



B2B portal for Pharma/Biotech Product Listing

Client Overview

The client is a transaction-enabling company focused on business development in the life sciences industry. Client provides comprehensive insights into the workings of the pharmaceutical industry, including its participants and various business development opportunities, through online screening tool which is a database of licensing opportunities in the biotech and pharmaceutical business development space. This powerful and dynamic tool boasts over 2000 product listings; over 1000 corporate profiles in biotech, pharma, and venture capital; and over 10,000 registered users from throughout the pharma sector, including users from the world's 25 largest pharmaceutical companies.

Challenges

The client wanted to turn its online screening tool into a user friendly and engagement based web application that-

- Allows two-sided marketed atmosphere to bring both buyers and sellers under one roof.
- The goal was to increase the quality and quantity of content as well as allow the users to deal with transaction enablement through this tool.

The client was facing various difficulties to manage the existing database and wanted it to migrate from HBase to MySQL. It was challenging to design the relational/structured database together with understanding the existing non-relational database in HBase and then migrating the data to the newly created relational database.

At a high level, the client was looking for the following features to be added over and above the existing features:

- Complete powerful text based search engine
- Secure, stable, scalable and maintained system
- License Management Tool including payment integration
- Contact Management
- Transparency Control
- Matching Profiles
- Administration Module
- Content Management and Data Entry
- Audit Trails and User Logs
- Simple and Intuitive front -end redesign including UX and UI integration
- Data Analytics to track external user movement inside the system
- Data Analytics Dashboard and user interface
- Enhanced SEO and Google traffic
- Cloud based Hosting Externally
- Custom Reports
- Event, alerts and time based notifications

Solution (B2B portal for pharma/biotech product listings)

Optra team started with an in-depth analysis of client's requirement by assigning a business analyst. Optra team was focused on integrating the latest technologies with an appealing and easy- to-use interface. Emphasis was to strike a balance between complexity of the interfaces and computational complexity of the database. Optra architects proposed a customized content management system with specific focus on portal architecture to provide the freedom for improvements, functional extensions and new systems integration.

Optra team ensured that the portal could handle the high traffic by implementing load balancing techniques, database performance optimization and best- practice programming patterns. The solution required associated management tools which could allow the administration for orders

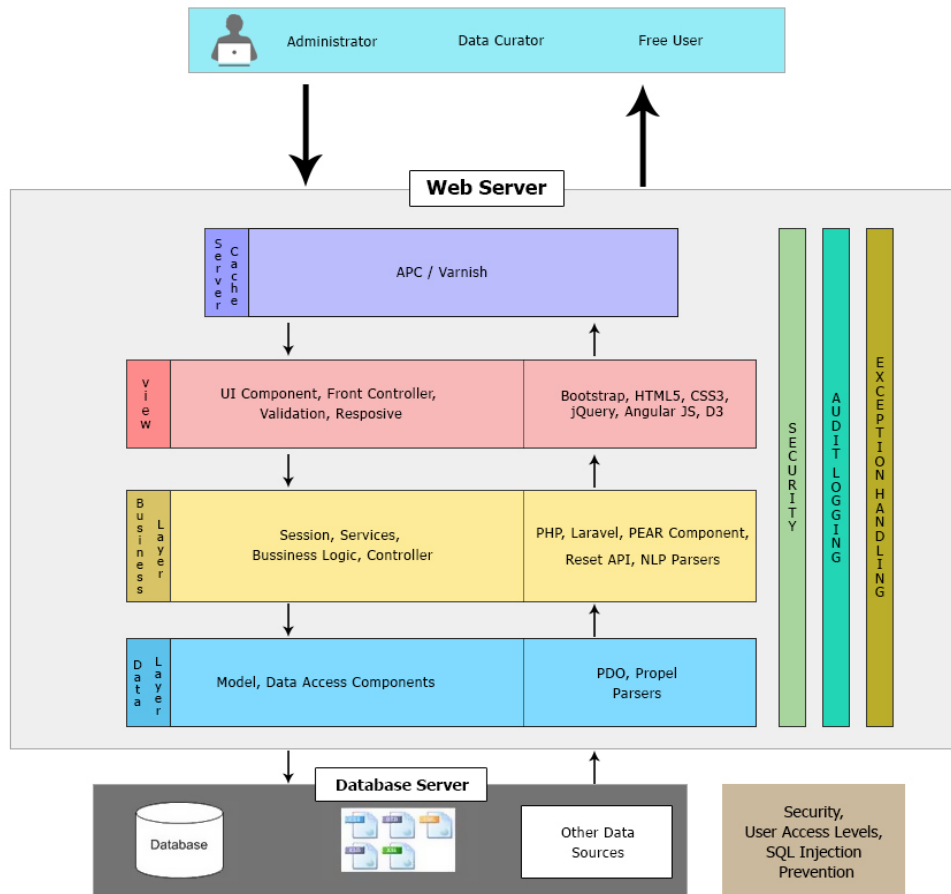
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from users as well as institutions. The application was developed in such a way that it allowed site administrators to give approval for suitable data and routes in tracking system.

