

## SELECTED PROFESSIONAL PROJECTS

---

### ***CRM Plus***

Organization	KalSoft (Pvt) Ltd, Karachi, Pakistan
Client	Halal Financial Services, United Kingdom
Role	Team Lead, Architect
Tools & Technologies	Visual Studio.Net 2005, C#, KalUI Framework, iBatis, Microsoft Application Blocks, MS Visio, MS EPM, ASP.Net, SQL Server 2005
Project Summary	This is a CRM application which is being developed for Halal Financial Services.
Assignments	<ul style="list-style-type: none"><li>■ Development of functional specifications</li><li>■ Leading the development team</li><li>■ Preparation of the required technical documentation</li><li>■ Collaboration with testing and graphics departments</li><li>■ Support for user acceptance testing</li></ul>
Team Size	8 Members
Duration	9 Months (expected)

---

### ***Channel Intranet Solutions***

Organization	KalSoft (Pvt) Ltd, Karachi, Pakistan
Client	HumanSoft Learning Solutions, Kuwait
Role	Team Lead, Analyst, Architect
Tools & Technologies	MS Visio, MS EPM, Visual Studio.Net 2005, C#, ASP.Net, SQL Server 2000
Project Summary	The aim of this project is to create a Learning Management System with offline licensing capabilities. The end product would have the capability to generate licenses based on various course playback capabilities.
Assignments	<ul style="list-style-type: none"><li>■ Requirement analysis and preparation of CRS</li><li>■ Identification of functional specifications and preparation of FSD</li><li>■ Leading the development team</li><li>■ Preparation of technical documentation</li><li>■ Collaboration with testing, graphics and support departments</li><li>■ Support for user acceptance testing</li></ul>
Team Size	4 Members
Duration	3 Months

---

### ***Dubai e-government Training Portal***

Organization	KalSoft (Pvt) Ltd, Karachi, Pakistan
Client	HumanSoft Learning Solutions, Kuwait and Dubai e-government, UAE
Role	Team Lead, Analyst
Tools & Technologies	MS Visio, Visual Studio.Net 2005, C#
Project Summary	The aim of this project is to provide a training portal which will be used as a central place by the government departments and individuals in search of training courses; while the vendors will be providing information about various trainings.
Assignments	<ul style="list-style-type: none"><li>■ Requirement analysis and preparation of CRS</li><li>■ Identification of functional specifications and preparation of FSD</li></ul>

	<ul style="list-style-type: none"> <li>■ Leading the design / analysis team</li> <li>■ Initial technical design and architecture of the system</li> </ul>
Team Size	3 Members
Duration	1 Month (Only performed initial analysis and design)

---

### ***Anti-Reptile***

Organization	KalSoft (Pvt) Ltd, Karachi, Pakistan
Client	Bourne Labs, United Kingdom
Role	Analyst, Developer
Tools & Technologies	Genesis Call Center, Reptile, MS Visio, Visual Studio.Net 2005, C#, VC++
Project Summary	The aim of this project is to develop an application that can test the working on <i>Reptile</i> on real data. It will also serve to test <i>Reptile</i> .
Assignments	<ul style="list-style-type: none"> <li>■ Requirement analysis and preparation of CRS</li> <li>■ Identification of functional specifications and preparation of FSD</li> <li>■ Development of the prototype application</li> </ul>
Team Size	3 Members
Duration	1 Month (Analysis period, waiting for client approval)

---

### ***Reptile***

Organization	KalSoft (Pvt) Ltd, Karachi, Pakistan
Client	Bourne Labs, United Kingdom
Role	Analyst, Developer
Tools & Technologies	Genesis Call Center, MS Visio, Visual Studio.Net, C#, VC++
Project Summary	<i>Reptile</i> is a reporting framework for a widely used Call Center Software. It receives the call records and converts it into meaningful information. It has been designed to be highly available and withstand any failure without data loss.
Assignments	<ul style="list-style-type: none"> <li>■ Programming, technical testing and debugging</li> <li>■ Fixing bugs and supporting the product during the warranty period</li> </ul>
Team Size	3 Members
Duration	1 Month (This was my contribution, project duration was longer)

