**Experience Summary:**

* **13 years** of overall IT experience primarily in **US HealthCare, Insurance & Education Domains.**
* Experience working in **state government projects.**
* Experience in developing applications based on Microsoft Technologies and Visual Studio .Net Frameworks **(2.0/3.5/4.0/4.5/4.6) & core 3.1.**
* Experience in developing web application using Asp.Net **MVC** Framework **5.0** and **Angular.\***.
* Experience in developing web application using **Asp.net**, **Ajax and JQuery**.
* Experience in securing web applications from **Cyber Attacks** by implementing security mechanisms based on policy and threat models.
* Experience working with **Cloud service** providers like Microsoft **Azure** and understanding of Amazon Web Services **(AWS).**
* Experience developing **Accessible** web applications **Aria**.
* Exposure to **Accessible** standards **WCAG2.0** & **US Section 508.**
* Experience in developing business logic/business logic layer (**BLL**) adheres to Business rules using **C#** technology.
* Experience in Test Driven Development (**TDD)** using **NUnit** framework.
* Extensive experience in dealing with **database applications/data access layer (DAL)** using **ADO.NET** technology and Objects such as **SQL Connection Objects**, **SQL Command Objects, Dataset Objects, Data Reader Objects and Data Adapter Objects.**
* Experience working with multiple data providers **Oledb**, **Odbc** and **SqlClient**.
* Exposure towards **NoSql** programming using **RavenDB** and **MongoDB**.
* Experience in developing **Internet, Intranet, n-tier, Client / Server and Windows Applications Development** with active involvement in all phases of **Software Development Life Cycle (SDLC)** such as design, development, testing, and deployment.
* Proficient in developing and understanding of **Object Oriented Principles** (**OOP**)**, multi-tier web application design, .Net Design Patterns and Relational Database (RDBMS) principles.**
* Experience in migrating existing applications and services developed under **.NET 2.0 to .NET 4.0 and from Classical ASP to ASP.NET to ASP.Net MVC.**
* Experience in implementing Service Oriented Architecture **(SOA)** Applications.
* Experience in developing **Web** services**, Wcf** services and **Rest full** services and have knowledge on web security PKI x.509**.**
* Experience working with **Entity Framework ORM** technology and **EF Fluent** Configurations & Mapping
* Experience working with **NHibernate ORM** technology and **Nhibernate Fluent** Configurations & Mapping.
* Exposure towards programming **XAML** for Silverligh**t &** Windows Presentation Foundation **(WPF**) and Windows Workflow Foundation (**WF**).
* Good understanding and implementation experience of **Dependency Injection/IOC**, **Ninject** and **Unity**.
* Excellent knowledge and working experience in developing and consuming **Web Services** using standard protocols such as (**HTTP and SOAP).**Good understanding of **XML, XSD and WSDL.**
* Experience in developing **FTP** and **SFTP** client applications, in Socket Programming using **TCP/IP.**
* Experience in developing Multithreaded Applications / **Parallel** programming 4.0.
* Experience in programming **SqlXml** for **CRUD** operations by developing **Updategram** sql templates.
* Experience in developing workflows based on xml technologies **XPath** and **XQuery**.
* Expertise knowledge on **HTML, DHTML, JavaScript, VBScript, COM, DCOM, Classic ASP applications, XML, XSLT, CSS, IIS-Server.**
* Well versed in querying the databases like **SQL Server 2005/2008** and **Oracle** using **SQL, PL/SQL**, **Stored Procedures, Functions, Triggers**, **views** and **SQLjobs.**
* Excellent knowledge in Microsoft Business Intelligence **(MSBI)** tools like **SSRS, SSIS and SSAS.**
* Experience in Data Modeling **Data warehouse.**
* Good understanding of **Data warehouse design methodologies and standards.**
* Experience in working with the data **in Excel sheets** and **imported** in **to SQL Server Data base**.
* Proficient in generating both **structural** and **behavioral UML diagrams** such as Class, Use Case, Object, Component, Deployment and Sequence, Collaboration and Activity diagrams
* Experience in developing Enterprise Application Integration (**EAI**) driven projects.
* Experience in integrating applications using **Cloverleaf, Ensemble and Mirth integration engines**.
* Experience integrating systems in **Healthcare** network to facilitate Electronic Data Interchange (**EDI X12**).
* Experience automating applications using **Boston Work Station** (**BWS**).
* Experience in developing **Documentation** at various levels of software development.
* Experience and Good knowledge towards **IVR Framework**, **VoiceXml** and **CCXml.**
* Experience in **Business Analysis** for Healthcare Integration/EDI/kiosk/PMS projects, in contributing **Project management** activities.
* Experience in contributing **Pre-sales** activities like developing presentations and participating in demos.
* Extensively involved in fixing production bugs and production support.
* Worked on Tools like **MS Team Foundation Studio, SVN and VSS.**
* Good Understanding ofHealth Insurance Portability Accountability Act **(HIPAA).**
* Good Knowledge of **SOX Compliance** and **PCI Compliance** Standards
* Experience working on **Agile** Iterative Development and **Scrum Methodology**.
* Excellent communication and interpersonal skills, quick learner, self-motivated, ability to work individually and as well as in a team environment with good team spirit. Excellent in envisioning and adapting to upcoming and latest technologies and great contributor of knowledge transfer.

