Kalyan Thumaty

Senior .NET Developer

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**Summary**

* IT professional with **13.2** years of diverse experience in business analysis, software design, development, testing, troubleshooting, implementation and deployment of web and client server applications using Microsoft Technologies.
* Developed N-Tier applications distributed across the Web, Application and Database servers using **.NET** Framework 4.5/4.0/3.5/3.0/2.0/1.1**, C#.NET, VB.NET, ASP.NET** 4.5/4.0/3.5/2.0/1.1**, MVC, HTML, CSS, JavaScript, jQuery, Angular JS, JSON, WCF**(SOAP), **Web API**(REST), **Web services**, **Entity Framework, ADO.NET, Window Services, Task schedulers, MSMQ, SQL server** 2005/2008/2012**, Oracle, XML, XSD, VS.NET** 2005/2008/2010/2012
* Experienced in developing light weight responsive UI designs using ASP.NET MVC, ASP.NET Web Forms, JavaScript, jQuery, Html5, AJAX, JSON, AngularJS, Kendo UI, Page Methods for rich user experience.
* Extensively used LINQ, LINQ to XML, Entity Framework and other ORM tools like LLBLGenPro.
* Having excellent experience in working with Identity Access Management services, designed and developed claims aware web application using WS-Fed authentication with SAML tokens.
* Having good experience in Web Application security writing several countermeasures following the OWASP Top Ten guidelines for the threats such as SQL Injection, Cross Site Scripting, Cross Site Request Forgery, etc.
* Implemented security mechanisms such as Authentication, Single Sign-On (SSO), Authorization (Role based), Access Control and URL authorization.
* Developed Service layers leveraging WCF services (SOAP) and ASP.NET Web API (REST) to support distributed development.
* Strong in OOP concepts and successfully implemented design patterns such as Factory, Separated Presentation, Inversion of Control, Repository, and Singleton.
* Good at database planning & design. Proficient in using SQL Queries, Stored Procedures, Functions and Triggers in SQL Server 2005/2008/20012 & Oracle11.
* Successfully implemented SQL Query Optimization techniques using best practices.
* Experience in developing reports using SSRS.
* Assisted Architect in design and implementation of Architecture.
* Successfully led development teams to implement coding standards, best practices & patterns.
* Conducted code reviews for the delivery of quality code in terms of Maintainability, reliability extendibility and security.
* Well versed in Agile Scrum, Iteration and Waterfall methodologies.
* Excellent in Written & Verbal communication, having worked with different clients in business implementation. Have great organization skills, to use time, energy, resources in an effective way to achieve my targets.
* Quick learner, flexible, adaptable and an organized person who would make a valuable contribution to any working team environment, while being equally at ease working alone.

**Technical Skills**

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| --- | --- |
| Operating Systems | Windows, DOS, Linux |
| Languages | C#, VB.NET, C, C++, SQL |
| Markup Languages | HTML, DHTML, XML, XSLT |
| Web Development/Tools | ASP.NET MVC, ASP.NET Web Forms, Classic ASP, HTML, CSS, Bootstrap, JavaScript, JQuery, Angular JS, Ajax, Kendo UI(Telerik), Component Art |
| Databases | SQL Server 2005/2008/2012, Oracle 11 |
| Microsoft Development Tools/ IDE | Visual Studio 2005, 2008, 2010, 2013, MS-Visio |
| Frameworks | Entity Framework, ASP.NET WebAPI, LINQ, LINQ to XML, LINQ to SQL, Enterprise Library, MSMQ, LLBLGenPro |
| Design Patterns | Dependency Injection(Unity), Factory, Repository, Singleton, Separated Presentation |
| Version Control Tools | Team Foundation Server (TFS) 2013, VSS, SVN, GIT |
| Security Systems | Windows Identity Foundation (WIF), WS-Fed Authentication, Single Sign-on (SSO), Web Application Security (OWASP), |
| Reporting Tools | SSRS |
| Foundation Technologies | WCF, ADO.NET, WIF |
| Testing Tools | Visual Studio Unit Testing,MOQ |
| Web Services | REST, SOAP |
| Other Tools | Fiddler, Postman, SOAP UI, TOAD for Oracle |
| Web Servers | Internet information Services (IIS) 7.5 and lower versions |

**Education**

Master of Computer Science, Andhra University, India

**Achievements**

Written internal paper on ‘Threats & Countermeasures’ and designed ‘security architecture diagram’, following ‘OWASP top 10’ guidelines. This helped my previous employer to implement web application security and to successfully set a security guideline document for the development teams.

