Response

to State of Illinois RFSP

Illinois State Board of Education

Special Education Database System – Software Developer

Reference # 22039832

PACKET 1

Response to Specifications/Qualifications/Statement of Work



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Springfield, IL 62711

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Special Education Database System – Software Developer #22039832 Proposal Specification Checklist Table 1

* Please indicate in your proposal, utilizing the table below, the section and page number where the requested information is located.

Posnonsivo Cotogory	Brogram Specifications	Vendor's Proposal
Qualifications (Software Developer)	The degree to which the candidate demonstrates expertise working with ASP.NET. (175 points)	Section Page(s) 14,15,16,17,18,20
Qualifications (Software Developer)	The degree to which the candidate demonstrates expertise working with VB.NET. (175 points)	Section Page(s) 14,15,16,18,19,20,21
Qualifications (Software Developer)	The degree to which the candidate demonstrates expertise working with Microsoft SQL Server. (175 points)	Section Page(s) 14,15,22
Qualifications (Software Developer)	The degree to which the candidate demonstrates expertise working with JavaScript. (75 points)	Section Page(s) 14,15,16,17,18,22,23
Qualifications (Software Developer)	The degree to which the candidate demonstrates expertise working with Crystal Reports or SQL Server Reporting Services (SSRS). (50 points)	Section Page(s) 14,15,16,23,24
Qualifications (Software Developer)	The resume and narrative description submitted by each candidate will be evaluated against how the proposed candidate's knowledge of special education applications or education data systems will contribute to likelihood of success as a software developer. (100 points)	Section Page(s) 14,15,24



D. SPECIFICATIONS/QUALIFICATIONS/STATEMENT OF WORK

D.1. GOAL: The ISBE IT Division seeks an offeror to provide one software developer on a time-and-materials basis to assist in the development and maintenance of extant and future data systems as they pertain to Special Education projects. The contractor will work cooperatively with ISBE to provide continual enhancements, ongoing system maintenance and assist with the SEDS re-write project.

D.1.1. BACKGROUND

The demand for IT services continues to increase as additional processes are automated and as access to data becomes more critical/necessary to enable internal and external stakeholders to make informed decisions. In order to meet the continued demand while simultaneously minimizing risk to the agency, it is necessary to increase the IT division's capacity.

The contractor will provide critical support to various ISBE special education applications. These applications include, but are not limited to:

- Special Education Approval and Reimbursement System (SEARS),
- Special Education Database System (SEDS),
- IEP Special Education Tracking and Reporting (I-Star) System, and
- Illinois Longitudinal Data System (ILDS).

Contractors may be assigned to multiple project teams over the course of the contract. Each project team will maintain a project plan that includes clearly defined objectives, tasks, and timelines. The contractors will be required to provide weekly status reports and to attend weekly project status meetings. The project team's progress and accomplishments will be continually measured/evaluated by ISBE management against the expectations to ensure that each member is performing efficiently.

D.2. SUPPLIES AND/OR SERVICES REQUIRED:

D.2.1. ISBE SYSTEMS ENVIRONMENT

ISBE currently operates and supports a multitude of applications to conduct its business processes on various platforms using mainframe, client server, and web-based technologies. ISBE initiatives have incorporated the use of web-based tools utilizing Microsoft[®].NET as the primary application development tool, SAP[®] Crystal Reports XI



Release 2 as the primary reporting tool, and Microsoft[®] SQL Server as the relational database management system (RDBMS). ISBE operates a Windows-based environment using the Microsoft[®] Office Suite for staff in its Springfield and Chicago offices.

Web-based applications at ISBE must be browser independent and run on a Windows-based PC or MAC operating systems. In addition, the selected Offeror will be required to follow all current ISBE application development standards and procedures while ensuring maximal security.

All technical solutions related to this RFSP must use Microsoft Visual Studio 2010/2012/2013, Visual Basic.NET, ASP.NET, AJAX, JQUERY, Microsoft SQL Server, SQL Server Analysis Services (SSAS), SQL Server Integration Services (SSIS), SQL Server Reporting Services (SSRS), Statistical Analysis System (SAS), Business Intelligence, Microsoft SharePoint 2013, and Crystal Reports XIR2 / CRS2011. SourceGear Vault will be used for version control. Secure access to all ISBE web applications requires the Offeror to use the current ISBE application development framework to integrate into the current ISBE single sign-on system (i.e., ISBE Web Application Security (IWAS)).

Web-based applications at ISBE must run under Internet Information Server (IIS) 7 or higher on one or more servers running Windows Server 2008 R2 Data Center Edition. All servers run as virtual machines under VMware ESXi 5.

D.2.2. Offerors must include the resume of the candidate proposed for the software developer position. The resume must indicate the degree to which the candidate meets the qualifications described in Section D.4.1 below. An offeror may bid on the position by submitting the resume for the candidate and cost proposal for that candidate. Offerors are only permitted to submit a maximum of one candidate per position in this RFSP. Should an Offeror proposed candidate become unavailable during the evaluation stage of this procurement or during the term of the contract, the Offeror must replace the candidate at the same rate or lower than the original candidate. The replacement candidate must be accepted and approved by ISBE using the same evaluation criteria as the original candidate. If the Offeror does not have a suitable replacement candidate accepted and approved by ISBE, ISBE may deem the offer not responsive. Offeror



shall not submit a candidate who is currently working under contract during the proposed term at ISBE, whether for the offeror or another company.

