

## SOFTWARE REQUIREMENTS SPECIFICATION for Online Recruitment Company

**1.3 Definitions, Acronyms and Abbreviations:**

online recruitment company	Online Job Portal System
SRS	Software Requirements Specification
IDE	Integrated Development Environment
IEEE	Institute of Electrical and Electronics Engineers
AJAX	Asynchronous JavaScript and XML
CIF	Code Igniter Framework
CSS 3.0	Cascading Style Sheets
HTML	Hypertext Markup Language
JS	JavaScript
MYSQL	My Structure Query Languages
PHP 5.2	Hypertext Preprocessor
DB	Database

**1.4 References:**

1. IEEE Recommended Practice for Software Requirements Specifications, Std. 830
2. Pressman, Roger S., 2001. "Software Engineering", McGraw-Hill, fifth edition
3. Software Project Management, Bob Hughes & Mike Cotterell, McGraw-Hill Publication, 2006. (Textbook)

4. The Project Manager's Guide to Software Engineering's Best Practices (Best Practices), Mark Christensen, Richard H. Thayer, Wiley-IEEE Computer Society Pr, 2002

## **1.5 Overview**

This report is prepared by using IEEE Std. 830 and constituted 3 parts. The first part of this report contains overall descriptions of the online recruitment company. It is about all the functions, dependencies, properties, development phase, perspectives and also constrains of the devised system. The second part of report contains descriptions of specific requirements of the online recruitment company project. It defines what we will do and will not do. The last part of this SRS contains the Appendices and figures.

## **2. OVERALL DESCRIPTIONS**

### **2.1 Product Perspective**

The Online Job Portal System is a package to be used by agencies and employees to improve the efficiency of business. The online recruitment company system is developed on the basis of benefits greatly the members that are employees and employers.

#### **2.1.1 System Interface**

The product to be developed has interactions with the users/members that are admin, employers and employees. And the product has to interact with other systems that like Internet, Billing System, Web Service and the online recruitment company Information Security System.

All of information about agencies (employers), employees and admin are kept at the online recruitment company database that interacts with online recruitment company system. The connection between online recruitment company system and online recruitment company database will be done using MYSQL files and PHP My Admin.

The online recruitment company system provides jobs catalog and information to members and helps them decide on the jobs to apply. These types of notifications or notifications about new system information will be sent with SMS and via mail to employees that are to be taken to the candidate list for a particular job.

Ready web service applied by TURKCELL Company will be used to send a message for the system's members. The connection between online recruitment company database and TURKCELL Web Service will be provided using Excel files that will be created with data transfer from MYSQL files.

The online recruitment company system presents a variety of payment services such as resume writing assistance, job fair access, etc. The Billing System is connected to the Online Job Portal System and the online recruitment company system database is used by the Billing System.

The online recruitment company Information Security System will be developed to prevent malicious users for registration as members to the web site. This system is supported with Captcha.

### ***2.1.2 User Interface***

The user interface is divided in to some main modules. These are shown below:

- ❖ Administrator Interface
- ❖ Web User Interface
  - Registered Web User Interface
    - Employee Interface
    - Agency (Employer) Interface
  - Unregistered Web User Interface

These interfaces will be designed as different interfaces for each of the appropriate users. On the other hand, user interface will be personalized for each user. In short, all of user's interface will be the same screen but, the interface options will be different according to the user.

All these interfaces have common properties such as;

- ❖ Tabs
- ❖ Frames
- ❖ Window layouts
- ❖ Menu
- ❖ Template

### ***2.1.2.1 Administrator Interface***

This interface is only used by system admins. The admin is responsible for changing the system with all relevant information.

The following activities are performed by Administrator Interface.

- ❖ Multiple administration accounts,
- ❖ Live statistics,
- ❖ Accept payments,
- ❖ View/Edit agencies account balance,
- ❖ Send account balance report via email to agencies,
- ❖ Create resources,
- ❖ Create multiple job categories with subcategories,
- ❖ Create countries with regions and cities,
- ❖ Specify working hours, contracts and experience levels,
- ❖ View/Edit/Delete jobseekers,
- ❖ View/Edit/Delete agencies,
- ❖ Email individual jobseekers,
- ❖ Email individual agencies,
- ❖ Upload company logos,
- ❖ View jobs for each agency,
- ❖ Add/Edit jobs for each specific agency,
- ❖ Advanced mailing system,
- ❖ Advanced content management system,
- ❖ Customize the job board to meet your exact requirements.