---

### ***Professional Employer Services MIS, Analysis and Design***

Organization	KalSoft (Pvt) Ltd, Karachi, Pakistan
Client	Professional Employer Services, Pakistan
Role	Analyst
Tools & Technologies	MS Visio, MS Project
Project Summary	The aim is to design the Management Information System of Professional Employer Services. The project encompasses four modules: HR, payroll, invoicing and accounts.
Assignments	<ul style="list-style-type: none"> <li>■ Requirement analysis and preparation of CRS</li> <li>■ Identification of functional specifications and preparation of FSD</li> <li>■ Technical analysis and design of the system</li> <li>■ Preparation of project timeline and cost</li> </ul>
Team Size	3 Members
Duration	1 Month

---

### ***Banking Vision Support***

Organization	KalSoft (Pvt) Ltd, Karachi, Pakistan
Client	Union National Bank, Abu Dhabi, UAE
Role	Analyst, Developer (for fixing the issues)
Tools & Technologies	C/C++, Borland C++, Oracle 9i, Oracle Pro C/C++, Oracle SQL *Plus
Project Summary	Supported the issues found by the users in Banking vision, the banking solution being used by the client.
Assignments	<ul style="list-style-type: none"><li>■ Coordinating with the support desk in identifying bugs based on help desk logs</li><li>■ Technical analysis of the issues raised</li><li>■ Clarifying to the user and fixing the bug (if any)</li><li>■ Documenting and performing unit tests</li><li>■ Supporting user acceptance testing</li></ul>
Team Size	Dynamic Size (2 – 4 Members)
Duration	1 Month

---

### ***Etisalat Automation Project***

Organization	KalSoft (Pvt) Ltd, Karachi, Pakistan
Client	Union National Bank, Abu Dhabi, UAE
Role	Analyst, Developer, Architect
Tools & Technologies	C#, Asp.Net, VS.Net, XML, Web Services, SQL Server
Project Summary	Develop a Web Service interface for use by internal banking channels, which will perform all communication with Etisalat Bill Payment Web Service; windows services were developed for generating reports and queuing purposes. The web service has already been integrated with UNB Internet banking software and in a short time with other banking channels including IVR, ATMs and Banking Vision.
Assignments	<ul style="list-style-type: none"><li>■ Technical analysis and design</li><li>■ Preparation of technical specifications</li><li>■ Implementation, technical documentation and unit testing</li><li>■ Prepared guidelines for integration with various banking channels</li></ul>
Team Size	2 Members
Duration	1 Month (Project Duration: 2 Months)

---

### ***Straight Through Processing Project***

Organization	KalSoft (Pvt) Ltd, Karachi, Pakistan
Client	Union National Bank, Abu Dhabi, UAE
Role	Analyst, Developer
Tools & Technologies	C/C++, Borland C++, Oracle 9i, Oracle Pro C/C++, Oracle SQL *Plus
Project Summary	The project is a typical automation project aimed at minimizing manual work in the areas of remittances processing and transfers. The eliminated steps include the manual generation of swift and eft files required for various forms of remittances and automatic routing of incoming swift messages to concerned departments.
Assignments	<ul style="list-style-type: none"><li>■ Technical analysis and design.</li><li>■ Preparation of technical specifications.</li><li>■ Implementation, technical documentation and unit testing</li><li>■ Support user acceptance test</li></ul>

Team Size	2 Members
Duration	5 Months

### ***Switch Communication Component***

Organization	KalSoft (Pvt) Ltd, Karachi, Pakistan
Client	Union National Bank, Abu Dhabi, UAE
Role	Analyst, Architect, Developer
Tools & Technologies	COM, VC++, VS.Net, VB.Net, iso8589
Project Summary	A component which enables the integration between the various banking channels and the banking switch. It communicates with the UNB Banking Switch using iso8583 messages, while a COM based interface was provided for the banking channels. The component has been successfully deployed for use with the internet banking solution. The project included a control panel and reporting capabilities.
Assignments	<ul style="list-style-type: none"> <li>■ Technical analysis and design.</li> <li>■ Preparation of technical specifications.</li> <li>■ Implementation, technical documentation and unit testing</li> <li>■ Support user acceptance testing</li> </ul>
Team Size	2 Members
Duration	3 Weeks

