**Aravind Manoharan**

**Summary**

* Over 12 **years** of experience in Java skills with experience in **Analysis, Design, Development and Deployment** in Web based and Portal Applications.
* Well versed indesigning, coding, testing and implementation of software applications with **Java, Portal, portlet, JSR 286, Servlet, JSP, JSF,primefaces, Java Persistence API Hibernate, Spring, Dojo,Jquery, Struts, Ajax, JDBC, EJB, XML, JMS, MDB, Web services, js, css and MQ-Series.**
* Worked as onsite coordinator and managed the offshore team and delivered the project on time.
* Based on the client need, analyze multiple solutions and demo the pros and cons of each solution with the facts and help them to take the decision.
* Work collaboratively with other team across the organization.
* Learn and adapt to new technology based on project need.
* Solid understanding of server-side Java development ,middle-tier development using **MQ, JMS (Point To Point/ Pub Sub), MDB** and integration legacy systems using **Web services**
* Extensively worked in **Portlet** Using Rational Application developer.
* Extensively worked in **STRUTS, portal, JSF, Hibernate and spring framework, AJAX, DOJO, jQuery.**
* Extensively worked in **Rational Application Developer** (RAD), WebSphere Application developer Studio IDE (WSAD IDE) and Visual age for Java.
* Experience in installing, deployingand configuring **on Liferay Portal Server, IBM Websphere Application Server, Websphere portal server, Apache tomcat.**
* Experience in Implementing and testing project in Websphere at Australia.
* Good knowledge and **working experience in Design Patterns**
* Expertise in working with version control system like **CVS, Clear Case, SVN and PVCS**
* Extensive Experience with scripting languages like java script and Markup languages like **HTML, DHTML** and style sheet language like **CSS**.
* Good knowledge in database.
* Followed agile software development methodology.
* Experience in Operating system like **AIX, Linux**, and **Windows**.
* Good Experience in software Analysis and design using **Rational software Architect**

**Education:**

* Bachelor of engineering from Madurai Kamaraj University.
* Training on Websphere Portal server and Portlet development.

**Certifications:**

* **Sun Certified java Programmer (April 2000).**
* **IBM Certified Specialist in Websphere Application Server(June 2001)**

**TECHNICAL SKILLS:**

Operating Systems : Windows, Linux.

Languages : JAVA, JDK, SQL, XML, UML.

Technology / J2EE : Java, Struts, JSF, Hibernate, spring framework, portal, JSP, Servlets, JSR168, JSR 286, JDBC, EJB, Java Beans, RMI, JNDI, Ant, Log4J, JTA, JMS.

RDBMS : ORACLE, DB2.

Application Server / Web server : Liferay Portal Server, Websphere application server, Websphere Portal server 7,BEA weblogic server, Tomcat

Framework : Struts, Hibernate, spring, Java Server Faces, AJAX, SD

UI : DOJO,jQuery,JS,CSS and Extjs

Design Patterns : GOF, J2EE Design Pattern

Design Tools : UML using rational software architect

IDE : WSAD, RAD, Eclipse, Edit Plus.

Design Version Control : Clear Case, CVS,SVN.

Security Server : LDAP Tivoli directory server 5.2

Other : Webservice,TOAD, BPEL, AlphaBlox, IBM MQ-series

**Professional experience:**

**Project: BIOS One Stop - Jan 2014 to till date**

**AT&T USA**

**Company : CharterGlobal**

**Lead Portal and mobile Developer**

**Roles & Responsibilities**

* Designed and developed the project using spring and hibernate.
* UI Development using Dojo,javascript,Jquery.
* Create design document.
* Installed and configured the Websphere Application Server.
* Develop UI, Business Layer, Data Layer, and Integration layer.
* Retrieve the data from Database using Hibernate.
* Integrated with different system using Soap and restful services
* Responsible for unit testing, integration testing using SOAPUI and implementation of the application.
* Engaged in application performance tuning and code review.
* Worked closely with the technical team in consolidating and refining the application requirements.
* Followed agile software development methodology.

**Environment**: JSP ,JavaScript,css, jQuery, DOJO, Restful services, Java, Servlets, Spring, hibernate, Ajax, SOAP, web services , WebSphere application server, tomcat.

