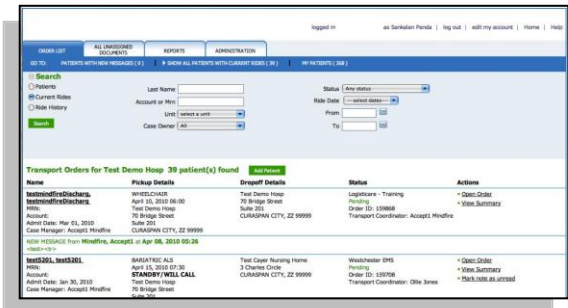




E-Transport System

Executive Summary

Let's imagine a case wherein you have an urgency to relocate a patient from one hospital to another. You inquired with each and every transport provider in town but, alas you could not find anyone for the job. Think how helpless you would feel! To avoid such critical situations for users, one of our clients in the USA had an application which manages records of various transport providers across towns/states stored in a database. They could arrange transport providers for patients according to the availability of the provider and the preference of the user. Due to certain inconvenience, the client aimed at enhancing the features and functionalities of its existing application to better manage patient's transport between different transport companies. The application to be developed required certain technical improvements to be implemented in order to effectively manage patient transport request.



The client, with its objective in mind, approached Mindfire Solutions and briefed them about the existing case. They were keen to know the proposed solution from Mindfire Solutions team. Our team had a series of brainstorming sessions, in-depth analysis of their requirement and then proposed a set of development phase to follow to develop the application which was immediately accepted by the client. Thus, Mindfire was able to deliver a robust and efficient application.

About our Client

Client Healthcare Service Provider | **Location** USA | **Industry** Healthcare

Business Situation

Our client who is into Healthcare service sector was in search of an offshore partner who could take responsibility to implement new features and functionalities to their existing system in order to have a better managed application in place. Their existing application served users to overcome the hassles of searching for an appropriate transport company. Their requirement was as follows:

- The application to provide a better way of managing patient's transport between different transport companies operating in different states of USA who have their contact information registered in database.
- Each transport company may have request for a transport service and can also provide transport service based on the availability.
- The patient transport request to be used for creating and assigning orders for transport provider.



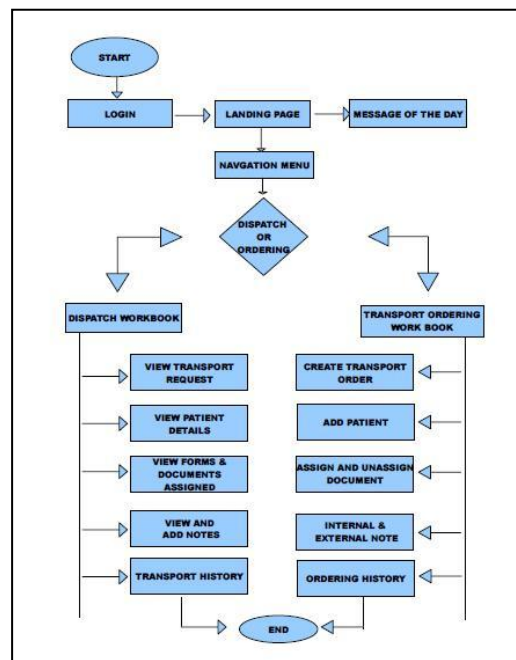
- In the other hand patient transport service provider can be used by the referred transport provider, to schedule the transports for patients assigned to them.
- One transport service provider company people can log into the application and can create a transport order for patients on behalf of transport providers assigned.
- After creating transport order for patients, user can send the required documents for referred transport provider.
- User can get all the status of the transport form the application.
- Users can use the application provider and request of the referred transport provider.
- User can view the transport detail and also documents assigned to the referred transport provider, and provide instructions for the referred transport provider.
- User can schedule the transports in advance on behalf of the referred transport provider which will notify the referred transport provider.

They required a three way communication process between who provides the service, who uses the service and who orders the service mutually.

Solution Details

The Mindfire Solution

Mindfire’s team started work by going through the specification document shared by the client. They found the specification of the project to be simple with most of the implementation and features to be imported from their old existing application. After a few round of discussions within the team, they finally produced a flow diagram (Fig-1) to be followed in order to meet the objective of the client.



(Fig-1)



This application developed is very specific to manage rides within the hospitals and transport organizations. Advanced features like YUI library and advanced AJAX features have been implemented throughout the application to ensure faster and efficient usage. The application has been reorganized from its old structure to the new one to use all CFC functionality. Performance related issues of the application have been fixed and a lot of UI specific advance features have been incorporated to combine large contents into a single page.