D.3. MILESTONES AND DELIVERABLES:

- **D.3.1.** The software developer will work under the direction of ISBE IT management (hereafter referred to as management) on a time-and-materials basis in the development, maintenance, and support of various Special Education web-based and LAN-based applications as determined and defined by management's weekly/quarterly work plan.
 - D.3.1.1. The contractor will be responsible for the overall general development, maintenance, and support of various Special Education web-based and LAN-based applications as defined in the work plan. The software developer will work with ISBE staff (as assigned and/or approved by management) in the creation and customization of queries, development of reports, fulfillment of Freedom of Information Act (FOIA) data requests, and maintenance of various special education applications.
 - D.3.1.2. As defined and approved by management, the contractor will support ISBE staff by:
 - D.3.1.2.1. actively participating in all facets of the systems development life cycle;
 - D.3.1.2.2. working with staff to implement programming modifications necessary to improve system performance and availability, improve data quality, and assist staff with data collection and reporting;
 - D.3.1.2.3. assist staff with the implementation of system enhancements/modifications necessary to meet internal agency needs and to ensure compliance with state and federal mandates;
 - D.3.1.2.4. meeting required /defined timetables when providing accurate information for state and federal reporting, including Education Data Exchange Network (EDEN)/EDFacts reporting, internal data requests, and FOIA requests; and continuing work as related to ISBE's ongoing efforts to simplify and streamline data collection, and state and federal reporting processes.



D.3.2. Treatment of and Access to State Data

Notwithstanding anything to the contrary herein, State shall be and remain, at all times, the sole and exclusive owner of the State Data (including any modification, compilation, or derivative work therefrom and all intellectual property and proprietary rights contained therein or pertaining thereto) and, effective in each case upon the creation of any such items, Vendor hereby has no rights to such State Data except that Vendor is hereby granted a license to use and copy the State Data solely for purposes of carrying out its duties hereunder during the term and solely to the extent that Vendor requires access to such data to provide the Services as contemplated by this Contract during its term. Vendor shall not commercially exploit the State Data, or do any other acts that may in any manner adversely affect the integrity, security or confidentiality of such items, other than as specified herein or as directed by State in writing.

D.3.3. Transfer/Migration of State Data

Prior to completion or termination of the contract, and at no additional cost, Vendor will ensure that all data is delivered to the Agency as an Excel Spreadsheet backup file containing all data in a relational format including a data model and data dictionary, and shall provide technical assistance to transfer the data to a new or replacement system.

Vendor agrees to clear the State's data from all computers as per the methods specified below:

After transfer of data back to Agency and/or migration of data to a new or replacement system, Vendor agrees to clear the State's data that resides on its computer hardware or software by erasing or wiping/sanitizing in a manner that prevents retrieval of electronically stored information.

The following method shall be used to accomplish the clearing of data: (i) overwriting the previously stored data on a drive or a disk at least 10 times and (ii) certifying in writing that the overwriting process has been completed by providing the following information: (1) the serial number of the computer or other surplus electronic data processing equipment; (2) the name of the overwriting software used; and (3) the name, date, and signature of the person performing the overwriting process. If the method above will not prevent retrieval of the electronically stored information, a method such as burning in a pyrolytic furnace or other incinerator or incendiary device, destroying in a dry pulverizing system, shredding, grinding, milling, knurling, disintegration, or degaussing is appropriate and Vendor will be required to certify in



writing the method used including the date and time of data destruction.

D.4. OFFEROR / STAFF SPECIFICATIONS:

Criteria for Responsiveness (maximum 850 points): The total number of points available for responsiveness is 850: 650 points for qualifications, 100 points for the education data system qualifications, and 100 points for client references. Proposals that receive fewer than 80% of the 750 points for the qualifications and education data system qualifications will not be eligible to move on to the following phases: client references, cost evaluation, or award.

D.4.1. Qualifications (650 points):

- D.4.1.1. Software Developer Qualifications (1 position) will be evaluated as follows:
 - D.4.1.1.1. The degree to which the candidate demonstrates expertise working with ASP.NET. (175 points)
 - D.4.1.1.2. The degree to which the candidate demonstrates expertise working with VB.NET. (175 points)
 - D.4.1.1.3. The degree to which the candidate demonstrates expertise working with Microsoft SQL Server. (175 points)
 - D.4.1.1.4. The degree to which the candidate demonstrates expertise working with JavaScript. (75 points)
 - D.4.1.1.5. The degree to which the candidate demonstrates expertise working with Crystal Reports or SQL Server Reporting Services (SSRS). (50 points)
- **D.4.2.** Education Data System Qualifications (100 points): The resume and narrative description submitted by each candidate will be evaluated against how the proposed candidate's knowledge of special education applications or education data systems will contribute to likelihood of success as software developer. (100 points)

** Only vendors receiving 80% (600 points) of the points available for qualifications and education data system qualifications will move on to the candidate references phase.