**TECHNICAL SKILLS:**

|  |  |
| --- | --- |
| .Net Technologies | .Net Framework 4.8/4.0/3.5/2.0, MVC 6.0,ASP.Net Core, ADO.Net, C#, VB.Net, Win Forms, Web Forms, WCF, Reflection, Generics, WPF, WWF, LINQ, Entity Framework, Web Services, Silver light |
| Internet Technologies | HTML, DHTML, Classic ASP, Java Script, VB Script, JQuery, CSS, XML, XSLT, JSon, VoiceXml, CCXml, XSD, XPATH, XQUERY, SOAP, WSDL, UDDI, AJAX, Angular, React |
| Programming  Languages | C,C#, C++, VBA, Objective-C, UML, VB.NET, Java |
| Databases & Data Providers | SQL Server 2005-2017, Oracle8i/9i/10g, PL/SQL, MYSQL, Oledb, Odbc & SqlClient |
| Web/Application Tools | Microsoft Visual Studio 2003-2019, IIS 5.0-8.0, SVN, Team Foundation Server(TFS), Visual Source Safe(VSS) |
| Business Intelligence & Reporting Tools | MS SQL Integration Services (SSIS), MS SQL Reporting Services(SSRS), Crystal Reports, Rational rose |
| Scripting Languages | PERL, TCL, Jscript, VbScript, JQuery |
| OS Platforms | Windows7,Windows 9X/NT/XP, Windows Server 2003, LINUX, UNIX |
| Tools | Putty, Telnet, Fiddler, Trace, UML,MS Project 2005,Project Tracker |

**EDUCATION:**

* Bachelor of Technology in Computer Science & Engineering.

**Summary of Projects:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Client Name** | **Location** | **Project Role** | **Duration** |
| H & R Block | Kansas City, MO | Senior Software Dev | Jul 20 to Till Date |
| ExxonMobil | Houston, TX | Full Stack Dev Lead | Aug 19 to Oct 20 |
| Department of Education | Augusta, ME | Technical Lead | Sep 14 to Aug 19 |
| GHX | Louisville, CO | Edi Developer | Jun 14 to Sep 14 |
| Kansas State Department of Health And Environment (SHPR) | Atlanta, GA | Sr. Net Web Developer | Aug 13 to Jun 14 |
| Manhattan Physician Group | New York, NY | Team Lead / Sr. Programmer | Apr 12 to May13 |
| Patient point: Healthy Advice | Orlando, FL | Team Lead / Sr. Programmer | Jul 11 to Mar12 |
| Patient point: Physician Associates | Orlando, FL | Team Lead / Sr. Programmer | Jan11 to Jun 11 |
| Patient point: Orlando Internal Medicine | Orlando, FL | Team Lead / Sr. Programmer | Aug10 to Dec 10 |
| MedStar | Miami, FL | Team Lead / Sr. Programmer | Jan10 to Jul 10 |
| Cardinal Health | Dallas, TX | Team Lead / Sr. Programmer | Apr 09 to Dec 09 |
| McKesson | Newton, MA | Sr.System Analyst | May 08 to Apr 09 |
| Purkinje | St. Louis, MO | Integration Engineer / Programmer | Oct 06 to May 08 |

**Detailed Project Description:**

**LogicQue Inc.**

**Client: H&R-Block, Kansas City, MO. Duration:** JUL 20 – Till Date

**Project: IDM link:** [https://[hrblock.com](http://www.hrblock.com/)](https://corporate.exxonmobil.com/)

**Environment: NET Core 3.1, .Net 5, Asp.Net MVC, Restful Web API, C#, EFCore, Microsoft Azure, Azure database, Blob storage, Cognitive Search, ServiceBus, RabbitMQ, KeyVault, Functions, GraphQL, Micro Services, Docker, Auto mapper, XUnit, ADO, Git, NPM.**

**Description:** Integrated Data Management (IDM) project is H & R Block smart platform which helps Tax payers, Tax consultants and staff at retail outlets for filing taxes by eliminating redundant app portals into one stop shop using modern technologies/tools like, Automation, Azure Cognitive Search (ACS), Azure Cloud and web technologies.