### ***CPU Centralization Project***

Organization	KalSoft (Pvt) Ltd, Karachi, Pakistan
Client	Union National Bank, Abu Dhabi, UAE
Role	Analyst, Developer
Tools & Technologies	C/C++, Borland C++, Oracle 9i, Oracle Pro C/C++, Oracle SQL *Plus
Project Summary	The project intended to put in place robust controls on transactions done by bank's CPU department users, who earlier enjoyed additional privileges in order to carry out the back office processing functions.
Assignments	<ul style="list-style-type: none"> <li>■ Preparation of technical specifications.</li> <li>■ Implementation, technical documentation and unit testing</li> <li>■ Support user acceptance testing</li> </ul>
Team Size	2 Members
Duration	2.5 Months

### ***CPSP MIS***

Organization	KalSoft (Pvt) Ltd, Karachi, Pakistan
Client	College of Physicians and Surgeons, Pakistan
Role	Developer
Tools & Technologies	C#, iBatis Data Access Framework, KalUI Framework, SQL Server
Project Summary	The aim of this project was to design the Management Information System of College of Physicians and Surgeons, Pakistan. The project included 12 modules including Examination, on which I worked for a short period.
Assignments	<ul style="list-style-type: none"> <li>■ Technical and functional design</li> <li>■ Implementation technical documentation and unit testing</li> </ul>
Team Size	12 Members
Duration	1 Month (Project Duration: 1 Year)

---

### ***Virtual Private Network Setup***

Organization	FAST- NU, Karachi Campus, Pakistan
Role	IS Consultant
Tools & Technologies	Windows 2000 Routing and Remote Access
Project Summary	Deployed dial-in VPN to provide remote access to campus's computing resources.
Work Description	Designed and implemented the VPN Server on Windows. Fine-tuned the implementation to provide secure access to resources.
Team Size	1 Member
Duration	3 Weeks

---

### ***Automated Assignment Testing Software***

Organization	FAST- NU, Karachi Campus, Pakistan
Role	Analyst, Designer, Developer
Tools & Technologies	Java, Borland JBuilder
Project Summary	A System to automatically grade programming problems using predefined input and output formats along with various flexible matching techniques.
Work Description	Work involved designing, implementing and testing the system.
Team Size	1 Member
Duration	3 Weeks

---

## **SELECTED ACADEMIC & LEISURE PROJECTS**

---

### ***PAREGIN – Pakistan Research and Education Grid Initiative***

Tools & Technologies	Grid Computing, Grid / Web Services, Globus Toolkit 3, Linux, Java, Portlets
Project Summary	Reviewed the latest work in the field of Grid Computing especially its applications for collaboration amongst education and research organizations for Educational Resource Sharing. Proposed an initiative (PAREGIN) and developed prototype.

---

### ***Distributed Web Proxy***

Tools & Technologies	Squid, C, Java, Linux / Windows
Project Summary	A distributed web proxy designed with reliability and scalability in mind using Squid proxy server and a custom developed java based proxy client. Solution is targeted for Linux Operating System for servers and Windows or Linux as clients.

---

### ***Network Analysis & Redesign***

Tools & Technologies	Various network monitoring tools, MS Visio
Project Summary	Performed the site survey and analysis of the Local Area and Access Network of FAST-NU, Karachi Campus. Redesigned and proposed steps for improvement.

---

### ***httProxy***

Tools & Technologies	JavaScript, XUL
Project Summary	This is a Mozilla Firefox extension to help users in accessing any particular page via web based (cgi) proxies (See <a href="http://httproxy.mozdev.org/">http://httproxy.mozdev.org/</a> )

---

### ***Personal Digital Jukebox***

Tools & Technologies	Linux, irMP3, lcdproc, mpg321, C#
Project Summary	A cost-effective Linux-based jukebox running on an old HP Brio (Pentium 90MHz) with a LCD character-based display.