### ***2.1.2.2 Web User Interface***

All of users can use this interface via the Internet. This interface provides to complete

Web application service for its users but, if the user is not a member of web site, h/she can only use this page and h/she does not take advantage of the web site member's service. At the

Same time, this type of user can only use the Unregistered Web User Interface.

### **2.1.2.2.1 Unregistered Web User Interface**

The web site's visitor can access this interface that is not a member of the web site. This type of user can access limited of information about web site. The user does not see the job application, writing assistance, job fair access or etc.

### **2.1.2.2.2 Registered Web User Interface**

Registered Web User Interface is only seen by persons who are members of the web site. This interface service is provided with verification of personal information these are username and password. At this stage, the web site' members have menus, intelligent search engine, information of job application and employers and all the secured data accessing from unregistered users. Users of this interface were employees, employers/agencies that can reach the different interfaces that are Employee Interface and Agency (Employer) Interface.

#### **2.1.2.2.2.1 Employee Interface**

In this interface, job seeker user can take advantage of the web site's services but, the only them for employees. The employees and agencies (employers) can access to the updated information all the time such as jobs application, intelligent search engine, training course, etc. This information will be provided according to the quality of each employee.

The following activities are performed by Employee Interface.

- ❖ Advanced job search functions,
- ❖ Register for a job seeker account,
- ❖ To change the account's information,
- ❖ Build your profile,
- ❖ Build & update online CV & Business card,
- ❖ Upload Word/PDF documentation of CV,
- ❖ Receive jobs via email,
- ❖ Enable/Disable email alerts,

- ❖ Save jobs in your Jobs Inbox,
- ❖ View previous applications,
- ❖ Apply to job vacancies instantly,
- ❖ Upload personal photo,
- ❖ Job application according to the cities,
- ❖ Forward job vacancy to a friend.

#### **2.1.2.2.2 Agency (Employer) Interface**

This interface is different from the Job Seeker Interface because this interface includes extra functionalities. This interface' users cannot make many changes on the fly. The agency should apply for leave to online recruitment company system's admin. This interface has different intelligent search engine from the Job Seeker Interface's intelligent search engine that allows employees in a given field for itself.

The following activities are performed by Agency (Employer) Interface.

- ❖ Advanced CV search functions,
- ❖ Advertise job vacancies instantly,
- ❖ Upload company logo,
- ❖ Purchase advertising credits via credit card, PayPal or invoice,
- ❖ Edit/Delete job vacancies,
- ❖ To do payment for jobseeker contact details,
- ❖ To save jobseeker CV's in CV Inbox,
- ❖ To hide contact details on job postings,
- ❖ View/Delete application CV's,
- ❖ Specify application rules for each job posting.

#### **2.1.3 Hardware Interface**

The Hardware Interface is applied as TURKCELL Web Service for sending message in the online recruitment company system. The details of the Hardware Interface were mentioned in the chapter 2.1.1.

#### ***2.1.4 Software Interface***

The Online Job Portal System is also web based application and mobile application. This system is supported on mobile devices such as cell phones and modern web browser (JavaScript enabled) such as Mozilla Firefox 1.5, Internet Explorer 6 or later, Google Chrome and all Windows Operating System versions.

A firewall will be used with the server to prevent unauthorized access to the system.

The online recruitment company system's Software Interface is performed as follows:

- ❖ Web site Interface, PHP 5.2, HTML, AJAX, JS, CIF, JQF, CSS 3.0,
- ❖ Database Design, My SQL,
- ❖ Advanced Tools, Net Beans IDE.

#### ***2.1.5 Communication Interface***

The system shall be comply with the TCP/IP protocol standards at the client and server and shall be designed accordingly. The Online Job Portal System will be connected to the World Wide Web.

#### ***2.1.6 Memory***

The ideal specifications for the server machines and client machines are performed as follows:

At the server side;

- ❖ Intel Core 2 Duo – 1.86 GHz,
- ❖ 2GB RAM,
- ❖ Running Windows Server,
- ❖ Ethernet Card.