**Responsibilities:**

* Developed multiple **WebAPI’s** with client friendly documentation using **swagger.**
* Converted some of the rest api controllers to **GraphQL** schemas.
* Developed MVC controller and views.
* Developed Azure cognitive client to access the **cognitive search**.
* Developed Timer & Queue based trigger **Azure Functions**.
* Developed **Azure Service Bus** queues.
* Testing API’s using **Postman.**
* Developed unit tests with **XUnit.**
* Setup **Application Insights** to monitor & analyze telemetry.
* Setup Health checks endpoint for API.

**Client: ExxonMobil, Houston, TX. Duration:** Aug 19 – APR 20

**Project: eWOPR link:** <https://corporate.exxonmobil.com/>

**Environment: ASPNET Core 3.1, Asp.net MVC, Angular8, Restful Web API, UML, Html5, C#, EFCore, Microsoft Azure, Azure database, Blob storage, Sql Server, ServiceBus, RabbitMQ, KeyVault, Micro Services, Docker, Auto mapper, Xunit, ADO, Git, NPM, Powershell.**

**Description:** Exploration Well Optimization Planning and Response (eWOPR) project is Exxon Mobil global platform which helps Geoscientists, reservoir engineers, development planners, drilling, and commercial analysts for exploration of Oil & Gas by eliminating the impediments by adopting modern technologies/tools like Artificial Intelligence (AI), Automation, Geographical Information System (GIS), Azure Cloud and web technologies.

**Responsibilities:**

* Developed UI screens using **Asp.net Mvc, and Angular**.
* Implemented Microservies architecture and patterns.
* Created read and write models using **CQRS** pattern.
* Used **Dapper** for querying read models/ Db queries
* Backend CRUD operations are managed by **Entity Framework Core**
* Developed multiple **WebAPI’s** with client friendly documentation using **swagger**.
* Deployed **Web App** to Azure App Service.
* Testing API’s using **Postman.**
* Develop infrastructure code to use **Azure Service bus** and **Rabbitmq** with environment switch.
* **Refactor** code smells, technical debt and ensuring coding standards are followed.
* Develop unit test and functional test using **xUnit**.
* Performance tuning code and **Sql** queries.
* Setup **CI/CD azure pipelines** for build and release adhering to enterprise policy.
* Setup Blob storage and create blob services for storing blobs on Azure.
* Setup **Azure Pass** services like **Azure key** **vault**, **Azure functions**, **Azure storage**, **Azure sql**, **Event Grid**, **worker** **services**, **web** jobs..etc
* Setup **Application Insights** to monitor & analyze telemetry.
* Setup Azure Active directory for authentication and role-based authorization.

**Client: Dept. of Education, Augusta, ME. Duration:** SEP 14 – Aug 19

**Project: NEO Project link:** <http://www.maine.gov/doe/>

**Environment: VS.Net 4.6, ASPNET Core 2.2, Asp.Net MVC5, Telerik, Angular.\*, WPF, Restful Web API, Html5, C#, EF6,SSDT, Microsoft Azure, Azure database, Blob storage, Sql Server 2012, SSIS, SSRS, nServiceBus, WCF, Unity Framework, log4net, UML, vba, ms-access, Oracle10g, Crystal Reports, Micro Services, Docker, Auto mapper, Nunit, TFS, Confluence, Gulp, Bower, NPM, Powershell.**

**Description:** NEO project is a realm of modules, each module is used by the sections under the Department of Education, State of Maine. Each module is an application in itself with .Net as background and has variations in Architecture, UI frameworks, and other technologies based on the requirements and time of development.