**Project: Learning and development - Feb 2012 to Dec 2013**

**Cisco CA USA**

**Company : Softech**

**Lead Portal Developer**

* Designed and developed the project using spring and hibernate.
* UI Development using Dojo,javascript,Jquery.
* Create design document.
* Based on the client need, analyze multiple solutions and demo the pros and cons of each solution with the facts and help them to take the decision.
* Develop UI, Business Layer, Data Layer, and Integration layer.
* Retrieve the data from Database using Hibernate.
* Integrated with different system using Soap and restful services
* Responsible for unit testing, integration testing using SOAPUI and implementation of the application.
* Worked closely with the technical team in consolidating and refining the application requirements.
* Engaged in application performance tuning and code review.
* Followed agile software development methodology.

**Environment**: JSP ,JavaScript,css, jQuery, DOJO, bootstrap,node.js, Restful services, Java, Servlets, Spring, hibernate, Ajax, SOAP, web services , WebSphere application server, tomcat.

**Project: My Team Portal - June 2011– Jan 2012**

**Cisco CA USA**

**Company : Softech**

**Tech Lead**

* Designed and developed the project using Primefaces component.
* Development using Spring andJava Persistence API.
* Integrate with different system using webservices.
* Responsible for unit testing, integration testing using SOAPUI and implementation of the application.
* Worked closely with the technical team in consolidating and refining the application requirements.
* Followed agile software development methodology.
* Responsible for Development, unit testing, integration testing and implementation of the application.

**Environment**: Java, JSP, Servlets, JSF, Primefaces, Spring, Java Persistence API, JavaScript, jQuery, Ajax, SOAP, web services , WebSphere application server.

**Project: CPC - Jan 2011– June 2011**

**Cisco CA USA**

**Company : Softech**

**Tech Lead**

CPC is a portal to manage the employee performance. CPC is a year-round process that includes four events: Strategic Priority Publishing (executives only), Performance and Development Planning, a Mid-Year Career Discussion, and a Year-End Performance Review. CPC enables the alignment of work and goals with Cisco strategic priorities and also creates multiple opportunities for development and performance dialogue between managers and their employees. In addition, CPC provides a channel for continuous feedback throughout the year.

**Roles & Responsibilities**

* Create design document.
* Coding and Unit testing.
* Installed and configured the websphere portal Server.
* Integrate with different system using web service(xml/JSON)using soap and Restful services.
* Designed and coded application components in an Agile environment utilizing a test driven development approach.
* Developed JSR 168/286 portlets
* Integrated with different system using Soap and restful services
* Work collaboratively with other team across the organization.
* Engaged in application performance tuning and code review.
* Develop UI, Business Layer, Data Layer, and Integration layer.
* Retrieve the data from Database using Hibernate.
* Developed the project using Spring framework.
* Deployed and configured the application in local tomcat environment.

**Environment:** Java, JSP, Servlets, PVCS, SVN, Maven, Spring, Hibernate, Struts, JSR168/286, **,** Websphere Portlet Factory 6.1 Javascript, SOA, Spring, Hibernate, ExtJS, Ajax, Webspher Content Management, WCM, JDBC, Websphere Portal 6.1.5, 7, 8, RAD 8.0/RAD7.5, Websphere Application Server 8

**Project: My Employment Info - April 2009– Dec 2010**

**Cisco CA USA**

**Company : Softech**

**Tech Lead**

The application allows employees to view information relating to :

* Compensation including salary, CAP awards, bonuses, and supplementary compensation
* Job history including job changes, promotions, grade changes, and manager changes
* Personal information, including address, birth date, marital status and emergency contact information
* Performance history, including performance ratings
* Stock allocation which includes dates stock grants were made, and the amount of stock allocated

**Roles & Responsibilities**

* Create design document.
* Installed and configured LIferay/QUAD Portal Server.
* Manage the offshore team.
* Based on the client need, analyze multiple solutions and demo the pros and cons of each solution with the facts and help them to take the decision.
* Work collaboratively with other team across the organization.
* Engaged in application performance tuning and code review.
* Coding and Unit testing of portlet using Spring framework.
* Deploy, Configure and maintain Portal using administration of Liferay Portal server.
* Develop UI, Portlet, Business Layer, Data Layer, and Integration layer.
* Retrieve the data from Database using Hibernate.
* Connect to different system using webservice.
* Deployed and configured the application in local tomcat environment.

