

Andrés Quintero

Senior Software Engineer, 15+ years experience

Email: rocoutp@gmail.com

Personal Website: <https://andres.servibot.co>

Education

- **B.D. Systems Engineer** - Technological University (2008)
- **M.D. Software Project Management** - Autonomous University of Manizales (2024)

Areas of Expertise:

- Back-End Development
- Front-End Development
- DevOps

Core Competencies:

- **Programming Languages & Frameworks:** PHP, Laravel, Java, Spring
- **Development Practices:** Test-Driven Development (TDD), SOLID
- **Laravel Ecosystem:** Livewire, Nova, Tailwind, Vue
- **Cloud Computing:** AWS (Lambda, CloudFormation, Elastic Beanstalk, EC2, S3)
- **Containerization:** Docker

Certifications:

- Zend Php Certified Programmer
- Oracle Certified Java Programmer
- Aws Certified Solutions Architect
- SEI PSP Certified Developer

Also proficient with: **OOP, Android, Ionic, Vue, Ruby on Rails, WordPress, Tailwind, Python**

Introduction

Over the past 15 years, I have dedicated my career to developing a wide range of applications using various technologies, including PHP, Laravel, and Java Spring. Since 2016, I have been an active subscriber to Laracast and have consistently participated in the Laracon Online conference for the past three years. Additionally, I regularly attend the AWS re:Invent conference virtually. I am a strong advocate of Test Driven Development (TDD), which I integrate into my daily workflow. My deep passion for the efficiency that modern frameworks like Laravel and Spring provide drives my commitment to adhering to best practices to fully leverage their capabilities.

In addition to my development work, I have been expanding my expertise in scaling and enhancing the observability of my applications. I've utilized various AWS services, such as EC2, Elastic Beanstalk, ECS, Lambda, and S3, to deploy and scale applications in the cloud. This hands-on experience has not only enhanced my proficiency in cloud computing but also equipped me with the skills necessary to optimize development workflows in accordance with DevOps principles.

Please feel free to visit my personal website at <https://andres.servibot.co> to explore more details about my projects. While many of the projects I've worked on are private on GitHub, I have a public project available at Intervals on GitHub. This project features a custom-built framework I designed, which includes components like a basic router, request manager, controller, models, views, database abstraction, and a straightforward service provider. It demonstrates functionality for managing time interval resource reservations, showcasing the framework's capabilities. Inspired by a Laracast course, I have continuously refined this project, enhancing its features and functionality over time.

Additionally, I invite you to review my coding work at Rest API Creator on GitHub <https://github.com/afquinterog/rest-api-creator>, a straightforward resource creator enhanced with an advanced Query Builder. This tool streamlines the management of simple resources by allowing for the declaration of models and their relationships in an array format, thus simplifying the development process.

Experience

AET

Feb/2022 -

Senior Software Engineer

<https://www.aetrust.com>

Project Overview

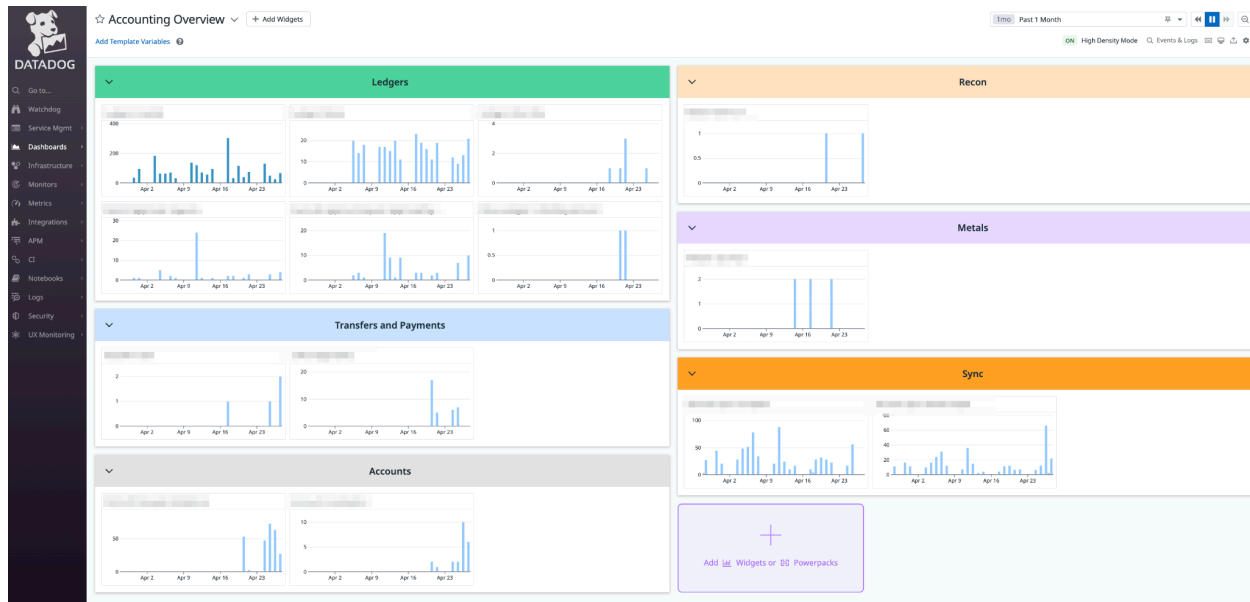
- Developed an application to enable the investment of retirement funds across various options. This project involved creating a user interface with Vue and Nova, and an API built using Laravel. The application is deployed on AWS, utilizing test-driven development principles.