**Responsibilities:**

* Design the architecture of the applications and illustrate concepts in words and diagrams
* Provide architectural solutions to address issues, enhancements or upgrade of applications.
* Provide technical guidance and support for the teams.
* Research and analysis on technologies to improve the quality of the applications.
* Designed and execute proofs-of-concept for up gradating the application to support TLS 1.2, move from on prem to azure cloud, and improve deployment model & managing **micro services** using docker containers.
* Designed & implemented solution based on **CQRS** pattern to address issues in a module.
* Developed **Accessible** UI screens using **Aria** & **AngularJs, 2 & 4**. And conducting **Accessibility** testing using **Jaws** tool.
* Developed applications using **Asp.Net MVC, C#**, **Telerik Kendo UI, Entity Framework \*** and Restful **Web API** on frameworks **Asp.net core & Asp.net 4.\***.
* Implementing Identity management using **Azure B2C** and MSAL.js.
* Implementation of sso, security using JWT tokens, claims, oidc, Identity Server 3 &4.
* Developed messaging platform to automate communication between applications on pub/sub model.
* Implemented Behavior Driven Development (**BDD**) using **SpecFlow** &Test driven development **(TDD).**
* Writing unit test cases using testing frameworks **Nunit,** mocking frameworks **moq**.
* Responsible for code reviews and optimization using VS and third party tools.
* Designing, developing and managing database schema using **Database project**.
* Developed views, functions and stored procedures.
* Developed **SSRS** reports for reporting and **SSIS** packages for data integration (**ETL**) purposes.
* Migrating Asp.Net application to be deployable to **Microsoft Azure** Cloud.
* Setting up **Continuous Integration and Deployment** to Hosting Server/Azure App Service.
* Developed security mechanisms to prevent any **cyber-attacks** based on the policy and threat models.
* Developed **cryptography** code for encrypting/decrypting sensitive information like **SSN**.
* Ensured Personally identifiable information (**PII**) is accessed only by authorized users and to be in compliance with Family Educational Rights and Privacy Act **(FERPA).**
* Participating in **sprint** planning meetings, story boarding, analyzing requirements and estimating the effort.
* Participating in standup, sprint **review** and **retrospective** meetings.
* Managing the tasks and user stories for the sprint in **TFS**.
* Managing source code branching, merging and check-in.

**Client: GHX. Duration:** Jun 14 – Sep 14

**Project: Catalog 832 link:** <http://www.ghx.com/>

**Environment: VS.Net 4.5, C#, Xml, XSD, EDI X12, MSTest, Jira, Confluence**

**Description:** GHX, Global Healthcare Exchange fill the gap between the healthcare facilities and the supplier/vendors by automating the supply chain. The EDI 832 Price/Sales Catalog transaction set is used to electronically request or provide the prices of goods or services in the form of a catalog.

**Responsibilities:**

* Developing mapping document between x12 and xml data elements.
* Developed XSD document to validate the xml.
* Developed C# application to parse the inbound messages.
* Developed unit test using MSTest.

**Client: SHPR. Duration:** Aug 13 – Jun 14

**Project: KQoC (Kansas Quality of Care) link:** <http://www.shpr.com/>

**Environment: VS.Net 4.5,Asp.Net MVC 4, Html5,C#,Telerik, DevExpress, EF6, SSDT, WCF-MSMQ, Sql Server 2012,Xml,Unity Framework, Sales Force CRM, Enterprise library 6, log4net, automapper, Data warehouse**

**Description:** KQoC reporting, a project of **Kansas State Department of Health And Environment**, which is used to measure the quality of care across the state comparing clinics by groups, county, zip code...Etc. Reports are queried using query tool and presented in browser. Meaning full use data is collected from clinics periodically as process of data aggregation. Data from clinics is either submitted in file (xml, csv, excel…etc) by clinics, through web service or queried from clinics database by data aggregation application.

**Responsibilities:**

* Analyze data to be collected, extract options, transport options, message and file formats.
* Designed and developed n-tier architecture.
* Designed and developed Data Tier using Entity Framework 6 and following patterns
* Persistence ignorance pattern.
* Unit of work pattern.
* Generic repository pattern.
* Designed and developed **poco** models and data **mappings** using EF **fluent** configuration.
* Designed and developed generic repository.
* Designed and developed **context factory** to create **dbcontext** and ability to create database if not exists.
* Designed and developed db context manager to manage the **scope** of the context
* Designed and developed Auto mappings using **Automapper**.
* Used **unity framework** as **ioc** for dependency injection (**DI**) and boot strapping.
* Used **log4net** as logging framework with rolling file **appender**.
* Designed and developed data extractor using **Enterprise Library** Data access application block.
* Developed inbound/outbound interfaces to facilitate information exchange with **AS/400, Mainframes**, Share point, **Sales Force**..etc
* Designed and developed **wcf** service as one of the data transport using **.netMsmq** binding to ensure guaranteed delivery.
* Implemented Wcf **security** using message security mode and **certificates** to sign message.
* Developed certification manager component to download, add, remove, and validate certificates from **X509Certificate** store.
* Web pages are developed using **asp.net MVC** framework, **DevExpress** and **Telerik** **Kendo UI**.
* Designed and implemented **pipeline pattern** for parallel processing using parallel **task** and **concurrent queues.**
* Designed and developed parser library for parsing **xml, csv and excel** files.
* Designed database schema using vs2012 database project (**SSDT**) and created **dacpac file** to publish database.
* Performed dimensional data modeling for **Data warehouse**.
* Part of **Data Architecture team** to review the architecture and development progress of **Data warehouse**.
* Ensured Personally identifiable information (**PII**) is accessed only by authorized users and to be in compliance with **HIPPA** Act.
* Designed and developed notification manager to notify status of data aggregation process by email using **smtp** protocol.
* Developed test cases using **NUnit** framework.
* Experience working and deploying application components to **Azure cloud services**.