At the client side;

- ❖ Internet Celeron or equivalent processor – 1.5 GHz,
- ❖ 1 GB RAM,
- ❖ Running Windows XP/Vista,

- ❖ Internet Explorer 6 or later and Mozilla Firefox with JavaScript enabled,
- ❖ ADSL Internet Connection with 512kbps bandwidth.

## **2.2 PRODUCT FUNCTIONS**

The main function of Online Job Portal is User Authentication. Because employers and employees can make operations if only login the system by using email address and password. Thus, this function holds the session and create authentication for users. Depending on authentication function some other modules and functions became active for user which has a session.

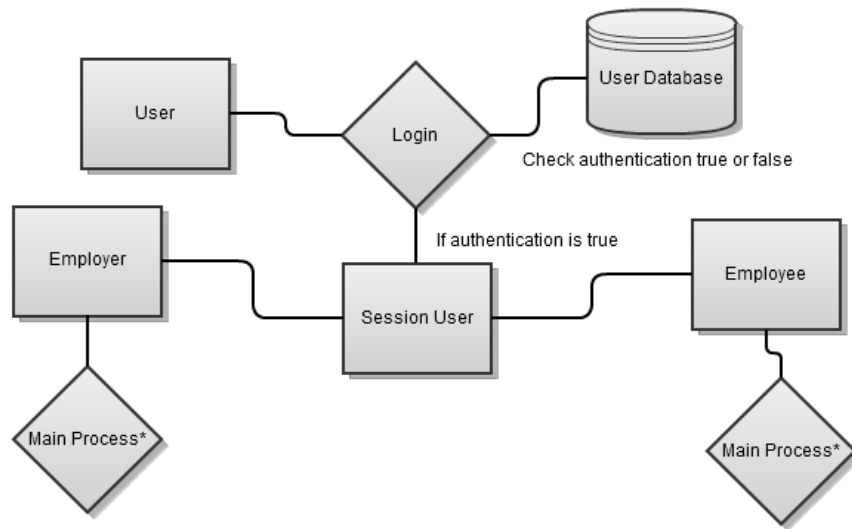
For employees,

- ✓ Login
- ✓ Change Password
- ✓ Create, Update and View Profile
- ✓ Create, Update and View CV and Business Card
- ✓ Change privacy settings
- ✓ Upload and make profile picture
- ✓ Added success stories
- ✓ Send request to compaines

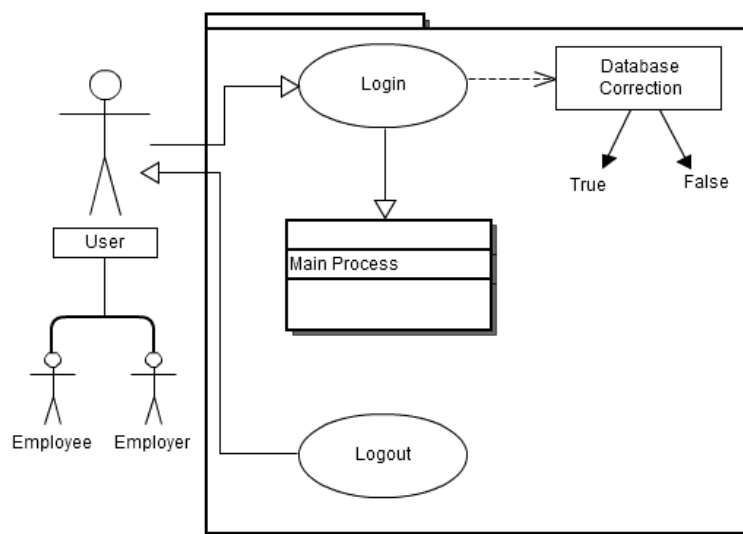
But for employers there are some changes like,

- ✓ Login
- ✓ Change Password
- ✓ Added new job annoucement
- ✓ Update or Create Company Profiles
- ✓ Send information to user about job
- ✓ Send request to users
- ✓ Upload and Change company logos





Simple DFD of our project is above. User enter the email and password, then system check database, if there is a correct combination, then system create a session then make authentication. Thus, users can make main process\* mentioned above such as Change Password and the others.