**Environment:** Liferay Portal Server, ORACLE, Maven, TOAD, SVN and eclipse.

**Technologies:** Portal, Portlet, spring framework, AJAX, DOJO, Hibernate, Web services, JSON.

**Project: PTO - Sep 2008– March2009**

**Cisco CA USA**

**Company : Softech**

**Senior Software Developer**

In the current world, Employee Services, though functionally aligned causes numerous challenges for the employees to locate and navigate across. With WPS, the intention is to target commonly used employee services and create a ‘One Stop Shop’ HR Approach to IWE comprises of designing the PTO Portlet. It has the following functionality.

· Functionality to “View current PTO balance”

· Functionality to “Submit a new PTO”

· Functionality to “View PTO History (Past and Future)”

· Functionality to “Update an existing PTO request”

· Functionality to “Cancel an existing PTO request”

· Functionality to “View list of Holidays”

**Roles & Responsibilities**

* Create design document.
* Installed and configured LIferay Portal Server.
* Coding and Unit testing of portlet using Spring framework.
* Deploy, Configure and maintain Portal using administration of Liferay Portal server.
* Develop UI, Portlet, Business Layer, Data Layer, and Integration layer.
* Retrieve the data from Database using Hibernate.
* Connect to different system using webservice.
* Deployed and configured the application in local tomcat environment.

Engaged in application performance tuning and code review.

**Environment:** Liferay Portal Server, ORACLE, Maven, TOAD, SVN and eclipse.

**Technologies:** Portal, Portlet, spring framework, AJAX, DOJO, Hibernate, Web services, JSON.

**Project: SLK Portal - Nov 2007– Sep 2008**

**Brocade CA USA**

**Company : Softech**

**Senior Software Developer**

Brocade was founded in 1995 to enable IT organizations to face the challenge of managing ever-increasing amounts of data while also saving money. To ensure that their information is stored securely and backed up reliably, many organizations rely on Brocade-based Storage Area Network (SAN) and application infrastructure management solutions.SLK Portal application provides brocade’s customers a facility to generate licenses for the Brocade products. This application generates licenses for SAN switches, Tapestry series of products like ARM, WAFS and DMM. The generated license will be node-locked. The customer enters his email-address and the other information like address, phone number, country etc. and selects the product for which the license has to be generated. The unit identifier and transaction key will be entered to generate the license which will be sent to the customer via email. The customer also has option to download the generated license.

**Roles & Responsibilities**

* Create design document.
* Installed and configured WebSphere Application Server, and Rational Application Developer, Websphere Portal server
* Develop portlet using rational application developer.
* Deploy, Configure and maintain Portal using Administration of Websphere portal server.
* Develop UI, Portlet, Business Layer, Data Layer, and Integration layer using RAD.
* Retrive the data from Database using Hibernate.
* Connect to different system using webservice.
* Deployed and configured the application in WebSphere Application Server and Websphere portal server.
* Engaged in application performance tuning and code review.

**Environment:** Websphere application server, Websphere portal server, ORACLE, RAD, TOAD, Clear Case.

**Technologies:** Portal, Portlet JSR168, JSF, AJAX, Hibernate, Web services, XML, UML,LDAP.

**Project: Integrated Commerce Workspace/ Partner Deal Registration**

**CISCO RTP NC USA - May 2007– Nov 2007**

**Company : TCS AMERICA**

**Senior Software Developer**

The existing Partner Deal Registration (PDR) which enables Deal Registration, Configuration, Pricing and Quoting will be integrated as Whole offer project by utilizing service based architectures. In addition to this, the Whole offer will also enable the capability of importing a Quote to PDR by Integration of the new Configuration User Experience with the Quoting capability in PDR.

**ICW will Provide the following Benefits**

* Offer integrated solution through Workspace
* Retire legacy tools (QB, SX, and DCT) and consolidate all discrete tools into workspace via the Next Gen Config Tool. This offers better support and manageability for all the services provided by Cisco.
* Improve the overall ordering experience by designing a radically simplifying the Deal Registration & configuration process
* Drive revenue contribution by increasing order velocity via a one stop shop for Creating a deal, Adding Configurations, Creating Configurations, Validate, Price & Place an order.
* Set the foundation for Cisco to be seen as a leader by customers and competitors in the product configuration space
* Single logical configuration engine through technology and design standardization.