Optra Proposed a Perfect Framework for the Portal Which Successfully Covers All the Client's Requirements



The design also incorporated security checks at different levels within the application. The intent was to ensure the data is entirely secure and only authorized users are able to access the content.

- Application usage in form and authentication and authorization.
- Application deployment and maintenance on server in lieu of –
 - ✓ Cross-site Scripting(XSS) Attacks
 - ✓ SQL Injection Attacks
 - ✓ CSRF(Cross-site request forgery)
 - ✓ Authentication and Authorization
 - ✓ Session Fixation, Session Hijacking and Session Guessing
 - ✓ Encrypting sensitive information in configuration files

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- ✓ Replacement of native PHP's faulty functions
- ✓ Secure implementation of "remember-me" and "temporary password" features
- ✓ Capability to mark/disallow suspicious strings

Technology Environment

The basic computational infrastructure behind the portal development consists of PHP-based web interfaces, MySQL databases for organizing database. Optra had delivered portal architecture with server topology design and multiple deployments & configuration services.

➤ **Programming - Server side**

- ✓ PHP 5.5
- ✓ PDO Library / Propel (ORM)
- ✓ Laravel (Security, Routing, Sessions)
- ✓ Based on further requirement analysis (Yii may be recommended)
- ✓ REST API

➤ **Programming Client Side**

- ✓ jQuery
- ✓ Bootstrap / Responsive Grid
- ✓ Angular JS

➤ **Web Server**

- ✓ Apache 2.x
- ✓ APC/Varnish

➤ **Reporting libraries/packages**

- ✓ D3

- ✓ Jasper Reporting Engine 5.x / PDF / XLS / CSV

➤ **Database System**

- ✓ MySQL 5.x

➤ **Development IDE**

- ✓ Eclipse

➤ **Build/Dependency Management**

- ✓ PEAR / Composer
- ✓ Phing

➤ **Debugging tool**

- ✓ Webgrind

➤ **Code and document repository**

- ✓ Apache Subversion (SVN)

➤ **Documentation Tool**

- ✓ phpDocumentor

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Benefits

- Extensive experience in delivering web applications helped client in building a scalable and user friendly portal.
- Global delivery model ensured 50% costs savings with 100% assured quality and 200% enhanced production cycle.
- “Work for Hire” model facilitated Client to own code and Intellectual Property Rights without increasing their headcount.
- Ready building blocks of software architecture and engineering resulting in faster time to market and quick turn-around time.

About Optra Systems

Optra Systems is an ISO-certified global organization with deep domain expertise in medical devices, lab automation, life science informatics and healthcare IT solutions. The company provides a fully-scalable, cost-effective OptiShore™ delivery model. This enables customers to choose the optimal balance between on-site, on-shore, and off-shore development that will best address their budget and collaboration requirements. With Optra Systems, customers are able to shrink their time-to-market by leveraging practical, building-block based solutions. Committed to clear communication and total transparency, the company consistently meets or exceeds its clients' expectations. Offering a full complement of expert engineering and consulting services, Optra Systems is aligned to real business needs applied over the entire product development lifecycle. The robust, scalable and efficient IT infrastructure of the company, together with its outstanding project management team, consistently ensures superior results. Optra Systems' global delivery model helps its customers cut costs by about 50% without compromising on quality and realize a 200% improved production cycle.

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