Persona site were also corrected, in addition to the development of payment methods.

Technologies

We utilized a variety of technologies for this project. For the front-end, we used Next.js, and for the back-end, we implemented .NET. We also integrated Infobip to manage and process requests through WhatsApp, enabling the automated sending of messages via WhatsApp within the Tafi portal.

For database management, we employed both MongoDB and SQL Server. Additionally, we used C# for various development tasks and Docker for containerization and deployment.