Key Features:

- **Migration:** Participate in the migration from FileMaker to Laravel Nova. This process included building a new data model, analyzing user requirements, and streamlining the existing process.
- **Experimentation:** Conducted small-scale experiments to rapidly gather feedback on the new system, enhancing iterative development.
- **Metrics and Observability:** Implemented metrics to monitor important business use cases, improving our understanding of application usage patterns and supporting data-driven decision-making.

Tools: Vue, / Tailwind CSS / Nova / Laravel / PHP / MySQL / Aws / Web Services / TDD

The image below showcases the dashboard that includes various metrics, providing insights into system performance and user interactions.



LawnStarter

Feb/2021 - Feb/2022

Senior Software Engineer

<https://www.lawnstarter.com/>

Project Overview

- Developed an application to manage the lawn care marketplace, including administrative tasks and mobile applications for LawnStarter. This role involved building the user interface using React and Vue and developing an API with Laravel. The application was deployed using Forge and Vapor, emphasizing a test-driven development approach.

Key Features:

- **Integration:** Managed the integration of two distinct applications, each with its own specific data model. As the Epic Manager, I crafted the initial epic description for integrating the notifications module, then segmented it into smaller work units (stories) to facilitate concurrent development by the team.
- **Leadership and Communication:** Provided frequent status updates and actively worked to remove obstacles, ensuring timely project delivery.

Tools: Laravel / Php Mysql / Livewire / React / Vue / Tailwind CSS / Web Services