D.4.3. Candidate References - 2 (100 points – 50 points for each candidate):

Only vendors receiving 80% of the points (600 points) available for qualifications will move on to the candidate references phase. ISBE will select, interview and score two of the four references. Each interview will be worth 50 points based on the rubric below. If ISBE is unable to contact or score at a minimum two references of the four included in offeror's proposal, a score of zero will be assessed for each reference not scored by ISBE. Each interview will be worth 50 points based on the rubric below.

- D.4.3.1. How satisfied were you with the services delivered by this candidate? Did the candidate meet the assigned timelines? (10 points)
- D.4.3.2. Did the candidate demonstrate a high degree of professionalism and strong capabilities taking direction from a management team? **(10 points)**
- D.4.3.3. What was the candidate's greatest strength? How did this impact the project you engaged them for? **(10 points)**
- D.4.3.4. Was the candidate able to work in a complex environment and take multiple perspectives into account? (10 points)
- D.4.3.5. Would you hire this candidate again? Why? (10 points)

** Only vendors receiving 80% (680 points) of the points available for qualifications, education data system qualifications, and references will move on to the pricing phase.

D.4.4. Criteria for Pricing (150 points):

(Only vendors receiving 80% of the points available for qualifications, education data system qualifications, and references will move on to the pricing phase.)

- D.4.4.1. Price will be determined using the following formula:
- D.4.4.2. Maximum Price Points X (Lowest Price/Offeror's Price) = Total Price Points
- D.4.4.3. If ISBE does not consider the proposed price to be fair and reasonable, and it cannot negotiate to an acceptable price, then ISBE reserves the right to cancel the award and take appropriate action to meet its needs. ISBE will determine whether the cost is fair and reasonable by considering the proposal, including the bidder's qualifications, the price proposed, other known prices, the project budget, and other relevant factors.

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D.4.5. Replacement Candidates

- D.4.5.1. Vendor shall provide appropriate staff to carry out all aspects of the Vendor's responsibilities under the contract. The candidates assigned by Vendor to the project shall possess the skills, abilities and experience necessary to successfully perform the roles to which they are assigned. The Vendor shall not knowingly offer a candidate who is unfit and unskilled for the work to be performed.
- D.4.5.2. Vendor shall dedicate an individual to serve in the positions described herein. If the candidate becomes unavailable, Vendor shall notify the State in writing as early as possible.
- D.4.5.3. If candidate becomes unavailable during the term of the contract or it is determined by ISBE that 1) the candidate's performance is unsatisfactory or 2) the candidate cannot perform the objectives of the contract, the Vendor will have ten (10) working days to provide a suitable replacement candidate. A replacement candidate must have qualifications that are equal to or better than those of the individual being replaced, and ISBE must approve the replacement candidate prior to assignment to the project.
- D.4.5.4. If ISBE accepts a replacement candidate, the Vendor shall provide the replacement candidate at the same or a lower hourly rate than the individual being replaced, and, at no additional charge, for as many hours as ISBE requires to complete any orientation and attain the level of project proficiency of the individual that is being replaced. Orienting is defined as the replacement candidate becoming acquainted with the State of Illinois, ISBE, and the project environment.
- D.4.5.5. If, during the course of the contract, the Vendor is unable to propose, within 10 working days of the provided personnel becoming unavailable or the determination by ISBE that a particular individual is performing unsatisfactorily or cannot perform the objectives of the

contract, a replacement candidate who meets the position requirements, ISBE reserves the right to cancel the contract in whole or in part without penalty.

D.4.5.6. During the term of the contract and any renewal option, Vendor will maintain current information about formal education, training, certifications and licenses of the candidate. The Vendor will maintain current information about skills and experience acquired through similar engagements. The Vendor shall make any and all of this information immediately available to ISBE, upon request.

D.5. TRANSPORTATION AND DELIVERY TERMS: n/a

D.6. OFFEROR'S PROPOSED SOLUTION TO MEET THE STATE'S REQUIREMENTS: Please either respond in the space below or in the following prescribed format:

D.6.1. WORK PLAN REQUIREMENTS

The proposal must include:

D.6.1.1. A brief description of the contractor's organization (if applicable);

SEA Group, Inc. is pleased to offer our extensive staffing experience in response to the State Board of Education request for sealed proposal. We know that we are uniquely qualified for this opportunity with the IL State Board of Education based on SEA Group and its management team's proven ability to provide high caliber, professional expertise based on our clients' specific needs.

For more than 30 years, SEA Group and its current management team have been providing the government market with superior IT technical staffing services. The current management team has its roots with a major Global Integrator and its team, made up of highly specialized recruiters and support services, have worked with and supplied staffing services to government agencies for multiple state governments including Illinois, Iowa, Indiana, Michigan, Wisconsin, and Mississippi. Every day current and legacy technical professionals serve clients within state sectors and because of this experience, we are uniquely qualified to provide rapid response to large and highly specialized government programs. Headquartered in the Springfield, IL area, we leverage an extensive network of professionals and partners in the United States and Canada along with specially designated recruiters for the State of Illinois to deliver best in class technical talent on short timeframes and with minimal other direct costs (ODC). SEA Group's staffing support services have laser focus on the critical elements of staffing projects; people. Because of our experience and knowledge of the global integrator world, we can provide contract staffing and services that are fiscally competitive over the big firms.