**Roles & Responsibilities**

* High level Design using Rational Software Architect.
* Design based on J2EE and GOF Design Pattern
* Installed and configured WebSphere Application Server, and Rational Application Developer, Websphere Portal server.
* Coding and configure JSF – portlet for ICW using rational application developer.
* Coding and configure Struts and Ajax for PDR using rational application developer.
* Deploy, Configure and maintain Portal using Administration of Websphere portal server.
* Developed Portlet, Business Layer, Data Layer, and Integration Layer using RAD.
* Developed Asynchronies communication using JMS and web services.
* Deployed and configured the application in WebSphere Application Server and Websphere portal server.
* Engaged in application performance tuning and code review.

**Environment:** Websphere application server, Websphere portal server, ORACLE, RAD, TOAD, CVS.

**Technologies:** Portal, Portlet JSR168, JSF (ICW), struts (PDR), AJAX, Hibernate, spring, Web services, XML, UML.

**STC Bedford NH - Oct 2006– May 2007**

**Project: Disease Surveillance and Management Project.**

**Canada Health Infoway**

**Senior Software Developer**

The aim of this project is to help public health professionals better detect and respond to outbreaks of communicable diseases, such as severe acute respiratory syndrome (SARS).

This Software is the single most important tool for identifying new or re-emerging infectious diseases with potential to cause serious public health problems. Surveillance can be useful in rapidly identifying and monitoring persons at highest risk, changes in disease rates, modes of transmission, and groups at risk. Surveillance can help in planning and evaluating disease prevention and control programs and can improve capacity to control annual epidemics as well as the next influenza pandemic.

**Responsibilities:**

* High level Design using **Rational Software Architect**.
* Design based on J2EE and GOF Design Pattern
* Installed and configured **WebSphere Application Server ,and Rational Application Developer**, Websphere Portal server.
* Installed and configured LDAP Tivoli directory server for security.
* Create code and configure **JSF - portlet using rational application developer**.
* Design and coding based on JSF, Portlet**, Hibernate and Spring Frame Work**.
* **Deploy, Configure and maintain Portal** using Administration of Websphere portal server.
* Develop **AJAX** call from JSF.
* Developed Portlet, Business Layer, Data Layer, and Integration Layer using RAD.
* Developed Asynchronies communication using JMS and MDB.
* Deployed and configured the application in WebSphere Application Server and Websphere portal server.
* Developed the test cases, performed TestNG.
* Source Code control using Subversion /Tortoise
* Engaged in application performance tuning and code review.

**Environment**: Websphere application server, Websphere portal server, ORACLE, RAD, LDAP Tivoli directory, maven and Subversion.

**Technologies**: **Portal, Portlet** **JSR-168**, **JSF, AJAX,Hibernate**,Spring, Web services, XML, BPEL, UML, Log4J.

**IBM, NC**

**Project: OMCS Order Management Component System. Feb 2006– Sep 2006**

**Senior Software Developer**

OMCS is a staged replacement application for the Mainframe COATS application. The applications manage customer orders for IBM products, process them through milestones and key activities (grouping, serial assign, Validation, translation, start to build) and maintain the data after shipment for use by the MES process. MES orders are an alteration to a field machine.

**Responsibilities:**

* High level Design using **Rational Software Architect**.
* Design based on J2EE and GOF Design Pattern
* Create code and configure **Struts - portlet** using rational application developer.
* Installed and configured **WebSphere Application Server** (SF), and Rational Application Developer, **Websphere Portal server**.
* Develop **Ajax** call from client tier.
* Installed and configured **LDAP Tivoli directory** server for security.
* Design and coding based on **STRUTS Frame Work, Portlet, Hibernate Frame Work, EJB**, BPEL, **JMS, MDB and Web services**.
* Deploy, Configure and maintain Portal using **Administration of Websphere portal server**.
* **Developed Portlet**, Business Layer, Data Layer, and Integration Layer using RAD.
* Developed Asynchronies communication using **JMS and MDB**
* Deployed and configured the application in WebSphere Application Server (SF) and Websphere portal server.
* Developed the test cases, performed **JUNIT** test and web king.
* Engaged in application **performance tuning** and code review.

**Environment:** Websphere application server, Websphere portal server, IBM MQ server, **DB2**, RAD, WSAD IE, AJAX,LDAP Tivoli directory, Ant and CVS.