This is the simple use case diagram for the project. User have two opportunities like employee and employer. Main process of user start to login and finish to logout. Login process depend on the database connection. This connection set and return message true or false then if true, user can use main process class.

### 2.3 USER CHARACTERISTICS

**Because of this project is a educational project, our user characteristics is a little limited. A part of the team develop software, a part of the team checking the quality and measurement control of the product, another part of team write reports, taking notes, read and follow new technologies from blogs, news and other instructions.**

Mesut Sinan Kazancı has a big experience for php developing, he developed too many projects and manage them so far. Sena Yıldırım has limited developing experience but she is a good reader, thus, she always reads articles about new media and developing technologies. Sinem Tuncer has a experience for developing but not like as Mesut Sinan Kazancı. But she developed too many dynamically module by using ajax. Lastly, Fatime Akgül is a good tester and debugger for software projects. In addition to this, she has a experience with database management.

### 2.4 CONSTRAINTS

The main constraints of this project is limited time because of educational project. Another important constraint is limited developer for this project. In the function point estimates, normally, about 10 people need to finish in a restricted time, but our group have only 4 people.

There is another constraint, our project want to a Computer with the Internet connection. But this not a big constraints because, in the world, too many people has one or more computer with the Internet connection.

### 2.5 ASSUMPTIONS AND DEPENDENCIES

The Project has some dependencies. For example, the product is free, all of employees and employers can register quickly and using free. Then, we have a big dependencies such browsers and operating systems. The product will run all of the Internet browsers such Internet Explorer, Safari, Opera, Chrome and Firefox and will run all of the platforms such Windows, Macintosh and Linux.

### **3. SPECIFIC REQUIREMENTS**

#### **3.1 External Interface**

First of all, interface of Online Job Portal will be simple and easy to understand, because there are lots of websites about finding job and many of them can be complex to find suitable job.

online recruitment company will have login and create an account buttons for every users. And, users will register with unique e-mail address and also they will have only unique username. If users enter with different username to system, there will be some type of message to users like error messages. After users sign up to system, they will be controlled by system admin for system security and then users will benefit from online recruitment company.

The software shall have customizable menus, interface of these menus will be different each other according to users' authorization. Detailed description of these interfaces is explained in section 2.1.2. The entire interface is in the appendix part (Figure 1.2 – 1.5).

#### **3.2 Functional Requirements**

This section is subdivided into three main subsections:

- 1) **First User**-Employees
- 2) **Second User**-Employers
- 3) **Third User**-Administrator

##### **3.2.1 First User – Employees**

###### **Employees Functions:**

- ✓ Login
- ✓ Determine Authorization Level
- ✓ Registration
- ✓ Change Password
- ✓ Forgot Password
- ✓ Create CV
- ✓ Searching
- ✓ Update Employees' Info
- ✓ Adding Success Stories
- ✓ Sending Request to Employers

**3.2.1.1 Login**

<b>Precondition</b>	Access to online recruitment company webpage and click login button
<b>Post condition</b>	Employees can login to system with required inputs
<b>Inputs</b>	Username & Password
<b>Processing</b>	<ul style="list-style-type: none"> <li>i. Employees enter username &amp; password pair</li> <li>ii. Validity of username &amp; password is checked from system DB</li> <li>iii. If the inputs are invalid, error message will be displayed</li> <li>iv. If the inputs are valid, determine the user authorization level.</li> </ul>
<b>Outputs</b>	i. Error message is displayed (if the inputs are invalid)

**3.2.1.2 Determine the user authorization**

<b>Precondition</b>	Employees are logged to system by correct inputs
<b>Post condition</b>	Authorization of users is determined
<b>Inputs</b>	Successful login information
<b>Processing</b>	<ul style="list-style-type: none"> <li>i. Go to authorization DB with username &amp; password info</li> <li>ii. If coupling is OK, return required info from DB to application</li> <li>iii. If coupling is not OK, return with acceptance warning query</li> </ul>
<b>Outputs</b>	Determined user authorization level and proper interface

**3.2.1.3 Registration**

<b>Precondition</b>	If employees access to system and click registration button.
<b>Post condition</b>	employees can fill required field in the inputs part of registration
<b>Inputs</b>	<ul style="list-style-type: none"> <li>i. First name</li> <li>ii. Last name</li> <li>iii. Username</li> <li>iv. E-mail</li> <li>v. Password</li> <li>vi. Confirm Password</li> <li>vii. Birth date</li> </ul>
<b>Processing</b>	All of the inputs of employees will store in DB system.
<b>Outputs</b>	If important field is blank or if the password and confirm password are not same, warning message will be given. And, this warning message will display unfilled field. After job seekers fill in the blanks, confirmation message will be send to their e-mail in order to prevent fake e-mail address.