We customize our service to meet your precise business and technological needs, addressing the issues that you face. For example, we realized that many clients:

- Seek a strategic partner who can understand the market dynamics driving their business
- Value a services vendor who will take the time to fully understand their strategy and operations in addition to their specialized needs
- Are frustrated by large, resume factory Tier 1 vendors who simply broker resumes at high rates
- Want candidates who meet their technical requirements and are able to communicate and fit into their own culture with seamless precision
- Are concerned about turnover and welcome proactive resource management of technical contractors

To address these types of issues and client needs, SEA Group's management team has developed a quality resource management process. Through each of its five stages, we ensure that we can both understand your workforce needs and provide valuable solutions to drive the success of your business:

- Market Analytics: We understand the industry trends and are experts in the Springfield, Illinois market
- Customer Understanding: We ensure full understanding of your requirements and supported business initiatives, driving your IT needs with our depth and range of staffing services
- Sourcing Strategy: We strategically approach our search by leveraging successful technical professionals and our vast referral network
- Screening and Selection: What works? We thoroughly screen all candidates and only present those we believe truly meet the specifications of your requirements and, just as important, your corporate/business culture
- Relationship Management: We provide ongoing support throughout the duration of each engagement and are dedicated to deepening our relationship with both clients and technical professionals. Whether it's one consultant, or fifty, you receive the same attention to detail and support.
- Cost Value/ROI: Our rates are simple and based on the true cost of the contractor with modest markups. The engaged consultant receives 80% of the billed rate.

We pride ourselves on providing the highest level of service to both our clients and our consultants. In a challenging, global marketplace, you can rely on SEA Group and its team to help you meet your business and staffing goals through our ability to source the highest quality of people available.

SEA Group's main management team consists of Joe Marchizza and Sean Brown, and with over 47 years of combined experience, the team of Marchizza and Brown has effectively recruited well over 3000 consultants to businesses



and government agencies in the Central Illinois area. In 2012, they became partners when they resigned their positions at CIBER and purchased SEA Group with a vision of providing cost effective staffing solutions based upon the criteria of quality over quantity. With a database of over 3 million resumes, our reach grants us to access to 81% of the technical professional workforce and combined with the 30 year history of SEA Group personnel, we are well positioned to handle ISBE's staffing needs.

The combination of SEA Group and its current management team dates back to 1984 when SEA Group began doing business with the State of Illinois as a provider of technical contractors. We have provided the State of Illinois with skilled technical resources such as Help Desk, .NET Developers, VB Developers, Cobol Developers, and Support Desk professionals. We have many current and past relationships within the State of Illinois where we have provided staffing services that include but are not limited to: ISBE, SIU-C, IL Dept. of Aging, IC, IDPH, DCEO, CMS, DHS, IDOC, IDOT, HFS, ISP, and DNR.

D.6.1.2. A resume for the proposed candidate for the software developer position;





Naveen Alavilli

Summary

- Over 10 years of IT experience in Development, Business Requirements Analysis, Application Design and Testing for Web & Windows applications using C#.NET, WCF, ASP.NET, VB.NET, SQL Server, AJAX, LINQ, jQuery, JavaScript, HTML 5.
- Has participated in full SDLC in Agile (Scrum) environments with State of Illinois experience that includes the Illinois State Board of Education and the Department of Aging's Child and Adult Care Food Program.
- Currently assigned to the Special Education Database System rewrite and system enhancement project for the Illinois State Board of Education.

Technical Skills

VB.NET	ASP.NET	ADO.NET
.NET 2.0/3.0/3.5/4.0	SQL Server 05/08/14	MVC 3.0
WCF	JavaScript	HTML
HTML	XSLT	JQuery
AJAX	SharePoint 2010	NUnit
Visual Studio 08-12	Fiddler	DevExpress
QUnit	AutoMapper	FireBug
TFS	VSS	JS Fiddle
ANTS	Oracle 10g/11g	Chrome

Education

Bachelor of Technology, Computer Science & Information Technology, Andhra University

Professional Summary

SEA Group, Inc., Illinois State Board of Education Developer

06/2015 to Present

Project: Special Education Database System

SEA GROUP Response to RFSP Reference # 22039832 – Packet 1 SEDS is a comprehensive application designed to support seamless service for children with disabilities. This project is a rewrite for existing old application and the objective is to add enhanced features as well as to utilize to-date technology. This application is designed to meet the current web standards in terms of reliability, scalability, security and a better user-experience. Special Education Database system integrates with other applications in the system, like SEARS, SIS, etc. to exchange necessary information. The project also includes maintenance of the existing application which include error fixes, updates to data and code for immediate release to production.