Simple Chat

Jul/2021

Laravel Chat Application

Demo <https://youtu.be/pPtTluqT30c>

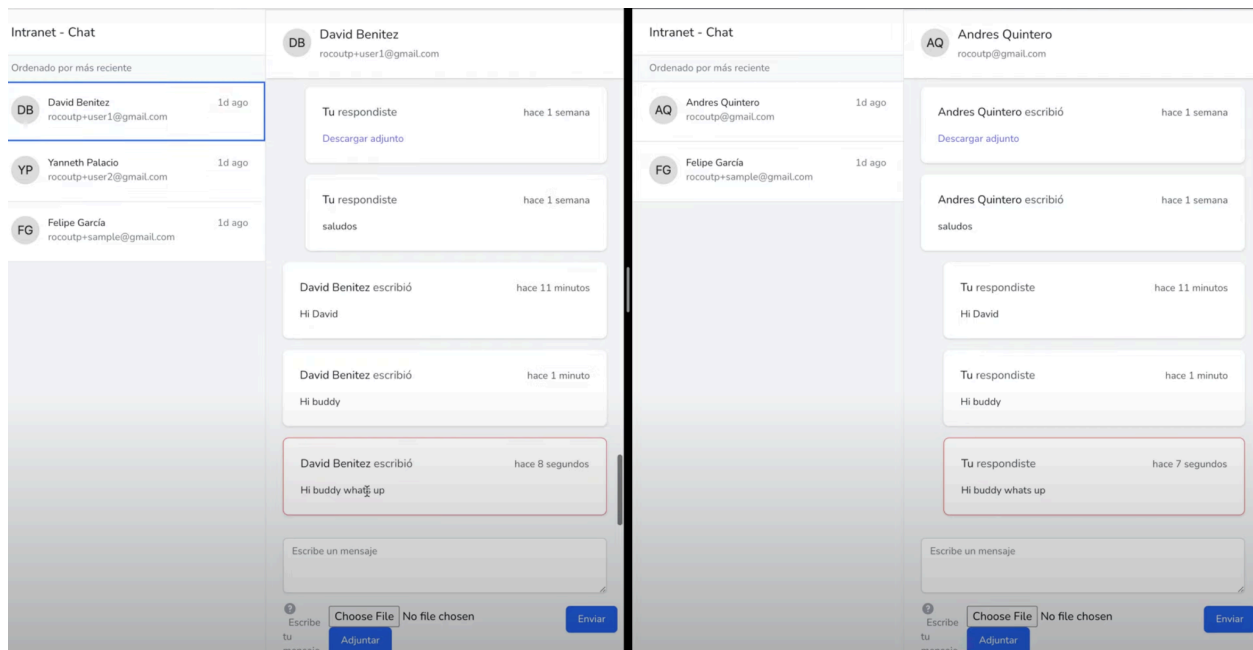
Project Overview

- Developed an online chat application that enables users to communicate privately with friends or in group settings. The application supports file attachments and facilitates multiple simultaneous conversations. Users can engage in various chats, and the application ensures that notifications for new messages are promptly displayed. This feature-rich platform enhances user interaction by allowing both individual and group chat functionalities.

Key Features:

- UI application built using Livewire
- API application built in Laravel.
- Test driven development
- Use Livewire and polling to keep the board up to date with the latest messages, this can be easily translated to Laravel Echo and Pusher.

