

Case Study



Grey Matter India
Technologies Pvt. Ltd.



Case Study

Web Based Leads Management Marketplace



Client Requirement

The client is a leads trader or a leads brokerage firm that buys leads from various vendors and sells out them to different customers. It acts as mediator between the leads buyers and sellers and hence, enables for easy and efficient leads trading process. The leads trading firm implements FTP and APIs for the implementation of online leads buying and selling process.

The client wanted us to develop a high performing; Symfony based web application which can add efficiency to their leads buying and selling process. They required to develop an online marketplace for effective leads management.

Client expected the following functionalities or features to be implemented in the system:

Admin Side Features

- Grabbing leads from various sources or customers
- Allowing admin to define customized lead templates
- Integration of PayPal and Braintree Payment Gateways
- Automatic customer billing process
- Implementation of sift logic API for data hygiene
- Report generation
- Allowing admin user to create sub admins (Sub admins are those who can perform all the operations just like admin except the monetary transactions).

Customer Side Features

- Implementing the purchase functionality for the customers such that they can purchase leads from our client and can also make payment through online payment gateways for the same.
- Data Filtration: Customers can filter the data to select the desired ones as per their requirements and can also export the same data to the desired location.

Project Challenges

Team faced the following challenges:

- Defining the structure of the database
- Implementing the lead template customization functionality such that admin can themselves define the custom lead templates
- Huge data management without effecting the application's performance
- Automatic leads acceptance - The application should be able to automatically accept the leads from various vendors
- Automation of customer billing process
- CRON job (scheduler) management
- Implementation of customer purchase tracking feature

Technologies Used

Operating System & Server Management	Red Hat Linux OS, Multi-Server Architecture with Staging & Production Environment through Version Controlling releases, Server Optimization, Security & SSL Implementation, Scheduler for Back-ups, Alert Monitoring System Integration, Server Performance Tuning at regular intervals, Software Firewall Configuration & Maintenance.
Development Tools & Environments	PHP5+, Apache Web Server, Symfony 2.8 Framework, AngularJS 2.0, AJAX, Java Script, HTML5, CSS3 etc.
Database	MongoDB Database Server, DB Clustering, DB Optimization, Master Slave Replication, Query Optimization, Scheduler for Backups

Manpower

Project Leader	1
Developers	2
Designers	1
Quality Assurance Testers	1

Planning

Taking into consideration the requirements of our client, our developers planned out a well-defined strategy for implementation of this project. Our developers adopted the standard MVC approach to effectively develop the web application for leads traded management.

Presentation Layer or View: It represents the graphical user interface that allows for client interaction with the application.

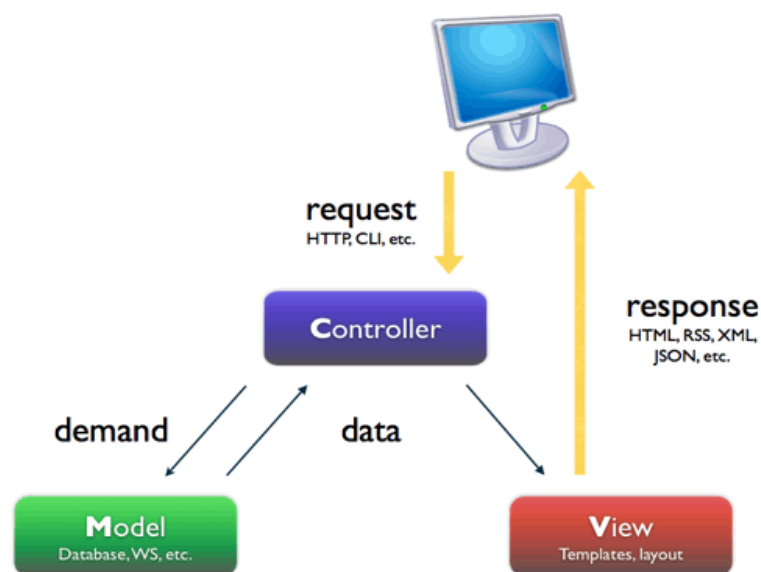
Data Storage Layer or Model: It enables for efficient data access, storage and management with the help of database.

Business Logic Layer or Controller: This is responsible for controlling of the functionality of the website.

Client required to develop an attractive web application which can give amazing user experiences as well as should be capable of handling millions of data or huge amount of data efficiently without effecting the performance. Hence, our developers planned to implement the MongoDB as the database and the popular AngularJS technology for the project.

Architecture

The Symfony and AngularJS form the basis of this leads marketplace development for our client's requirements. The project was successfully executed on the basis of Symfony MVC architecture as shown below.



Highlights

The highlight of this leads management marketplace was the wise implementation of the MongoDB and AngularJS technologies which helped our developers to well meet the intent needs of huge data management and better UX and UI design of this project. Our aim was to provide advanced web solution to our client and hence, implemented the latest Symfony framework and web development tools here. Every single element of the project was built by taking care of their loading and performance time and then only wisely chosen. We implemented the system that can track every process of the application when under processing stage and can alert the admin if there is any malfunctioning happening in the application.