**3.2.1.4 Change password**

<b>Precondition</b>	Employees login to system.
<b>Post condition</b>	Employees can change old password with a new password
<b>Inputs</b>	<ul style="list-style-type: none"> <li>i. Old password</li> <li>ii. New password</li> </ul>
<b>Processing</b>	<ul style="list-style-type: none"> <li>i. Employees enter “update my profile” in their profile</li> <li>ii. After employees enter their old password and new password, old password’s validity is controlled by DB system.</li> <li>iii. If old password is wrong or new password is not between 6 and 20 characters long, error message will be displayed.</li> <li>iv. If old password is valid and new password keeps the password rules, proper interface will be opened.</li> </ul>
<b>Outputs</b>	<ul style="list-style-type: none"> <li>i. Error message(Invalid password)</li> <li>ii. Change password successfully message(Valid password)</li> </ul>

**3.2.1.5 Forgot Password**

<b>Precondition</b>	Employees login to system.
<b>Post condition</b>	Employees can request for their losing password again with writing their registered e-mail.
<b>Inputs</b>	i. Registered e-mail on the DB system
<b>Processing</b>	i. Employees enter their registered e-mail to e-mail blank ii. After employees send their e-mail, DB system control validity of e-mail. iii. If e-mail is valid, password will be send to job seekers' E-mail.
<b>Outputs</b>	After e-mail blank part is filled, message will be displayed about sending password to e-mail.

**3.2.1.6 Create CV**

<b>Precondition</b>	Employees login to system
<b>Post condition</b>	Employees can fill required blanks of in the inputs part.
<b>Inputs</b>	i. ID number ii. First name & last name iii. Address iv. Country & city v. Phone numbers vi. Education situation vii. Experiences viii. E-mail ix. Photo x. Birth date
<b>Processing</b>	i. Employees enter "create my CV" in their profile part ii. After employees fill in the blanks, DB system will control all of the blanks. iii. If required blanks are empty, return with acceptance warning query from DB and display error message about empty blanks. iv. If required blanks is filled ,all of the inputs of job seekers will store in DB system and display
<b>Outputs</b>	i. Error message ii. Confirmation message

**3.2.1.7 Searching**

<b>Precondition</b>	Employees login to system and click to intelligent search engine part
<b>Post condition</b>	Employees can search job easily according to their specific qualifications or expertise through intelligent search engine button
<b>Inputs</b>	Job that employees want to search according to their expertise
<b>Processing</b>	<ul style="list-style-type: none"> <li>i. Connect to DB and DB is searched according to the query string.</li> <li>ii. If input is valid in DB, most relevant results and advertised jobs are moved to upper positions as a list.</li> <li>iii. If input is not valid in DB, error message is displayed.</li> </ul>
<b>Outputs</b>	<ul style="list-style-type: none"> <li>i. Error message</li> <li>ii. Listed available jobs</li> </ul>

**3.2.1.7 Update job employees' info**

<b>Precondition</b>	Employees login to system
<b>Post condition</b>	Employees can update their information through "update my profile" button.
<b>Inputs</b>	Information that employees want to change.
<b>Processing</b>	<ul style="list-style-type: none"> <li>i. Connect to DB and update all of the inputs in DB</li> <li>ii. After update their information, confirmation message is displayed.</li> </ul>
<b>Outputs</b>	Confirmation message

**3.2.1.9 Adding Success Stories**

<b>Precondition</b>	Employees login to system
<b>Post condition</b>	Employees can add their success stories about job life.
<b>Inputs</b>	Employees' success stories about job life
<b>Processing</b>	<ul style="list-style-type: none"> <li>i. Connect to DB and insert all of the inputs to DB table.</li> <li>ii. After insertion, confirmation message is displayed.</li> <li>iii. If DB system have a problem, error message is displayed and users will try again to insert their inputs</li> </ul>
<b>Outputs</b>	<ul style="list-style-type: none"> <li>i. Error message</li> <li>ii. Confirmation message</li> </ul>