**Work Experience**

**North Carolina - Division of Employment Security (NC-DES)** Jan 2016 – Till Date

**Department of Commerce, NC (NCDOC).**

Project: Security Enhancement and integration of NCDES, SCUBI, Optimal IDM

Position : **.NET Security Developer & Application Architect**

This project is focused on the development, testing, deployment and implementation of a new Security system for NCDES, replacing the legacy system. With the new system, all the secured DES portals like Citizen Home, Business home and Staff Home, which currently have separate login mechanisms, would be brought under a common Identity Access Management, using a federated setup between Optimal IDM, a security token service (STS) and the DES claims aware application (Relying Party). All anonymous requests for secured pages of these Portals will be redirected to Optimal IDM where they are authenticated through user provided credentials. Each authenticated request will be responded with a claim based SAML token which will be validated by the DES claims aware application for authentication & authorization.

The new system will assist a seamless integration with SCUBI, another relying party that is federated with Optimal IDM.

**Responsibilities**

* Made a huge contribution in the design plan to upgrade the security mechanism of existing DES web applications and DES portal.
* Successfully designed and developed claims aware relying party web application using Windows Identity Foundation (WIF) that is federated with Optimal IDM (Security Token Service). This application receives claims based SAML token from STS, validates the token and process the claims to authorize the user.
* Designed and developed new applications and enhanced existing applications for DES portal for a richer UI and smooth integration with the new DES authentication framework. Used technology stack such as ASP.NET MVC, HTML, CSS, Bootstrap, JavaScript, JQuery, Ajax, Kendo UI, WCF, WEB API, LINQ, Entity Framework, Oracle and multithreading for the same.
* Designed and developed WCF services and middleware modules to let the DES applications communicate with DES centralised security system.
* Engineered Web API based REST services for optimal IDM and SCUBI application to help them communicate with DES centralised security system.
* Actively Involved in design and development of database schemas (Data models) and procedures (Oracle-SQL) for DES Oracle data store.
* Actively involved in load testing by providing the testing team with necessary inputs to develop their scripts.
* Successfully created proof of concepts/pilot with optimal IDM and SCUBI developer teams.

**Environment:** Visual Studio 2013, .NET Framework 4.5, C#.Net, ASP.NET MVC 5, ASP.NET Web API, WCF, WIF, LINQ, Entity framework, HTML5, JavaScript, JQuery, Kendo UI , Unity (Dependency Injection), Oracle11, TOAD for Oracle, Fiddler, Team Foundation Server (TFS), IIS 7.5.

**Standard & Poor’s. NYC** July 2015 – Jan 2016

Project:Active Participant – LINX

Role: Sr. Programmer Analyst/Coordinator

Standard & Poor’s is a leading provider of financial market intelligence. The world’s foremost source of credit ratings, indices, investment research, risk evaluation and data, Standard & Poor’s provides financial decision-makers with the intelligence

The tool LINX is a proprietary tool of Standard & Poor’s (S&P) that is used to create/edit rating articles after the credit rating is analyzed by the respective teams. This tool provides the features like creating and editing articles with all the statistical data represented in tables, graphs and charts leveraging the functionality of f MS Office tools like Word and Excel.

Active Participation is a security module that has been introduced to track the work of all the active participants (users of all the S&P applications) to control the secure data from getting misused.

**Responsibilities**

* Actively participated in client interaction for requirement gathering, internal meetings on security mechanism and design.
* Developed various components of UI, Business and Data Access layers.
* Coordinated with the offshore development team (in India), headed development work, provided better coding practices and conducted code reviews.
* Diagnosed frequent problems that arose during production support and successfully developed a centralized ‘logger mechanism’ which hugely improved the troubleshooting time of the support teams.
* Helped in refactoring key components of the system.
* Redesigned some of the WinForms to be in sync with different DPI scaling of the modern version of Windows (7/8)

**Environment**: Visual Studio 2010, .NET Framework 4.0, ASP.NET, C#.Net, VB.NET, LINQ, Team Foundation Server (TFS), Web API, XML, XSLT, WCF, Oracle 11g, ADO.NET, Agile Scrum.