- Maintenance of the existing SEDS application by fixing errors, updating code or data.
- Create rich webpages using ASP.NET, HTML 5 and CSS, while ensuring the webpages to display as expected on multiple devices with varying resolutions.
- Design and implement User Controls which can be reused for various other modules within SEDS.
- Use AJAX, JavaScript and JQuery scripts for dynamic web-content and UX.
- Write VB.Net code and SQL scripts to implement the business logic and also adhere to the ISBE standards in terms of naming conventions, security, performance and reliability.
- Updated complete mailing module for the existing application to make it compatible with Windows 2012 server.
- Write test cases and code for IEP module for testing for errors and also scale performance of the system.
- Assisting team-members in creating reports using SSRS, for mailing module.
- Assisting team-members in writing a tool that creates a data abstraction layer.
- Handling project delivery, by creating build definitions on TFS server and also deploying web application to the IIS server, as well as publishing the SQL Server schema and data to the testing SQL server.

Environment: VS 2008/2013/2015, VB.NET, SQL Server 2005/2008, JavaScript, JQuery, CSS, LINQ, Fiddler, JS Fiddle, SSRS, TFS Build Server 2015

Illinois Department of Aging Developer

06/2014 to 05/2015

Project: Child & Adult Care Food Program

This is a web application for the Child & Adult Care Food program by the Illinois Department of Aging. This integrates the services of all the food service providers in the state and enables to administer, validate claims for the services, and generate invoices. The service providers can claim for the meals they served to qualified aged people of the state, and the system validates their input against the business rules to generate invoices and forwarded to the finance team.

- Responsible for design and development for data service components that interact with other applications.
- Implemented the claim validation and create invoices.
- Designed and implemented Authentication module.
- Designed the application architecture, with System Architect.
- Documented the system functionality and its detailed design.
- Designed User Interface screens, using MVC and JQuery.

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Environment: VS 2014, MVC, Entity Framework, C#, JavaScript, JQuery, CSS, LINQ, DevExpress, Fiddler, JS Fiddle, AutoMapper

AETNA, Infosys Technology Analyst

06/2013 to 06/2014

- Designed and developed Data Service components using WCF.
- Designed and developed application web pages using ASP.NET, C# and JQuery.
- Scripted MS SQL Database schemas and stored procedures.
- Used agile methodology developed the product by aligning with business and testing teams on incremental model.
- Participated in high-level design and detailed design of the application.

Environment: VS 2014, WCF, Entity Framework, C#, JavaScript, JQuery, CSS, LINQ, Dev Express, Fiddler, NUnit and Moq Unit testing, ASP.NET

BP, Infosys Technology Analyst

03/2013 to 06/2013

- Worked as Team Lead for requirements gathering, analysis and effort estimation.
- Coordinated with the offshore team at Infosys, India.
- Used agile methodology developed the product by aligning with business and testing teams on incremental model.
- Developed the layers of the web service application, for majority of the features.
- Developed a component that accepts xml package files, extract all the metadata and send as a response to the client application.
- Used IBM Net-Insight and another legacy framework to log all the events and errors in the applications, to ease the analysis when required.
- Participated in high level design and detailed design of the application.
- Work allocation, Team management, status reporting, mentoring.
- Subordinate competency mapping.

Environment: VS 2010, TFS, ASP.NET, C#, WCF, JavaScript, JQuery, CSS, XML, XSLT, LINQ

LEXISNEXIS, Infosys Technology Analyst

05/2007 to 02/2013

Project: Lexis Advance – Lexis for Microsoft Office

Lexis for Microsoft Office (LMO) - Lexis Advance is a research tool for Microsoft Outlook Email and Microsoft Word documents developed using VSTO, to assist running research against textual information and Open Web sources contained within these components. This application will allow users to perform LexisNexis research within their normal everyday work flow. The users can download any important information or forward as emails.

• Design for Content Delivery Services by which the user can save the content either by downloading as PDF or printing or via email.

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- Delivery of working models for PDF generation to the team.
- Designed and implemented Dynamic UI Templates service where the plugin reads the template and display the necessary WPF controls to the user.
- Optimized the plug-in for maximum performance.
- Provided technical support to the team.
- Requirement sizing, effort estimation, code review.

Environment: VS 2010, VSTO, TFS, ASP.NET, C#, WCF, MVC 3, JavaScript, JQuery, CSS, XML, XSLT, LINQ, NUnit, Moq testing, ANTS Performance profiler

Project: Smart Meeting

The Smart Meeting product will match the domain in the recipient addresses against the domains stored in the LexisNexis systems (Company Dossier Server), and will email the company's details to the Senders address before the scheduled time. The user can manually add multiple companies; perform a quick search to learn about the companies as desired.

- Worked with the Technical Analysts for requirements gathering and analysis.
- Designed and implemented email module that sends the formatted company information that fits either in desktop email clients or in handhelds.
- Designed and implemented content processing and formatting to fit the content in multiresolution screens, and deliver as emails.
- Worked on design and development of database: writing stored procedures, functions and table schemas.
- Complete ownership of Administrator website: implemented with extensive usage of JQuery to make the application perform faster.
- Designed and implemented LinkedIn integration with the plug-in, to retrieve profiles of the company executives.
- Provided technical support to the team.
- Work allocation, team management, status reporting, mentoring.
- Developed a book of knowledge which can be used as reference while maintaining the application.

Environment: C# on .NET 4.0, WCF, Oracle 11g, XML , XSLT , JavaScript, JQuery, ASP.NET, CSS, LinkedIn Integration, TFS, NUnit, QUnit and Moq testing, ANTS Performance Profiler

Project: Search Navigator

This application was developed to execute various search strategies, capture analytics and provides the user the ability to provide feedback. The user experience, product team and business unit will analyze the results of the testing and determine what changes that want to make to Content Services.

