

# ***COMMON APPLICATION SYSTEM FOR EMPLOYMENT EXCHANGES***

## ***Abstract***

The project has been developed to fulfill the requirements of the Employment Exchanges. The current product is a part of overall web-based employment portal. The product will take care of job seeker, employer and employment exchange perspective for submission activity. Subsequently, the following points were identified as the broad features required in the software to be developed for Employment Exchange Computerization at National Level with a facility to meet the additional/local requirements of the respective States.

The EMI (Employment Market Information) module is responsible for providing the necessary functionality to generate Employment Market Information . The module should assist Manpower shortage planners and Employment Officers in finding out kind of manpower required. Work done by me includes management of EMI Unit, EMI Unit Contact, EMI Office, EMI Office Contact, EMI Unit Type, EMI Return, and Return Periodicity. The work done on the module is adhering to sound software engineering principles.

## ***Existing System***

Realizing a higher need of development efforts and investment of time, developing a uniform application software for implementation within the State/National level employment exchanges, requires new business processes and supporting tools and infrastructure. Since the previous computerization efforts by various agencies have resulted in the use of multiple platforms, duplication of developmental efforts, and maintenance problems in places/states due to the lack of networking infrastructure.

Any system supporting a business process for the employment exchanges at a National Level thus must be able to reach out to a number of different users/stakeholders of the system who are situated in different locations at different times with different informational needs in a consistent manner and maintain uniformity of procedures with the provision of meeting the additional/local requirements of that region or state. Such systems must therefore be centralized in their very nature, and should be associated to a central server. The centralized computing paradigm is therefore inherently appropriate for the project-oriented nature of business processes of the employment exchanges, since it promises central, one point, and common solution which focuses on uniformity of employment procedures and providing efficient services to the job seekers and employers when needed. With this in mind, supporting existing business processes of employment exchange for interaction between jobseekers, employers and employment exchange personnel, and employment exchanges appears as a fruitful concept for adding more value through a National Employment website/portal, thereby increasing quality of services offered by the Employment Exchanges for the people

## ***Proposed System***

The present system comprises of manual procedures in most of the employment exchanges and hybrid of manual & computerized system. In the manual system, the main problems faced are time lag and accuracy, maintenance of records, deviations from uniform procedures, MIS, returns compilation.

In computerized system, all the activities are not addressed; MIS and returns compilation is up to some extent; multiple platforms are used; technological advancement needs has resulted in duplication of efforts and maintenance problems in many States with partial networking. The proposed system will take care of all the common activities to maintain uniformity of procedures, MIS and returns compilation as per NESM on a common platform with networking of all the exchanges. To take care of technological advancement, change requirement is to be addressed separately. The separate System Specifications are to be prepared by respective States to address local requirements.

## ***Scope of the System***

*The proposed system scope is limited to Internet only. In future it can be enhanced to be a global communication medium for multinational companies. We can also implement internationalization (i18n) to support user interface in various/local languages.*

## ***Module Description***

Employment Exchanges are responsible for collecting regularly information about employment in the private sector as well as in the public sector. EMI provide employers with the facility to file their returns. It has the responsibility to generate various kinds of employment market reports on the basis of the returns filed by employers. Following sub modules have been developed for the module

The system contains 3 modules

### **1.Administrator**

The administrator has following responsibility

Manage EMI Unit : This provides the basic functionality for the creation of new EMI Unit; modify/delete an existing EMI Unit.

Manage Office : The module provides the basic functionality for the creation of new EMI Office; modify/delete an existing EMI Office.

Manage EMI Unit Type : The module manages the various types of EMI Units and it provides the basic functionality for the creation of new EMI Unit Type; modify/delete an existing EMI Unit Type.

## **2.Employer**

The employer can register into the employment ex-change unit and he can give all Information related to the their company. If the company wanted recruiters the employer can place all related to the posts in the employment exchange

## **3.JobSeeker**

The job seeker can register into the employment exchange .If any posts related to the his qualification are to be placed in the employment exchange . Then he apply for the corresponding post

## ***Features to be implemented***

- ***Session management***
- ***Connection pooling***
- ***Normalized database***
- ***Prevention of duplication login***
- ***Design patterns***
- ***Three-tier architecture***
- ***Maintainability***
- ***Easy deployment with Ant script.***

- *Exception handling*
- *Client-side validations*

## ***Technologies to be used***

- *Web Presentation: HTML, CSS*
- *Client – side Scripting: Javascript*
- *Programming Language: Java*
- *Web based Technologies: JNDI, Servlets, JSP*
- *Database Connectivity API: JDBC*
- *Build Tool: ANT*
- *Debug Tool: Log 4J*
- *CASE tool: Rational Rose, Visual Paradigm, Enterprise Architect*
- *Backend Database: Oracle/SQL Server/MY SQL/MS Access*
- *Operating System: Windows XP/2000/2003, LINUX, Solaris*
- *J2EE Web/Application Server: Tomcat/Weblogic/Websphere/JBoss/Glass Fish*
- *IDEs: Eclipse with My Eclipse plug-ins/Net Beans/RAD*
- *Browser: IE/Mozilla*

## ***Hardware requirements***

- *Pentium processor* ----- *233 MHZ or above*
- *RAM Capacity* ----- *128MB*
- *Hard Disk* ----- *20GB*
- *Floppy disk* ----- *1.44 MB*
- *CD-ROM Drive* ----- *32 HZ*
- *KEYBOARD* ----- *108 Standard*