**City National Bank, Los Angeles, CA** Jan 2015 – June 2015

Project: Business Online Portal

Role: Sr. Programmer Analyst/Coordinator

The goal of the Business Online Portal strategy is to create a streamlined customer experience for Clients and Bank Colleagues. The primary capabilities include:

* Profile Management (Includes Bank colleagues, Client Administrators and Client Users)
* CNB Colleague Access (Includes Bank Administrator, Bank Super Users and Bank Users)
* Client access management (Includes Clients, Client Administrators and Client Users)
* Bank colleague administration.
* Single Sign-On to downstream entitlements, Treasury Net/Business Online

**Responsibilities**

* Successfully implemented web application security of the application. Resolved the web vulnerabilities like SQL Injection, Cross-site scripting etc., which are identified from Fortify reports, using OWASP measures.
* Diagnosed the performance of stored procedures and successfully optimized the SQL queries which greatly improved the processing time from 13 minutes to 7 seconds.
* Developed various ASP.NET WebAPI components to cater multiple client such as Kendo UI, Mobile and other Business components.
* Developed light weight web UI which is based on Html5, jQuery, JSON, Kendo UI and Angular JS.
* Developed a lightweight business rule engine in a pipeline fashion to load and unload rules dynamically. Abstracted the rules logic in separate pipeline classes to decouple validation logic from data classes. Asynchronous pipelines were implemented for long running rules like mass emailing, cascading changes to a bulk of entities etc.
* Developed task schedulers for authentication and authorization modules.
* Successfully implemented an event logging component (listener) for logging to HP Archsight.
* Involved in enhancing SSRS reports functionality.
* Coordinated with the offshore development team (in India) for distributed development,
* Actively participated in the Agile Scrum methodological development.

**Environment**: Visual Studio 2013, .NET Framework 4.5, ASP.NET, MVC 5, ASP.NET Web API, C#.Net, LINQ, Entity framework, HTML, CSS, JavaScript, JQuery, Angular JS, Kendo UI, JSON, MS SQL Server 2008/2012, SSRS, TFS, N-tier, IIS 7.5, Agile.

**Dealertrack, Lake Success, NY** Feb 2014 – Dec 2014

Project: Fusion Common Objects  
Role: Lead Development

Dealertrack and its web-based software solutions and services enhance efficiency and profitability for all major segments of the automotive retail industry, including dealers, lenders, third-party retailers, agents, and aftermarket providers. Fusion Common Objects is a framework for all the common components used by the products in Dealertrack. They are User Manager, Dealer Manager, Dealer Group Manager, Partner Manager Etc. Apart from common components there are core components which are used for Logging, Session Management, and Database Management.

**Responsibilities**

* Involved in gathering the requirements from client and in the analysis, design & development of the project.
* Followed agile methodologies (scrum).
* Created WCF Services using NetMsmqBinding for persisting customer data through message queue (MSMQ)
* Used MSMQ for implementing reliable, scalable, high performance distributed applications.
* Worked on parsing and editing XML documents (using LINQ to XML) to convert them to JSON files.
* Designed and developed PLSQL Stored Procedures for some DML functionality of the framework.
* Created Web/Windows based Utilities in C# and VB.NET
* Helped in refactoring some of the important components of the system.
* Coached team members on implementing best practices and maintained the delivery of quality code by performing regular code reviews
* Involved in testing the application using MS Unit testing.
* Involved in Production Support for some of the components in Common Objects
* Worked both as independent contributor and team member/lead for the project depending on the modules.
* Deployment & Support for the existing legacy application.
* Provided extensive documentation for few Utilities developed.

**Environment**: Visual Studio 2010/2013, .NET Framework 2.0/ 4.0, ASP, ASP.Net, C#.Net, VB.NET, MVC 3.0, JavaScript, JQuery, LINQ, TFS, GIT, N-tier, IIS 7.0, Web Services, XML, WCF, ADO.NET, Entity framework 4/4.5, Enterprise Library, Devart, SQL Server, Oracle 11g, Agile Scrum.

**Dealertrack, Lake Success, NY** Nov 2012 – Jan 2014

Project Name: Dealertrack Rebranding

Role: Lead Development

Rebranding project involves identification, analysis and remediation of branding violations that customers face (UI) in different products which were originally owned by different organizations and currently acquired by Dealertrack.

The two main phases in Rebranding are Analysis phase and Remediation phase.

*Analysis phase* objective is to analyze information about the brand names and publish the analysis report for brand violations.

*Remediation phase* objective is to resolve the brand violations based on the analysis report products and provide a common look and feel across all the products.