Tools: Laravel / Livewire / Alpine JS / Tailwind / TDD / Php / Mysql



PairChess

Jan/2021

Laravel Chess Application

Demo <https://youtu.be/FfXzbyV6q9s>

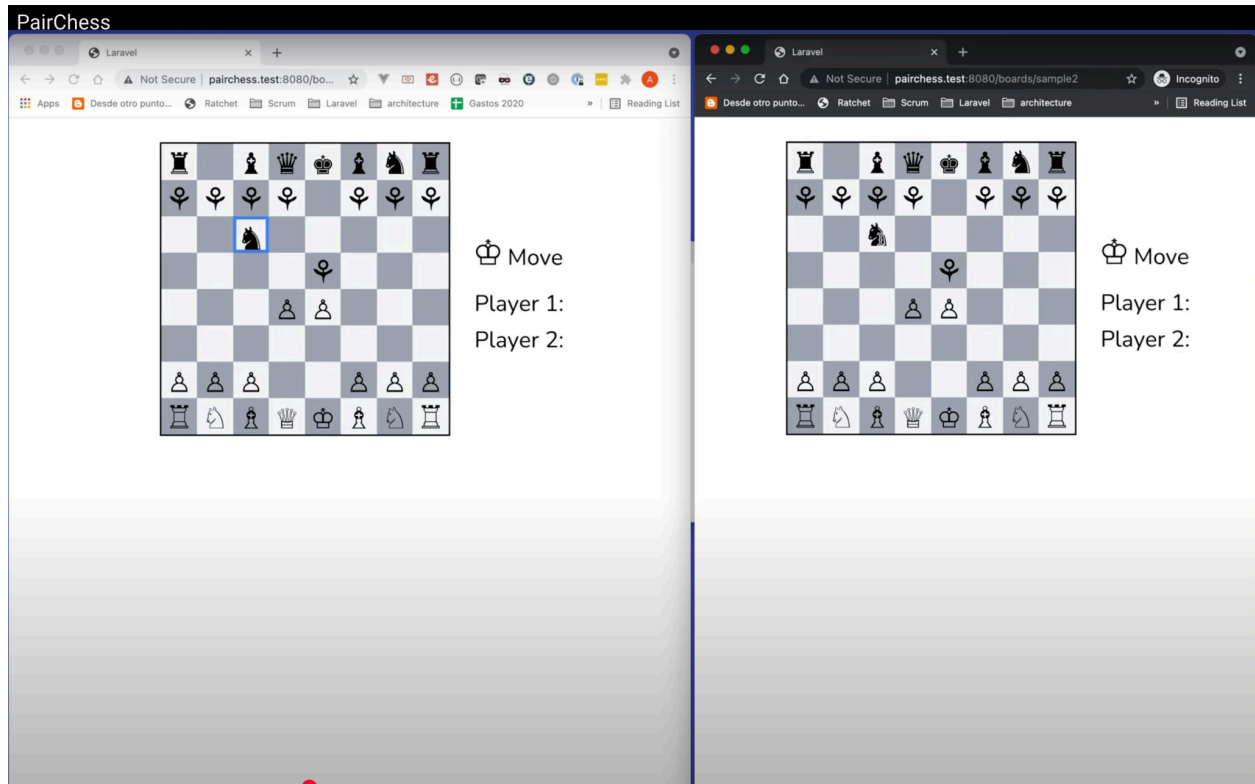
Project Overview

- Developed an online platform designed for playing chess with friends, adhering to official chess rules. The application's flexible architecture is also capable of supporting a variety of other board games. To adapt the platform for different games, only the specific game rules need to be substituted, making it a versatile solution for multi-game play.

Key Features:

- UI application built using Livewire
- API application built in Laravel.
- Use Redis Cache to store the board status
- Test driven development
- Use Laravel Echo and Pusher to send push notifications after a board change

Tools: Laravel / Livewire / Pusher / Echo / Alpine JS / Tailwind / TDD / Php / Mysql



Servibot.co

Jun/2020 - Jan/2024

Lead Developer - Architect

<https://servibot.co>

Project Overview

- Developed a versatile application designed to streamline operations for service-based companies. Users can customize the platform according to the specific types of services they offer to their clients.

Key Features:

- **Billing and Payments:** Automated billing with the ability to send invoices as PDF attachments via email, along with real-time payment notifications.
- **Service Rating System:** Allows customers to rate services, enhancing quality and customer satisfaction.
- **Reporting:** Periodic reports on business performance are automatically sent to business owners, providing essential insights into operational status.
- **Service Process Management:** Supports detailed service process management, including

billable items and state transitions using a state machine to ensure procedural integrity.

- **Calendar Integration:** Features a service calendar that syncs with Google Calendar, integrated directly into the application, enabling companies to easily view and manage upcoming service appointments.
- The landing page is crafted using Tailwind CSS, ensuring a responsive and modern user interface.
- The application maintains high standards of quality, covered by more than 60 tests to ensure reliability and performance.

Tools: Laravel / Nova / Livewire / Vue / Tailwind / TDD / Php / Mysql / Web Services

Venture

Feb/2016 - March/2021

DevOps - Software Engineer

<https://www.venture.co>

Project Overview

- Responsible for developing and deploying applications that streamline investment management processes. Used a robust suite of AWS services including Lambda, Elastic Beanstalk, S3, and VPC, and managed infrastructure as code with Terraform.

Key Features:

- Utilized Terraform to manage and provision AWS resources efficiently, ensuring seamless environment replication and version control.
- Integrated observability metrics using DataDog and AWS CloudWatch alarms to monitor application performance and system health, enabling proactive issue resolution and system optimization.

Tools: AWS / Lambda / Elastic Beanstalk / Spring / Laravel / TDD / Mysql / Web Services

MarketRise

Feb/2020 - Aug/2020

Senior Software Engineer

Project Overview

- Developed an application that enables small companies to construct comprehensive marketing plans. This tool facilitates strategic marketing through interactive planning and visualization.

Key Features:

- Engineered Angular modules to render marketing charts using D3.js, enhancing data visualization and user insights.
- Created an Angular module to display monthly and yearly marketing plan calendars, providing users with clear, chronological views of their marketing activities.
- Developed a step-by-step interactive guide to assist users in creating detailed marketing plans, improving user engagement and plan effectiveness.
- Translated Adobe XD designs into functional HTML/CSS layouts, ensuring visual consistency and responsiveness across the platform.

Tools: Angular 8 / AdobeXD / Node JS

Server monitor

June/2018 - Jan/2020

Lead Developer - Architect

Project Overview

- Developed a web application designed to monitor Linux servers across various providers. This solution facilitates secure connections to servers via SSH and key pairs, streamlining server management and monitoring.