- Requirements gathering and analysis.
- Designed and implemented the search module which is the crux of the application.
- Provided technical support to the team.
- Work allocation, team management, status reporting, mentoring.
- Requirement sizing , Effort Estimation, code review

• Subordinate Competency mapping

Environment: C# .NET 3.5, ASP.NET, Oracle 11g, JavaScript, JQuery, XML, XSLT, Agile methodologies, TFS, CSS 3.0

Project: BIS WebParts

This project is all about developing Webparts compatible with SharePoint 2007/2010, to enable other organizations to install into their websites (based on MS SharePoint). The web parts facilitate running search against News, Companies and their executives. The SharePoint admin can easily attach the Webparts to their SharePoint portals and enable their users to run searches.

- Requirements gathering and analysis.
- Designed and implemented the search module which is the crux of the application.
- Provided technical support to the team.
- Requirement sizing, effort estimation, code review

Environment: C# .NET 3.5, ASP.NET, JavaScript, JQuery, XML, XSLT, Agile methodologies, TFS

Project: LexisWeb

This web-based product provides comprehensive and reliable information, helping the legal professionals give advice regarding member states impacted by the directives. The product sends emails, if the user opts to receive whenever there is a new or updated directive. The user can run multiple searches, bookmark important content in the application, and also print/download.

- Implementation of Authentication framework.
- Implementation of content processing/formatting.
- Implementation of search module.
- Implementation of PDF files generation modules.

Environment: C# .NET 3.5, ASP.NET, JavaScript, JQuery, XML, XSLT, Telligent Community Server, TFS

Project: EU Tracker

This web application provides legal content to the lawyers and law students, in various countries: US, France, Austria, Denmark and UK. The application is adaptable to the desired country, and the language preferences are automatically set, thereby making it a multi-lingual web application. The users can search for any law related content and get their content in specific format and can also get emails.

- Prepared working models to analyze the feasibility of Telligent Community Server usability.
- Designed and implemented Authentication in the application.
- Implementation of search module against the LexisNexis content sources.
- Content processing and formatting.

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Environment: C# .NET 3.5, ASP.NET, JavaScript, JQuery, XML, XSLT, Telligent Community Server, TFS

Project: Laptop Subsystem

This laptop application is one of the significant applications for LexisNexis to input the legal content into the data centers. The officials at the courts enter the content in this application, and it will be synchronized with the servers deployed in a remote area.

- Creation of working models for content transmission, ensuring optimized performance and security.
- Implementation of User Screens and functionalities.
- Application testing.

Environment: VB.NET 3.5, Oracle 10g, IBM Rational ClearCase



D.6.1.3. A narrative describing the candidate's qualifications and experience in performing work of a similar nature. Proposed candidates should describe in detail all prior or current projects as they relate to the duties listed in Section D.3 and D.4 of this RFSP; and

The degree to which the candidate demonstrates expertise working with ASP.NET. (175 points)

Almost all of the projects I have worked for the past 10 years use ASP.NET for the front-end and it is always accompanied with JavaScript, CSS and MVC framework as well. While the applications were developed to support multiple resolutions, equal importance was given to improve the performance of the webpages by utilizing the Asynchronous rendering and to enable dynamic as well as decreased load on the client-server data exchange.

Even though ASP.NET provides sufficient HTML elements for the data display, there are areas where we need to utilize external libraries like JQuery, Bootstrap. JQuery and JavaScript libraries like JQueryUI.js were often used for displaying data for a better userexperience. Few examples include Calendar Controls, File Upload, etc.

Web-applications for varying screen resolutions were always a high priority requirement for all the projects, as the pages should be formatted on devices ranging from Desktops to Smartphones. This is achieved by using appropriate CSS classes, or by using Bootstrap.CSS libraries in most of my projects.

ASP.NET in my projects is always integrated with either C# or VB.NET as backend services. User Controls were created in every possible scenario, to increase reusability across applications.

My current project at ISBE, SEMS, consists of multiple web pages and they are developed to support Internet Explorer and Chrome to meet the expectations of the users in ISBE. To fix the formatting of the page, I utilized Firebug extensively for debugging and corrections.

One of the challenges with ASP.NET that I have faced in the last project is related to calendar control, which needs to display details of appointments scheduled for each day of the month in a calendar-like webpage. This was designed by using multiple nested-repeaters for displaying the dates, and list of events for each day. There are many critical areas in the applications which needed extensive coding on ASP.NET like Modal popups, AJAX controls, etc.

The degree to which the candidate demonstrates expertise working with VB.NET. (175 points)

The projects at ISBE, Dept. on Aging and LexisNexis were all written on VB.NET. And the other projects are in C#.NET. VB.NET was used in the applications, as a server-side code for the web applications, or web services. The projects used design patterns, which are of both Structural, and Behavioral patterns throughout the application. The backend code in case of ASP.NET applications, uses handlers and delegates for the best possible abstraction between the front-end and UI. This way, the code also avoids the redundancy for pages with same functionality.