**Responsibilities**

* Actively involved in analysis and design of remediation approach for different applications to sync them up with DT Applications Involved in Enhancements and Bug fixing.
* Actively participated it strategy development for providing business solutions.
* Involved in reverse engineering of different applications to understand the system and to come up with optimal solution ideas for remediation.
* Remediated & Unit tested violation keywords in the application which includes .Net, Html, JavaScript files.
* Lead the development team by guiding and reviewing the work during remediation phase.
* Setup the application development environment for different applications/products.
* Followed agile methodology (scrum). Also actively involved in client meetings for discussing various problem solving approaches.

**Environment**: Visual Studio 2008, C#.Net, ASP.NET 2.0/4.0, Classic ASP, VB Script, JavaScript, ADO.NET, SQL SERVER 2005/2008, Oracle and IIS 6.0/7.0. TFS, GIT

**Dealertrack, Lake Success, NY** July 2011 – Oct 2012

Project Name: AAX - Security Remediation

Role: Lead Development

AAX is one of the web products owned by Dealer Track that offers all the tools and services needed to significantly increase turns and profit at every step of inventory process. And Security Remediation is a Web security plug-in to protect AAX from the popular web application attacks like SQL Injections, Cross Site Scripting etc. Security Remediation is developed as a security plug-in using http modules that can be integrated with any web application by providing a customizable configuration setting which can be modified for the specific needs of the web application. It will guard the web application by scanning all the incoming web requests and outgoing web responses there by nullifying any potential attacks that might occur.

**Responsibilities**

* Designed and developed security plug-ins.
* Designed generic configurable file that could be used for the security needs of any web application and developed an algorithm over it that potentially detects web attacks and do the necessary actions.
* Actively involved in the R&D for analyzing the best practices (OWASP) in order to provide countermeasures for various security vulnerabilities.
* Successfully developed http module that works as security filter that filters all the http requests and responses so as to provide shield for the web application from the threats such as SQL Injection, Cross Site scripting etc.
* Contributed in the enhancement of web application’s authentication & authorization areas to tighten the existing security mechanism.
* Successfully designed and implemented URL authorization.
* Helped in the development of unit testing project using MOQ framework.
* Developed a custom spy framework that captures the real time request- response data to be able to simulate the real-time traffic.
* Actively participated in the security related meetings with clients and with different technical teams during various stages of the development.
* Trained development teams and provided documentation on the security approaches followed.
* Coached team members on implementing security best practices and maintained the delivery of quality code by performing regular code reviews
* Developed stored procedures and functions to support the security system developed.

**Environment**: VS2008, ASP.Net 4.0, C#4.0, HTTP Module, Classic ASP, XML, VB Script, JavaScript, MOQ Framework, SQL Server, 2008 and IIS 7, Fiddler.

**Terenine Technology Solutions, Chattanooga, TN** April 2009 – June 2011Project: ACHFederal  
Role: Technical Lead

Automated clearing house (ACH) Federal is the most complete and efficient solution for processing, managing, and transferring electronic funds. ACH seeks to offer a complete suite of products for the small and midsize financial Institutions and companies, in form of a web based application where the customers can enter the transactions in several ways possible.

Following are the features provided.

Single, one time ACH items, Recurring scheduled ACH items, Batch ACH items and Secure ACH file delivery.

The whole system is implemented using Agile Scrum methodology where each developer is involved in sprint planning to give an individual estimate on the development.

**Responsibilities:**

* Involved in coding & development of building different modules of the application.
* Actively participated in designing light weight presentation layer by using Page Methods, JQuery UI controls (Separated Presentation). Also developed business, service and data layers
* Helped in building window service components for email rendering and file downloading.
* Involved in the coding and implementation of web services
* Extensively participated in developing Stored Procedures, Functions and Triggers in SQL Server.
* Involved in enhancing SSRS reports functionality.
* Headed Sustain Engineering wing and successfully reduced the defects count. Actively involved in bug fixing and enhancements.
* Involved in Production Support for ACH transactions.
* Extensively used LINQ and Entity Framework to develop BLL and DAL layers.
* Successfully implemented design patterns such as Factory, Separated Presentation, Inversion of Control.
* Used Enterprise library application blocks extensively for logging, exception handling.
* Followed Agile Scrum and involved in product backlog sizing and sprint planning meetings with clients for estimating the tasks.
* Interacted with client on regular basis during various stages of design and development

**Environment:** VS2005, ASP.NET 3.5, C#.NET 3.0, ADO.NET, JavaScript, jQuery, JSON, AJAX, SSRS, SQL Server 2005, Enterprise Library and IIS 6.0.