**Mahathi Software**

**Client: Manhattan Physician Group Duration:** Apr 12 – May 13

**Project: ETL Service Link:** <http://www.mpgcares.com/>

**Environment: VS.Net 4.0, C#, WCF, SSDT, Sql Server 2008, LINQ, Xml, Nhibernate 3.3**

**Description:**Developed this service to extract patient appointment, demographic, insurance, guarantor emergency and employer information from **Nextgen EMR** database, transform the data into destination format and then load patientpoint database as in inbound via **wcf rest service** to help check in process on I-Pad. All the updated information during the check in process will be updated back in form of outbound to Nextgen database. Service is scheduled to poll the Nextgen database periodically for every 10secs to facilitate database synchronization.

**Client: Manhattan Physician Group Duration:** Mar12 – Aug 12

**Project: Drug Adherence Link:** <http://www.mpgcares.com/>

**Environment: VS.Net 4.0,C#,WCF, Sql Server 2008,LINQ, Xml,Nhibernate 3.3**

**Description:**Developed this service to extract patient drug information from **RxHub** history & **SureScripts** to identify whether a patient is adhering to the prescribed drugs. The drug information includes drug name, **NDC** code, generic drug name, patient appointment info, Refills and provider information.

**Responsibilities:**

* Participated in kick off meetings and requirement gathering.
* Developed Data Access Layer (**DAL**) using **ADO.Net** objects to perform database operations.
* Developed **Sql queries** to query Nextgen database and extract information.
* Worked on logic to build **queries** dynamically with dynamic **parameters** at runtime.
* Extended support to call **stored procedures** with dynamically built in parameters.
* Developed **Mapping** Definition xml document which have source and destination mappings.
* Developed **POCO** data models and mappings using **Nhibernate Fluent** mappings.
* Developed generic **Serializer** and **De-Serializer** methods to serialize/ deserialize **Xml to object** and vice versa during transformation phase.
* Developed custom method for **object to object** mapping using **Reflection**. For complex mappings used **AutoMapperLibrary.dll**.
* Developed Formatter class to perform date formatting, phone formatting, abbreviation/acronym formatting with **Regex** and other logic.
* Used queuing methodology for inter process communication by implementing **Concurrent Queue** and **Tasks** to initiate process.
* Developed a **wcf rest service** with methods to receive data objects.
* Developed a data **Repository** to persist data objects to database.
* Used **Linq** to perform select, insert, update and delete operations on repository.
* Developed technical documentation and did knowledge transfer to QA.
* Participated in User Acceptance Testing (**UAT**).

**Client: Patientpoint/** **Healthy Advice**  **Duration:** Nov 11 – Mar 12

**Project: Care Coordinated Portal Service Link:** <http://www.patientpoint.com/>

**Environment: VS.Net 4.0,MVC 4,C#,JQuery,JSon,Wcf, LINQ, SSIS, SSRS, Javascript, Sql Server 2008, Xml, Nhibernate 3.3**

**Description:** This is an up gradation of an existing asp.net web application with some new dashboard features. New application was developed using MVC 4.0 which has a dashboard where care coordinators can view the **gaps in care** for the patients at point of care or **post care**.

**Responsibilities:**

* Analyzing user requirements such as screen designs, validations, data models and database.
* Developed views and viewmodels **(.cshtml)** using razor markup.
* Developed controller logic and developed corresponding models.
* Used **Linq** and data models for data persistence.
* Used **NUnit** for writing **unit test** cases and other **TDD** based development of modules.
* Load test Data into tables from excel using **SSIS**.
* Developed stored procedures for **SSRS** reports.

**Client: Patientpoint/** **Healthy Advice. Duration:** Sep 11 – Nov 11

**Project: Payment Manager Link:** <http://www.patientpoint.com/>

**Environment: VS.Net 4.0,C#,WCF-Rest, Cryptography ,LINQ,Sql Server 2008, Xml,Nhibernate 3.3**

**Description:** Developed WCF service to receive payment request for credit card from client on exposed endpoint, validate the request information, encrypt the request by using **TripleDes (TDEA)** algorithm by following the specifications from transfirst and secret key then process request to transfirst and the response from the transfirst is received, decrypted back using the secret key and process the response and send transaction details to the client.

