



Case Study : Software Development

Customer Details

Client is one of the leading international libraries in India having more than 10 centers all over India.

Business Problem

An application need to be developed for employees of the library where they can enter their emergency contacts. Application should also have an integrated module for leave management system for the library employees.

Challenges:

1. We need to keep very high security measures as this application need to be installed at their central server.
2. Multi level user system need to be developed keeping the library management hierarchy in mind.
3. One click access to the application was one of the priorities to avoid making users remember new sets of login info.

Our Solution

The complete project was planned on 3 different phases as follows :

Phase 1: Requirement Document

1. Requirements from users at different level were taken to make a user flowchart of the application.
2. Application Architecture was discussed with the IT team of the client.
3. Low level design document was made for a discussion with the client.

Milestones Completed:

4. Complete High Level Design Document (HLDD) has been done including database design, GUI Design, security features, technical requirement specifications and project execution plan.

The few important outlines of the document are as follows:

Technical Specifications:

1. Windows Server
2. MSSQL Server 2005
3. ASP/ASP.NET
4. Ajax

5. JavaScript
6. CSS (Cascading Style Sheets)
7. HTML
8. XML

Security issues covered:

1. SQL Injection
2. Cross Site Scripting (XSS) Flaws
3. Session ID Protection
4. Access Control Flaws
5. Invalidated Input Errors
6. Error Reporting
7. Data Handling Errors

This phase took 1 month from fetching the requirements and to completing the documentation.





Phase 2: Development of Application

Development of the application has been kicked off in this phase. Our 3 resources were engaged for this phase for 2 months. Out of the 3 resources 1 resource works as a team lead and 2 resources worked as a developer.

- ASP development environment has been setup for developers.
 - Programming of the UI web pages has been done on the basis of the guidelines and project plan specified in HLDD.
 - Testing team has also been prepared for the testing of the application
- Milestones Completed:*
- Application has been completed for review and testing from client.
 - In-house Alfa testing has also been done.

Phase 3: Client Review and Beta Testing

- Application was deployed on our web servers for the clients review.
- Some quick enhancements have also been made in the application after the clients review.
- Few modules like Data warehousing tools and email notifications tools has also been developed.
- Beta testing environment has been setup for the final testing.

Phase 4: Deployment of Application

Deployment is made by our expert professionals at client's servers. Few modules like Data warehousing tools, email notifications tools were also installed along with the application for maintenance of the application.

Customer Benefits:

- Our client has automated leave management and disaster management application in place to track any of the staff members in emergency.
- Reports wizard in the application is the most appreciated and beneficial module for the client for weekly and monthly reports.