Key Features:

- Enables the monitoring of critical server metrics such as CPU usage, disk space, network requests, and Nginx connections.
- Allows for the execution of basic remote tasks using SSH and the scheduling of tasks to run at specified times.
- Provides the ability to group servers by categories and assign tasks to specific categories, enhancing management efficiency.
- Configures alarms to alert users when key metrics fall below predefined thresholds, ensuring prompt response to potential issues.

Tools: Laravel / Nova / Vue / Php / Mysql

Zipdev - Cloudbeds

June/2019 - Dec/2019

Senior Software Engineer

Project Overview

- Application designed to centralize bookings for hotels, hostels, and Airbnb hosts across various platforms. This tool streamlines reservation management and enhances operational efficiency.

Key Features:

- **Development Environment Enhancement:** Optimized the development environment by implementing Docker for development environment and caching certain assets on an external service (Amazon S3), which improved load times and resource availability.
- **Module Troubleshooting:** Conducted a thorough review and resolved issues in the inventory and availability module, ensuring accurate tracking and management of accommodations.
- **Feature Development:** Engineered a new feature that consolidates individual reservations into a single unit. This allows operations performed on the unit to automatically cascade to all associated reservations, facilitating easier management.
- **Customer Support:** Provided ongoing support for bugs reported by users, quickly addressing and resolving issues to maintain system integrity and user satisfaction.

Tools: CodeIgniter / Php / Mysql

TryGps

Jan/2018 - June/2019

Lead Developer - Architect

Project Overview

- Developed from scratch a **GPS tracker application** designed for real-time monitoring of vehicles and bicycles. This robust tool offers advanced features for enhancing security and operational efficiency.

Key Features:

- **Real-Time Tracking:** Provides continuous location updates for vehicles and bicycles, enabling users to monitor movements precisely.
- **Geofence Configuration:** Allows users to set up geofences and receive email alerts for entry/exit events, speed violations, and adherence to work schedules.
- **Driver and Vehicle Management:** Enables configuration of driver information, generation of distance reports, and designation of points of interest to optimize route planning and monitoring.
- **Alert System:** Customizable alerts for geofence interactions and speed thresholds ensure proactive management and response.
- **Rapid Development:** Built from scratch, the first version was released in under three

months, demonstrating a swift and efficient development process.

- **Commercial Success:** The application has evolved into a successful commercial product, widely adopted and continually enhanced based on user feedback and market needs.

Tools: Laravel / Php / Mysql / OpenGts / Vue

Starportal

Jan/2017 - Dec/2017

Senior Engineer - Devops

<https://starportal.edu.au>

Project Overview

- The Provider Portal is designed to promote STEM education opportunities to families, facilitate the posting of volunteer openings via VolunteerMatch, and enable collaboration with other organizations in Australia. This platform serves as a comprehensive resource for community engagement and educational advancement.

Key Features:

- **API Construction:** Developed in PHP, the API connects to MySQL for database management and Solr for enhanced search capabilities.
- **Search Optimization:** Integrated Solr to refine and accelerate search functionalities, improving user experience and response times.
- **User Interface:** The user interface is crafted using Angular, providing a responsive and intuitive design that supports seamless user interactions.
- **Deployment:** Deployed on AWS, utilizing an Application Load Balancer and autoscaling policies to ensure reliable performance and scalability under varying load conditions.

Tools: Php / Mongo / Solr / LoadBalancer / Angular

The Connectory

June/2016 - Dec/2016

Senior Engineer - Devops

<https://theconnectory.org/>

Project Overview

- The Provider Portal is an innovative application designed to facilitate connections between

volunteers, providers, and families. It serves as a dynamic platform to promote STEM education opportunities to families, post volunteer openings via VolunteerMatch, and foster collaboration with other organizations.

Key Features:

- **API Development:** Built in PHP, the API interfaces with MySQL for robust data management and Solr for advanced search capabilities, enhancing the overall user experience.
- **Search Optimization:** Utilizes Solr to significantly enhance search functionality, making it easier for users to find relevant information quickly and accurately.
- **User Interface:** Developed using Angular, the user interface is modern and user-friendly, designed to facilitate seamless interactions across all user types.
- **Deployment:** Hosted on AWS with an Application Load Balancer and autoscaling policies to ensure optimal performance and scalability, accommodating a growing number of users without compromising speed or reliability.