**Responsibilities:**

* Analyzing the requirements given and posting queries to the **BA/PM** team.
* Sharing views in design and architecture kick off meetings.
* Developed **POCO** data models such as Request, Response, Name, Address..etc
* Participated in defining tables,columns and relationships in **database**.
* Configured data repository and developed data mappings using **Nhibernate Fluent** configurations and mappings.
* Developed wcf rest **POST URL** and exposed to client to send transaction request and receive the transaction details in response.
* Created credit card validator class and developed validation logic to validate card number and Identify the card type (**visa**, mastercard, **dinersclub**..Etc).
* Have written helper methods for conversion **Hex-Array,Hex-Binary,Binary-Hex and XOR** functions to **decrypt** the text as per the specifications from transfirst.
* Worked on **HttpWebRequest** & **HttpWebReponse** methods to post the request and get response from the transfirst service.
* Application required information was configured in an .xml file and the file was loaded into **Xelement** with the help of **LinqtoXml** for faster processing.
* Used **NUnit** for writing **unit test** cases and other **TDD** based development of modules.
* Used **Log4Net** library for logging purpose.
* Performed End to End testing &**UAT** with the client and transfirst.
* Developed Technical document and did Knowledge transfer.

**Client: Patientpoint /ACME Financial. Duration:** Jul 11 – Sep 11

**Project: Claims Processor Link:** http://www.acmefinancial.ca/

**Environment: VS.Net 4.0,C#,wcf, Sql Server 2008, Xml,X12,SFTP**

**Description:** This application will unload files from a FTP server periodically, process each file data and pump into database. File contents are in X12 format of 837 transaction sets. Information of payer,provider, subscriber, and dependent information is saved into the database.

**Responsibilities:**

* Analyzed the specifications of the x12 837 transaction formats.
* Developed **Structures** for provider, subscriber, dependent and claim line entities.
* Designed and developed the **FTP** module using **Rebex.Net** which will connect to server over **SFTP** and authenticated by providing credentials.
* Used **DirectoryInfo**, **FileInfo** and **File** classes for file operations.
* Developed a parser class to parse the message and load **structures** with data.
* Structures are then used to persist data into database using data access objects.
* Data Access Layer (**DAL**) was developed using **ADO.Net** objects for database operations.
* Documented and did knowledge transfer.

**Client: Physician Associates. Duration:** Jan 11 – Jun 11

**Project: Eligibility Manager Link:** <http://www.paof.com/>

**Clearing House: MedData**

**EDI Transactions: 270/271**

**Environment: VS.Net 3.5,C#, Sql Server 2005, SqlXml, X12,Xml,Xpath,Updategram**

**Description:** This program is developed to verify the eligibility of a patient for a care at the facility. Eligibility verification is carried out by clearing house when request is made in form of EDI X12 transaction set 270 electronically by the application. The response is an EDI X12 271 transaction set which is then parsed and stored into the database.

**Client: Orlando Internal Medicine (OIM). Duration:** Aug 10 – Dec 10

**Project: Real time Adjudication Link:** <http://oimonline.com/>

**Clearing House: Availity**

**EDI Transactions: 276/277 & 837/835**

**Environment: VS.Net 3.5,C#, Sql Server 2005, Xml, X12**

**Description:** This application is developed to submit claims(X12-837), Claim Enquiries/Responses electronically in real time. The specifications from Availity are followed to build message in the custom format. Then Availity connects to commercial and government health plans and submits health care claims electronically.

**Responsibilities:**

* Requirement Gathering.
* Analyzing the specifications from clearing houses.
* Analyzing Connectivity Requirements.
* Analyzing Testing requirements, procedures/test cases.
* Developed a **windows** application with an user interface.
* Developed **schedule** module to configure the app to perform real time/batch processing.
* Developed **Mapping** module to map the data in xml to x12 format.
* Developed **Router** module to route the request to corresponding destination as per configuration.
* Used **WebClient** class to call the web service, post request and receive the response.
* Developed parser module to parse the message and save to database.
* Providing required mappings.
* Building up testing environment.
* Testing, Reporting and Resolving connectivity issues.
* Testing application against test cases.
* Knowledge Transfer sessions.