**Technologies:** **Portal**, **Portlet JSR-168**, JSP, **Struts**, **Hibernate**, Web services, JMS, MQ, EJB, XML, BPEL, UML, Log4J.

**Railinc, Cary, NC**

**Project: Command** - **July 2005– Jan 2006**

Railinc has been a leading provider of Information Technology development and related services for the North American Railroad Industry. Railinc's leading-edge technology applications facilitate interline and local rail operations, marketing, customer service, equipment management and accounting. Command is an Internet application of Railinc. It provides comprehensive tools for short lines like Class I railroad tools. It covers complete inventory management and functions to deliver and pull cars from customer locations. It processes demurrage, car hire, switching, junction settlement charges and other charges. It provides extensive operational level and management level reports.

**Responsibilities:**

* Getting the requirements for the web applications Command.
* Design the application based on **Struts Frame work**.
* High level Design using **Rational Rose**.
* Worked on the Web Tier of the Application using STRUTS Framework.
* Installed and configured **WebSphere Application Server, and WSAD**
* Design and coding based on **STRUTS** Frame Work, **Hibernate** Frame Work.
* Developed Asynchronies communication using **JMS and MDB**
* Deployed and configured the application in WebSphere Application Server
* Responsible for integrating the application
* Developed the test cases and performed unit, integration and system testing
* Test the application with Junit, Load runner.
* Build and deploy the project-using ANT.

**Environment:** Websphere application server using **Oracle** 9i.WSAD, IBM MQ server Toad and Ant, Clear case.

**Technologies: STRUTS**, UML, JSP, **Hibernate**, IBM MQ, EDI.

**Railinc, Cary, NC**

**Project: INTERLINE Connect Jan 2005– July 2005**

Interline revenue, needs to possess Rated interline revenue, Interconnect with participating interline roads and Controlled exchange of revenue information.

Application functions are automated transmission of Interline Waybills to ISS Connect subsequent to the completion of ICR or RLO moves involving interline equipments. Automated imports of monthly revenue information for all interline waybills sent to ISS Connect for rating. Automated updates of bill amounts associated with interline equipment based on the rated revenue information extracted from ISS Connect.

**Responsibilities:**

* Getting the requirements for the web applications INTERLINE.
* Design the application based on **Struts Frame work**.
* High level Design using **Rational Rose**.
* Worked on the Web Tier of the Application using **STRUTS Framework**.
* Installed and configured **WebSphere Application Server, and WSAD**
* Developed JSP, **Struts** and **EJB** using WSAD.
* **Deployed** and configured the application in **WebSphere Application Server**
* Responsible for integrating the application
* Developed the test cases and performed unit, integration and system testing
* Test the application with **Junit**, Load runner.
* Build and deploy the project-using ANT.

**Environment:** Websphere application server using Oracle 9i.WSAD, IBM MQ server Toad and Ant, Clear case.

**Technologies: STRUTS**, UML, JSP, **EJB**, IBM MQ, EDI.

**IBM, Venezuela. - June 2004– Dec 2004**

**Project: CTC for CANTV, Venezuela**

CTC “Conoce tu Cliente” (Know your customer). Cantv IT infrastructure is too complex since it is spread among different legacies systems. Cantv has many call centers in order to offers client support. Call center operation is very difficult since it need to interact with different applications to get the required information. Our project “Conoce tu Cliente” has as main objective to develop a consolidated view with all the required information, to avoid manage different application for the call center operator and increases significant response time for the end users.

**Responsibilities:**

* Getting the requirements for the web applications CTC.
* High level Design using **Rational Rose**.
* Design based on **J2EE and GOF Design Pattern**
* Installed and configured WebSphere Application Server, and WSAD
* Installed and configured **LDAP Tivoli directory** server for security.
* Design and coding based on HERA Frame Work, **JSF, and EJB.**
* Developed **JSF**, Business Layer, Data Layer, and Integration Layer using WSAD.
* Developed Asynchronies communication in Web services using **JMS and MDB**
* Deployed and configured the application in WebSphere Application Server.
* Responsible for integrating the application.
* Developed the test cases, performed **JUNIT** test, integration and system testing.
* Build and deploy the project-using ANT.

**Environment:** Websphere application server 5.2 using Oracle 9i.WSAD 5.2, webservices, LDAP Tivoli directory, Ant and Clear case.