Tools: Php / Mongo / Solr / LoadBalancer / Angular

VendaMais - Application on Play Store

July/2015 - Mar/2016

Senior Engineer**Project Overview**

- Developed an Android application designed to manage sales information effectively. This application is optimized for use in field environments, allowing for offline data capture and subsequent synchronization when network connectivity is established.

Key Features:

- **Offline Capability:** Ensures reliable performance by allowing users to operate offline and sync data once a network connection is detected.
- **User Interface:** Implemented using Google's Material Design principles, providing a clean, user-friendly graphical user interface that enhances user experience.
- **Database Integration:** Utilizes SQLite for mobile data storage, with seamless synchronization to a central SQL Server database, ensuring data integrity and accessibility.
- **International Use:** Successfully deployed and actively used in more than five countries, demonstrating its scalability and adaptability to various business environments.

Tools: Android / SQLITE / Web Services / SQL Server

ScienceFestival site

Aug/2015 - Oct/2015

Devops - Senior Engineer

<https://www.sciencefestivals.org/>

Project Overview

- Developed a custom WordPress site tailored to specific operational needs.

Key Features:

- **Custom Post Types:** Introduced custom post types to enhance content organization and presentation, tailored specifically to the site's requirements.
- **Plugin Development:** Engineered a bespoke plugin to efficiently manage the site's slideshow, providing seamless integration and user-friendly controls for dynamic content display.

Tools: Wordpress / Mysql / Plugin development / Custom Post Types / Apache / Php

SIGVIT Ecopetrol

Feb/2015 - Aug/2015

Senior Engineer

Project Overview

- Developed a Geographic Information System (GIS) to optimize and control hydrocarbon logistics operations.

Key Features:

- **Geospatial Module Development:** Engineered a module capable of capturing all components within a specified geographic area, enhancing operational oversight and management.
- **Ongoing Support and Maintenance:** Provided continuous support and implemented bug fixes for existing modules, ensuring system reliability and performance optimization.

Tools: Java / Jboss Server / Flex / Action Script / ArcGis Server

Colombian Federal Aviation Administration System

Jan/2014 - Dec/2014

Senior Engineer

<https://www.aerocivil.gov.co>

Project Overview

- Developed a comprehensive application designed to manage various operations for the Colombian Federal Aviation Administration.

Key Features:

- **State Management and Workflow Development:** Assisted in constructing parts of the state management transitions and workflows, enhancing the application's operational efficiency and user navigation.
- **UI Notifications Module:** Engineered a unified module to manage user interface notifications, ensuring consistent and effective communication with users throughout the application.

Tools: JBoss / Hibernate / JSF / PrimeFaces / Oracle / Maven / Arquillian / Subversion

Tigo Geographical information support system

July/2013 - Dec/2013

Lead Software Engineer

<https://www.aerocivil.gov.co>

Project Overview

- Developed key enhancements for the Tigo Une GIS system to improve functionality and data integrity.

Key Features:

- **Network Component Updates:** Introduced capabilities to update various types of network component information, streamlining data management and accuracy.
- **Data Consistency Module:** Implemented a module that enables users to identify and correct issues found in inconsistent data, ensuring system reliability and operational precision.

Tools: Arcgis Server / Javascript / Php / C# / Dev / Express / .Net / APIS Arcgis

Tigo Virtual Office

March/2008 - July/2013

Developer

<https://www.tigo.com.co>

Project Overview

- Developed a comprehensive virtual office application for Tigo Une, designed to support essential business operations and enhance customer interaction. The platform efficiently serves over **20,000** customers, streamlining their access to services and support.

Key Features:

- **Customer Registration:** Users can register using their contract number, allowing personalized access to their service details.
- **Operational Reports:** Provides detailed usage and payment reports, request status updates, and performance indicators for various services.
- **Integration with Internal Systems:** Seamlessly communicates with other enterprise applications such as IVR and OpenSmartFlex via web services, enhancing operational coherence.
- **Performance Tracking:** Generates performance indicators for each service type and SLA compliance, directly interfacing with billing software to ensure accuracy.
- **Bill Viewing and Service Requests:** Enables customers to view their bills and request services directly through the platform, simplifying interactions.
- **Support Team Interface:** Allows the company's support team to review and respond to customer requests efficiently. Responses are converted into well-formatted PDF letters and emailed directly to customers.

Tools: Php / Laravel /jQuery / Ajax / Prototype / MVC