**Client: MEDSTAR/MD-TABLET Duration:** Jan 10 – Jul 10

**Project: Electronic Medical Record Link:** <http://www.medstarsoft.com/emr.html>

**Environment: VS.Net 3.0, ASP.Net, C#, Sql Server 2008 and Mirth**

**#1.McKesson Lynx Mobile - Medicine Cabinet**

**Description:** This application facilitates the exchange of information between a MD-Tablet EMR system and Lynx Mobile, when a patient visits infusion centre staff will use lynx system to communicate with MD-Tablet via interface and get the orders prescribed for this patient. Dispensed drug information, wasted quantity etc are communicated back to EMR via interface. Physicians have access to up-to-date patient information from any location, even from home.

**Responsibilities:**

**Mirth – Integration Engine:** HL7 based interfaces has been developed using Mirth engine. Interfaces build using HL7 v2.3 RDE Message types.

**Web Services:**The implementation of the MDTablet to Lynx Mobile physician order exchange was developed as a set of conversational web services to enable a real time exchange of orders.

**#2.Medstar – Microsoft Amalga (HIS) - Practice Management System**

**Description:** Appointment, Check-in & ADT information triggered from the PMS system need to reflect in the EMR systems for further process. Bringing these systems in sync and to facilitate the exchange of information there was needed to build an interface. ADT & Scheduling Information has been exchanged between these systems using HL7 and XML messaging standards.

**Responsibilities:**

**Bizz Talk – Integration Engine: HL7 v2.3 ADT,SIU Message types.**

**Web Services:** The implementation of the MDTablet to Medstar patient ADT information exchange was developed as a set of conversational web services to enable a real time exchange of information between PMS & EMR.

**#3.Celldyne - RS232 – Windows Service**

**Description:** Celldyne machine is designed by Abbott systems used for Hematology tests. Practices using Celldyne machine has no automated way to get the test results into EMR system thus there is need to develop an interface between celldyne machine and EMR systems to save the test results in EMR. Earlier results written to printer port now this application will listen on that port and receives the data and process it to database.

**Responsibilities:**

* Developed windows form to collect input baud rates and stop bits.
* Used SerialPort class to Open/Close connections and perform Read/Write operations.
* Wrote conversion methods from binary to text and vice versa.
* Hooking a method to the event DataReceived to perform further operation.
* Data is then parsed and saved to database using data access layer.

**Client: Cardinal Health / P4 HealthCare. Duration:** Apr 09 - Dec 09

**Project: Enterprise Application Integration Link:** <http://www.cardinal.com/>

**Integrating Med kiosk , PMS Systems (GE-Centricity) & EMR Systems**

**Environment: VS.Net 2.0, C#, Sql Server 2005, Xml, HL7**

**Clinics:** Harvey, Gaston, Purchase Cancer, Premier, Rhopa, Atlantic, Coastal Cancer, Dr.Field.

**Description:** P4Healthcare, an online health care community, provides health care management solutions for physicians, patients, pharmaceutical companies, and payers. In order to exchange information between these systems we have developed this .Net application which will integrate all the systems. This application will take flat files, csv files,hl7 files as input from a folder and process these files into database as an inbound and also generate the hl7 files and writes to the folder as an outbound.

**Responsibilities:**

* Developed windows form application for user interaction.
* The entire configuration is out of class code in Xml files.
* Developed **FlatFile** reader, parser and mapper classes.
* Developed **HL7** reader, parser and mapper classes.
* Message definition an Xml document is designed suited for all HL7 message types.
* Message template xml documents are developed.
* **SqlXml** template files for database operations are developed.
* Developed scheduling logic based on timer and backgroundworker threads.
* Customized and implemented this application for various clients.

**SYNTEL**

**Client: McKesson. Duration:** Nov 08 – Apr 09

**Project: EncoreX12 – Cross Walk(4010A-5010) Link:** <http://www.mckesson.com/>

**Environment: VS.Net 2008, C#, Sql Server 2008,WCF,Bash Shell scripting**

**Description:**Independent [physician practices](http://www.mckesson.com/en_us/McKesson.com/For%2BHealthcare%2BProviders/Physician%2BPractices/Physician%2BPractices.html) will find that McKesson has the ideal solution to meet their clinical, financial and administrative needs. The fully integrated [electronic health record](http://sites.mckesson.com/achievehit/) (EHR), medical billing and practice management software are created for independent physician practices that want a sophisticated, easy-to-install and simple-to-use solution. The system brings together all of the essential elements necessary to run a modern physician practice.

**Vendors: Hospital Corporation Of America & HCA – London**

**ROLE: Project Lead**

* Intersystem Ensemble - Integration Practice team.
* Health vision Cloverleaf - Integration Practice team.