The code is always separated into multiple layers of Business, Data, Integration and UI layers and this always helped to maintain and easily update any part of the applications with minimal effort. I have used VB.NET for both Web and windows applications with .Net frameworks of 4.5, 4.0, 3.0, 2.0.

Few of the applications are specifically written for web services using WCF, in which data optimization, security play a vital role. The data is exchanged in SOAP based web services as well as XML and JSON formats, and AutoMapper was utilized for transforming business objects to data objects as vice-versa.

Project Highlights:

The present application at ISBE: SEDS is both maintenance of the existing application as well as write for better features and standards. An immediate task when I first took up the project was to migrate Mailing Service application, on a Windows 2008 Server based Windows Service to Windows 2012 Server. This application was dependent on Microsoft Word 2003 and Adobe libraries, which are no longer supported in Windows 2012 Server. In order to complete the migration, I had to write extensive VB.NET code to do the job of unsupported Adobe DLLs and create PDF files. And for the application rewrite, my responsibilities include:

- Writing server-side code for the ASP.NET pages
- Extensively apply OOPS concepts in the projects, by using .NET framework's libraries, which include Classes, Interfaces, Delegates, etc.
- Writing business objects to utilize throughout the application.
- Perform data retrieval operations on collections using LINQ.
- Write error handling and logging the exceptions into external files.
- Adhere to the industry standards and implement Design Patterns wherever possible to ensure efficient and high-quality product.
- Writing test-cases and creating automated scripts
- Create a data-access layer and create abstraction with the business layer.

LexisNexis is a windows application with Web services, in which the data is transferred from various external agents to a centralized content management server. My tasks were to utilize WSE 3.0 for the message optimization, exception-handling mechanism, and also create various proof-of-concepts to implement in the project.

SEA GROUP

The degree to which the candidate demonstrates expertise working with Microsoft SQL Server. (175 points)

Creating schema objects like tables, views and writing stored procedures are always in my tasks for all the projects that I have worked on over the past several years. Although the CACFP project at the Dept. On Aging used Entity Framework and doesn't have stored procedures in MS SQL, I still had to write equivalent LINQ scripts for the data retrieval in the code of business layer.

While creating schema objects, I ensure the tables are at least adhering the 2NF (Second Normal form), to avoid redundancy. The current project at ISBE, SEMS, has substantial Database schema objects. I created a separate database project to add it to the source control in TFS, which helped to revert to the previous version in case of errors while deploying to QA. The stored procedures were written to include exception and transaction handling. SEMS Database involves Jobs to schedule execution of specific stored procedures. The transactions were handled with VB.NET on the server side by invoking the Transactions features provided by MS SQL. The errors are returned to the server side code using the Error handling mechanism provided by SQL server.

The Transporter application at British Petroleum was created to maintain enormous data in the oil business and to enable migration of code across various databases like MS SQL and Oracle. This application is a Windows application that uses Microsoft's database object model and REST for transforming the SQL objects and push to other databases, with Zerodata loss and high efficiency.

My tasks related to MS SQL are:

- Analyze data and design Schema for the data objects that include Tables, Relationships.
- Extensively use all the CRUD operations on the SQL data, along with Transactions and Error handling.
- Optimizing the data retrieval queries by implementing Views, clustered/nonclustered Indexes.
- Creating mapping with objects in another databases within the system.
- Write triggers for the SQL Server in few of the projects.
- Extensively use joins, sub-queries, nested functions and stored procedures and retrieve data from various tables in MS SQL databases.
- Schedule jobs to execute specific set of stored procedures for a specific time/day.
- Backup, Restore, Copy and migrate the SQL Databases, using MS SQL Explorer provided functionalities and also utilize visual Studio SQL Solution templates.
- Create database deployment packages and when publishing applications to QA/production Servers.

The degree to which the candidate demonstrates expertise working with JavaScript. (75 points)

SEA GROUP

JavaScript was used in all of my web application projects to enable dynamic and faster responses. The web applications, like SEMS for example, needs to display data and perform error validations with negligible time-lag, and also on-the-fly formatting of the texts that the users type in the webpage. I have used JavaScript in SEMS for other features like session maintenance, event-handling using the DOM model and creating web requests to invoke the .ASMX web-services within the application.

JavaScript in my applications often utilize JQuery libraries for a better UI and dynamic content. The ASP.NET's AJAX capabilities were sufficient in most cases in SEMS, but there are few pages where extensive JavaScript code is required, like dynamic and draggable modal dialogs, keyboard handling which are not provided by ASP.Net. I have used the JavaScript libraries like jQueryUI and bootstrap.js for specific requests from the user, like enhanced calendar controls, upload dialogs with file-drop capability and to create windows that can be resizable using keyboard or mouse.

Various projects at LexisNexis, Aetna, and the Department on Aging used web services. The data was received as a form of JSON, especially when the application is based on MVC or WCF that use REST. The JSON objects need to be parsed and displayed on the webpage, and this was better handled by jQuery. The CACFP project at Dept. on Aging has extensive JavaScript to interact with external web services like SSA and USPS. The details of a person like SSN and home address must be verified before saving the details in the system, and this was handled by dynamically invoking the RESTful web services provided by USPS where the data is posted using HTTP/HTTPS calls and retrieving the JSON response to evaluate and notify the user about the data verification. Few services return XML responses as well, so the scripts were written to handle both types of responses from the servers.