**Technologies:**  **Java server Faces**, JSP, Servlet, **Web services, JMS EJB**, XML, Mock Object, UML, and Log4J.

**Benchmark Softech Technologies - Nov 2003 – June 2004**

**SGCC for CANTV, Venezuela**

Consumption Quotas Management system (SGCC Sistema de Gestión de Cupos de Consumo) is a mobile phone consumption management system for Corporate and Institutions. The objective of the project is to develop a platform that permit the intelligent administration of quotas of consumption of cell Movilnet of the personnel of a business. System is developed to facilitate administrator to define rules to the employed/user of the telephone, definition of corporate general rules that permit to have a most minimum control and in some cases to give total liberty. The telephone user’s profiles concept is introduced, with private characteristics of use for each profile.

**Responsibilities:**

* Getting the requirements for the web applications SGCC.
* High level Design using **Rational Rose**.
* Design based on **J2EE and GOF Design Pattern**
* Installed and configured WebSphere Application Server, and WSAD
* Design and coding based on HERA Frame Work, **JSF, and Hibernate**.
* Developed **Portal**, **JSF** and **EJB** using **WSAD**.
* Developed Asynchronies communication in Web services using **JMS**
* Deployed and configured the application in WebSphere Application Server.
* Responsible for integrating the application.
* Developed the test cases and performed unit test with **JUNIT**, integration and system testing.
* Build and deploy the project-using **ANT**.

**Environment:** Websphere Application Server 5.2 using Oracle 9i.WSAD 5.2, Web services, Ant and Clear case.

**Technologies:**  **Java server Faces, JSP, Servlet, Web services, JMS, EJB, XML, Mock Object, UML, and Log4J.**

**HCL Technologies - Jan 2003 – Nov 2003**

**Driver and License System (DALS) for VicRoads, Australia**

DALS is an Internet application developed for VicRoads, Australia. It is available to drives and Transport Company in Australia over the Internet. The application is to be deployed on the framework called ESD. The application interacts with several ESD services like Payment, Email, FTP, PDF, etc. The ESD system runs on Websphere Application server on Windows NT with DB2. Application was developed on Command Pattern. No proper document was given, but we explored the Framework and found the connectivity, Framework and different layers.

Successfully implemented and tested in Websphere application server at client Place.

**Responsibilities:**

* Installed and configured WebSphere Application Server, Visual Age for Java, WebSphere Studio
* Involved in the overall design, developing and testing of the application.
* Understood ESD frame work and different Services
* Developed **Servlets and Java Beans** using **IBM Visual Age for Java**
* Designed the application based on MVC architecture.
* Developed the **application using Value Object, Command Patterns**
* Deployed and configured the application **in WebSphere Application Server**
* Responsible for integrating the application
* Developed the test cases and performed unit, integration and system testing

**Environment:** IBM Websphere 3.5.3 and DB2 UDB 7.1 on Windows NT.

**Technologies:** JDK 2.0, Servlets 2.0, HTML 4.0 and XML, universal client 1.1

**HCL Technologies - May 2002 – Dec 2002**

**Road Traffic Asset Reporting System (RTARS) for VicRoads, Australia**

The objective of this project is to develop a web-based reporting tool that can

* Allow the users to build a query on the fly and store it for future reference
* Generate reports in popular formats like CSV, HTML and PDF
* Render graphs and charts in the browser

**Responsibilities:**

* Installed and configured WebSphere Application Server, Visual Age for Java, WebSphere Studio Involved in the overall design, developing and testing of the application, especially the Dynamic Query Module\Developed **Swing, Servlets and Java Beans using IBM Visual Age for Java and JSP using IBM WebSphere Studio**
* Designed the application based on MVC architecture **with STRUTS Frame work**
* Developed the application using Value Object, Factory Patterns
* **Developed Servlets** to use as controller and to communicate between Model (EJB / JavaBeans) and View (JSP/HTML)
* Deployed and configured the application in WebSphere Application Server
* Responsible for integrating the application
* Performed unit, integration and system testing

**Environment:** IBM Websphere 4.0,tomcat, JRE 1.4, DB2 UDB 7.1 on WinNT, Dream weaver 4

**Technologies:** JDK 2.0, Servlets 2.0, JSP, HTML 4.0.Struts frame work