**Role and Responsibilities:**

* Identifying Integration use cases.
* Identifying Systems in the network.
* Defining system boundaries.
* Design the Interfaces.
* Configuring Interface engines.
* Development and Testing.
* Integration Proctor in Healthcare & Life sciences University of Syntel.
* Conducting COE (Center of Excellence) programs.
* Developing Power Point Presentations on Syntel Integration service offerings for clients.

**Client: McKesson. Duration:** May 08 – Oct 08

**Project: Encore X12 –CrossWalk (4010A-5010) Link:** <http://www.mckesson.com/>

**Role: Business Analyst**

**Responsibilities:**

* Identifying the changes made to the existing version.
* Identifying the changes to be made to existing interfaces.
* Identifying the areas of impact and type of changes required.
* Communicating with Offshore Interface development & support team.
* Project level documentation.
* Presentations on Syntel X12 Interface conversion service offerings for clients.

**Provider/Product Practice**

* Case Study: Accelerating Clinical Trials through EHR & Subject recruitment solutions.
* Case Study: On ICD9 - ICD10 conversion, effects on payer’s subsystems.
* Product Study: Microsoft Health Vault & Google Health Record.

**PURKINJE**

**Client: CARESERIES. Duration:** Oct 06 – May 08

**Project: Electronic Health Record (EHR). Link:** [www.purkinje.com](mailto:www.purkinje.com)

**Environment:** QDX5.3 (Cloverleaf), Linux server, Shell/Bash scripting, Putty, PLSQL, Windows XP Server, Visual Studio 2.0 & 3.0, ASP.Net, C#, ADO.Net.

**Dev-Responsibilities:**

* Establishing client communication.
* Analyzing HL7/x12 specifications.
* Validate and Make sure patient data and relevant data format.
* Communicating with backend interface and getting assistance for developing a generic XSD.
* Creating a new site for the specific vendor in cloverleaf for further process.
* Creating a new Translator in order to maintain individual Xlate for each vendor.
* Selecting specific message type based on the HL7 version.
* Developing a HL7/x12 variant based on the requirements from different vendors.
* Loading the relevant XSD and Configuring Translator.
* Mapping the fields from HL7/x12 to XML format and vice versa.
* Usage of the features of cloverleaf in order to handle the complex logics.
* Create tables to hold the data which is reusable to map appropriately when required.
* Generate the TCL script/ Perl script based on the requirement.
* Create sample messages for Testing Translator within the cloverleaf engine.
* Debugging if cloverleaf engine throws error.
* Creating threads and configuring them to FTP protocol for testing in local environment.
* Initialization and Maintaining the Recovery and Error Databases.
* Maintaining and monitoring the logs to be aware of the behavior of engine using shell scripting.
* Figure out the bugs in the messages thrown to Error or Recovery Databases using shell scripting.
* When testing is done in local environment we need to test it among different servers
* For the above to happen we need to reconfigure the thread configuration to TCP-IP protocol.
* Building up the testing environment and QA support for cloverleaf.
* Establish connectivity with vendor for further testing and follow the test cases from either side.
* Finally deploy it to production and provide support for production.
* Maintain version control in TFS in order to not affect the existing translates or configurations when there is a need for enhancements or changes.

**Careseries EMR Web Development: ASP.Net, Java Script, PlSql**

**Module: Diagnostics**

**Description:** Physicians use these diagnostic screens to diagnose a patient which includes ordering a test, prescribing and viewing the test results from the labs. This is achieved by electronic requisition (e-requisition). Through these screens physician can able to order test and view results back from labs.

**Backend Interface: C#,VS 2.0,PlSql**

**Description:** This service holds communication between cloverleaf integration engine and central repository. It has been developed to receive message from cloverleaf, parse the message and inserts into database and vice versa. Exchange of information with cloverleaf is based on TCP/IP protocol.

**Interfaces Developed For Vendors:**

|  |  |
| --- | --- |
| Quest Diagnostics | Laboratory Corporation Of America (LabCorp) |
| Athena Health | McKesson |
| Global HealthCare Alliance (GHA) | Care Evolve |
| Sage (Community Health Care South Florida). | Horriba |
| Code Correct |  |

**Messages Handled:**

|  |  |
| --- | --- |
| **HL7 Message Types:** | **EDI-X12 Transaction Sets:** |
| ADT Messages. | Eligibility Request & Response - 270/271 |
| Order & Result Messages. | Claim – 837. |
| DFT (Payment & Charge Messages). | Claim status Request & Response – 276/277. |
| RDE Pharmacy Drug Orders | Remittance – 835. |

***\*references available upon request***