Debugging and testing JavaScript functionalities cost substantial time and effort, so I have used JSFiddle and Fiddler for testing the functionalities manually before testing the overall functionalities of the application.

The degree to which the candidate demonstrates expertise working with Crystal Reports or SQL Server Reporting Services (SSRS). (50 points)

I have used SSRS in SEMS at ISBE, to assist a colleague with a mailing component. This component retrieves the data by invoking the stored procedures and pushes it to the pre-formatted RDL Report files, and a code is written to automatically save the file as word documents to a shared drive. These reports are then fetched by a web based scheduling program to send out emails to the users.

Another project where I used SSRS is the HealthHub project at Aetna. The business users at this insurance company can generate reports on the details of customer, as well as the claim related data. As the data in the Aetna client database is very large, I had to analyze data models, data relationships, and dependencies for best possible optimization, along with extensive stored procedures and ensure the tables are normalized for a faster performance in data retrieval. I wrote SSRS package configurations and package parameters to ensure the packages execution in another servers in the system. The package was written to return



a formatted report to the web application, based on certain parameters. The HealthHub project also involves retrieving data from various data sources like .txt, .xml files and I developed an SSIS package to import the data from those files into the database.

Education Data System Qualifications (100 points): The resume and narrative description submitted by each candidate will be evaluated against how the proposed candidate's knowledge of special education applications or education data systems will contribute to likelihood of success as software developer. (100 points)

Special Education Database System is one of the applications that I have worked at ISBE, and this project is intended to manage and monitor the services for the children with special needs. I am involved in the development as well as rewrite of this application and my tasks include but not limited to:

- Analysis of the existing SEDS application
- Address the Work-Requests from the users, which range from error fixing in code to manual data corrections in the database.
- Participate in the business meeting with the users, for SEDS rewrite.
- Working with IWAS team and get their inputs to implement security in the application
- Design and implementation of various modules in SEDS like Mediation, IEP and complaints.
- Interacting with other application developers in ISBE, so as to integrate SEDS with applications like SEARS and SIS.
- Responsible for deployment of web applications and MS SQL objects to QA environment.



D.6.1.4. In order to meet the requirements of Section A.18 and References Part J, the names, addresses, and telephone numbers of four professional references. (These references should not be from ISBE employees or members of the Board.)

Name	Kirtan Patel
Title	Lead Developer
Client	Department on Aging
Phone	(217) 588-8517
Email	Kirtan.Patel@illinois.gov

Name	David Weibring
Title	CIO
Client	Department on Aging, Springfield, IL
Phone	<u>217-725-6570</u>
Email	David.Weibring@illinois.gov

Name	Karthikeyan Jayasuriyan
Title	Team Lead
Client	Aetna Insurance, Chicago, IL
Phone	<u>773-575-2956</u>
Email	<u>kjayasuriyan@payflex.com</u>

Name	Dinesh Pamini
Title	Team Lead
Client	LexisNexis, Miamisburg, OH
Phone	<u>916-837-7298</u>
Email	dreamz.dinesh@gmail.com



D.7. SUBCONTRACTING

- **D.7.1.** Subcontractors are allowed. A subcontractor is a person or entity that enters into a contractual agreement with a total value of \$50,000 or more with a person or entity who has a contract subject to the Illinois Procurement Code pursuant to which the person or entity provides some or all of the goods, services, real property, remuneration, or other monetary forms of consideration that are the subject of the primary State contract, including subleases from a lessee of a State contract. If subcontractors are to be utilized, Offeror must identify subcontractors expected to receive \$50,000 or more annually under the contract and disclose the expected amount of money each will receive in the Subcontractor Disclosure form found in Section 3 Part I.
- **D.7.2.** The Offeror shall notify the State of any additional or substitute subcontractors hired during the term of the contract. If required, Offeror shall provide the State a copy of all such subcontracts within fifteen (15) days after execution of the contract or the subcontract, whichever occurs later.
- **D.7.3.** Any subcontracts entered into prior to award of the contract are done at the sole risk of the Offeror and subcontractor(s).

D.8. WHERE SERVICES ARE TO BE PERFORMED

- **D.8.1.** Unless otherwise disclosed in this section, all services shall be performed in the United States. This information and the economic impact on Illinois and its residents may be considered in the evaluation. If the Offeror performs the services purchased hereunder in another country in violation of this provision, such action may be deemed by the State as a breach of the contract by Offeror.
- **D.8.2.** Offeror shall disclose the locations where the services required shall be performed and the known or anticipated value of the services to be performed at each location. If the Offeror received additional consideration in the evaluation based on work being performed in the United States, it shall be a breach of contract if the Offeror shifts any such work outside the United States.
- **D.8.3.** Location where services will be performed: ISBE office, 100 North First Street, Springfield, IL
- **D.8.4.** Percentage of contract of services performed at this location: 100 percent of services to be performed on location except when travel is required by ISBE for completion of various assigned projects or unless otherwise agreed to by ISBE management.

Include Part D and related attachments in Packet 1