Achievements

Achieving the client’s objective of a three way communication was a challenge for our technical team. Also, they had to overcome performance issues of the old application and come up with a new one in order to provide better and efficient access for its user. Mindfire’s dedicated team of developers did the job efficiently to deliver a robust application that not only served the purpose of the client but also provided them the facility of a well managed system that has the ability to store huge records in place. Features such as viewing transport details, documents associated with the request, and adding instructions for the referred transport provider was a bit of tedious task which the technical team managed well to produce a perfect solution.

Technologies

ColdFusion MX 7.0.2, JavaScript, AJAX, Oracle 10g, Light Box, YUI

Final Results Software System

Name (click to open)	Type	Last Updated	Add to Packet	Form Complete	Date Complete
Inbound Fax Cover Sheet (Leads Account)	form		<input type="checkbox"/>	<input type="checkbox"/>	
AZ PASBR	form	Feb 15, 2010 00:31	<input type="checkbox"/>	<input type="checkbox"/>	
Balt. City Provider Cert. for Medical Assistance Transportation	form	Feb 04, 2010 07:10	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Paroia, Senkalan Feb 04, 2010 09:35
Balt. County Physician Cert. for Medical Transportation	form	Feb 04, 2010 07:10	<input type="checkbox"/>	<input type="checkbox"/>	
Bed Hold Confirmation Form	form		<input type="checkbox"/>	<input type="checkbox"/>	
DNH - Physician's Certification for Ambulance Transport	form	Jan 23, 2010 02:14	<input type="checkbox"/>	<input type="checkbox"/>	
DocCentral Referral Form - East Coast	form	Feb 04, 2010 07:10	<input type="checkbox"/>	<input type="checkbox"/>	
Choice Affiliated Provider Letter	form	Feb 04, 2010 07:10	<input type="checkbox"/>	<input type="checkbox"/>	
Choice Non-Affiliated Provider Letter	form	Feb 04, 2010 07:10	<input type="checkbox"/>	<input type="checkbox"/>	
Clinical Review Worksheet	form		<input type="checkbox"/>	<input type="checkbox"/>	
Clinical Update Form	form	Feb 04, 2010 07:10	<input type="checkbox"/>	<input type="checkbox"/>	
DME - Durable Medical Equipment Form	form		<input type="checkbox"/>	<input type="checkbox"/>	
Detailed Notice of Discharge (DNH) (0318-1013)	form	Feb 04, 2010 07:29	<input type="checkbox"/>	<input type="checkbox"/>	
Discharge Transfer Form	form		<input type="checkbox"/>	<input type="checkbox"/>	
Home Health Certification and Plan of Care (HCH-485)	form		<input type="checkbox"/>	<input type="checkbox"/>	
VA Comfort Care/Dx Not Resuscitate Order Verification	form		<input type="checkbox"/>	<input type="checkbox"/>	
VA Level 1 Preadmission Screening (PAS)	form		<input type="checkbox"/>	<input type="checkbox"/>	
VA Medical Necessity Certificate	form		<input type="checkbox"/>	<input type="checkbox"/>	
VA Nursing Facility Clinical Eligibility	form	Feb 04, 2010 07:10	<input type="checkbox"/>	<input type="checkbox"/>	
VA Request For Services	form		<input type="checkbox"/>	<input type="checkbox"/>	
MD 28718 Additional Info	form		<input type="checkbox"/>	<input type="checkbox"/>	
ME PASSAR (Module V)	form		<input type="checkbox"/>	<input type="checkbox"/>	

Forms & Documents

The screenshot shows a web application interface for patient and order management. At the top, there are navigation tabs for ORDER LIST, ALL UNASSIGNED DOCUMENTS, REPORTS, and ADMINISTRATION. Below this, there are filters for PATIENTS WITH NEW MESSAGES (0), PATIENTS WITH CURRENT RISKS (90), and MY PATIENTS (270). The main content area displays details for a specific order: Order ID 159708, Status Pending, and Scheduled Pickup Time. It includes sections for Patient Details (Name: test5201, Gender: M, MRN, DOB: 01-27-1945, Chief Medical Complaint(s): test), Attending Physician, PCP Physician, and Order Details (Transport Type: BARBATIC ALS, Transport Vendor: Winchester EMS, Pickup Date: 04-15-2010, Pickup Time: 02:30, Payment Method: cash). There are also fields for Pickup Location (Text Demo Hosp) and Dropoff Location (Text Cayer Nursing Home).

Patient & Order Details



Customer Benefits

The new application developed was very much efficient in handling request of users displaying all the relevant data. Implementation of new features and functionalities to the application made it faster and user had a better experience dealing with the application.

Future relationship

Client was satisfied with the step by step approach and working of Mindfire's technical team. They were happy to receive an application that perfectly matched their requirement. Relationship with the client went to the next level when the client approached Mindfire Solutions with a new project in healthcare sector.