**Global Mapping Foundation, Foothill Ranch, CA** Oct 2007 – Mar 2009  
Project: TCM

Role: Technical Lead

The portal TCM is a universal user management interface and navigational mechanism allowing end users to experience multiple password-protected sites.

Development of a software technology prototype as a proof of concept, assembling disparate solutions centered around volunteers’ participation in short-term overseas projects. Specifically, the development of a universal user management interface and navigational mechanism allowing end users to experience multiple password-protected sites, including Go-overseas (a field driven volunteer preparation site) without the user having to login to each site separately.

**Responsibilities:**

* Helped in the maintenance of Architecture of the Application.
* Involved in the coding and implementation of web services.
* Helping in the Integration of TCM with its child sites through the services.
* Developed single sign on SSO functionality to have seam less integration across the sites.
* Involved in the Web Security of the Application by implementing Authentication and role based authorization.
* Designed UI using ASP.NET grids and other AJAX based controls of Component Art.
* Helping in the design and development of Enrollment and other business layer components
* Regularly interacted with client during various stages of design and development.

**Environment**: VS2005, ASP.NET 3.5, C#.NET 3.0, ADO.NET, SQL Server 2005, LLBLGenPro 2.0 and IIS 6.0

**Dawson McAllister Live** July 2007 – Sept 2007

Project: The Hopeline

Role: Technical Lead

The website https://thehopeline.com involves in counselling and is part of a Dawson McAllister Live radio show. The project involves developing an enrollment module enabling users all over the world to register themselves to get the online help for them. This also includes a separate enrollment mechanism for registering Hope line gents who belong to admin team.

**Responsibilities:**

* Involved in Re-engineering of the system for maintenance.
* Restructured Architecture of the Application.
* Developed the Login and Authentication components of the System.
* Participated in the design and development of presentation & business modules.
* Regularly interacted with client during various stages of design and development.

**Environment:** VS2005, ASP.NET 2.0, C#.NET, ADO.NET, SQL Server 2005 and IIS 6.0, VSS

**CCC, Orlando, FL** Oct 2006 – June 2007

Project: WorldMAP (World Missions Atlas Project)

Role: Programmer Analyst / Technical Lead

**Responsibilities:**

* Helped in implementing and maintenance of Application Architecture.
* Developed the Authentication and Authorization components of the System.
* Involved in the design and development of Presentation & Business Layer.
* Used Microsoft Map Point Web Service and Microsoft Virtual Earth to show the data (latitude – longitude) as Pushpins and provided light weight interface over the Maps to read data from the user to persist in database.
* Developed Emailing rendering service (window service) that reads the messages from the queues (MSMQ) on periodic basis and renders e-mails using SMTP servers.
* Used Enterprise library application blocks extensively.
* Regularly interacted with client during various stages of design and development
* Involved in R&D of Microsoft Map Point Web Service to design a strategy for developing Mapping interface.
* Helped architect in maintaining Continuous Integration using VSTS.

**Environment:** ASP.NET 2.0, C#.NET, ADO.NET, SQL Server 2005, IIS 6.0, Point Web Service, Microsoft Virtual Earth and TFS

**Saddleback Church, Lake Forest, CA** Mar 2005 – Oct 2006

**Project:** P.E.A.C.E

Role: Programmer Analyst

**Responsibilities:**

* Participated in Design and Coding of some modules in Presentation layer, and written some of Business Components and helped in Manager Classes.
* Involved in R&D of ORM tool LLBLGenPro for developing DAL and Business Façade layer and Component Art for Presentation Layer.
* Helped in the development of Authentication and role based Authorization Modules.
* Developed business layer components that defines the work flows.
* Developed light weight UI using Component Art tools which made use of AJAX for partial rendering.
* Involved in unit testing and assisted QA teams.
* Helped architect in maintaining Continuous Integration using the third party tools such as CruiseControl.NET and NANT.
* Regularly interacted with clients during various stages of development.

**Environment:** VS2003, ASP ASP.NET 1.1, C#.NET, ADO.NET, SQL Server 2000, LLBLGenPro 1.0, Component Art, Enterprise Library IIS 5.0, CruiseControl.NET and NANT

**Little Angels, USA** Jul 2004 – Feb 2005

Project: IFUN-FLX (Image Editor)

Role: Programmer Analyst

**Responsibilities:**

* Involved in Coding for Accessing the Network for downloading the Images from the Web Server.
* Participated in UI Design and wrote code for its functionality and other Graphics.

**Environment:** C#.NET, VS2003.