**3.2.1.10 Sending Request to Company**

<b>Precondition</b>	Employees login to system.
<b>Post condition</b>	Employees can request to company for job application.
<b>Inputs</b>	Employees' CV
<b>Processing</b>	<ul style="list-style-type: none"> <li>i. Connect to DB</li> <li>ii. Employees' CV information is inserted to employer's inbox table in DB system.</li> <li>iii. If CV send to employer's inbox successfully, confirmation message is displayed.</li> <li>iv. If CV doesn't send to employer's inbox, error message is displayed.</li> </ul>
<b>Outputs</b>	<ul style="list-style-type: none"> <li>i. Error message</li> <li>ii. Confirmation message</li> </ul>

**3.2.2 Second User – Employers****Employers functions:**

- ✓ Login
- ✓ Determine Authorization Level
- ✓ Registration
- ✓ Change Password
- ✓ Forgot Password
- ✓ Searching
- ✓ Update Companies' Info
- ✓ Adding New Job Announcements
- ✓ Sending Request to Job Seekers
- ✓ Adding Success Stories about Job Life

**3.2.2.1 Login**

This function is already described in 3.2.1.1 part for employees. This part is available for employers.

**3.2.2.2 Determine Authorization Level**

This function is already described in 3.2.1.2 part for employees. This part is available for employers.



**3.2.2.3 Registration**

<b>Precondition</b>	If new users for employers want to become a member of online recruitment company, they will click employer registration button.
<b>Post condition</b>	New users for employers will fill required field in the inputs part of registration
<b>Inputs</b>	<ul style="list-style-type: none"> <li>i. Company name</li> <li>ii. Employee first name&amp; last name</li> <li>iii. Degree of employee on the company</li> <li>iv. Phone number</li> <li>v. E-mail</li> <li>vi. Country&amp; City</li> <li>vii. Job class of company</li> <li>viii. Company logo</li> <li>ix. Job detail about company</li> <li>x. Fax number</li> </ul>
<b>Processing</b>	All of the inputs of employers will store in DB system.
<b>Outputs</b>	If important field is blank or if the password and confirm password are not same, warning message will be given. And, this warning message will display unfilled field. After employers fill in the blanks, confirmation message will be send to their e-mail.

**3.2.2.4 Change password**

This function is already described in 3.2.1.4 part for employees. This part is available for employers.

**3.2.2.5 Forgot password**

This function is already described in 3.2.1.5 part for employees. This part is available for employers.

**3.2.2.6 Searching**

<b>Precondition</b>	Employer's login to system and click to intelligent search engine part.
<b>Post condition</b>	Employers can search employees that have specific qualifications or expertise through intelligent search engine button.
<b>Inputs</b>	Employees' expertise that employers want to search.
<b>Processing</b>	<ul style="list-style-type: none"> <li>i. Connect to DB and DB is searched according to the query string.</li> <li>ii. If input is valid in DB, most relevant results and job seekers are moved to upper positions as a list.</li> <li>iii. If input is not valid in DB, error message is displayed.</li> </ul>
<b>Outputs</b>	<ul style="list-style-type: none"> <li>i. Error message.</li> <li>ii. Listed available result about employees.</li> </ul>

### 3.2.2.7 Update Company's Info

This function is already described in 3.2.1.3 part for employees. This part is available for employers.

### 3.2.2.8 Adding New Job Announcement

<b>Precondition</b>	Employer's login to system and click to "add new job" buttons.
<b>Post condition</b>	Employers can add new job advertisements to blanks about job.
<b>Inputs</b>	New job advertisements.
<b>Processing</b>	<ol style="list-style-type: none"> <li>i. Connect to DB</li> <li>ii. New job advertisements are inserted to DB table.</li> <li>iii. After inserting job advertisements to DB table, confirmation message is displayed.</li> </ol>
<b>Outputs</b>	Confirmation message.

### 3.2.2.9 Sending Request to Employees

<b>Precondition</b>	Employers login to system.
<b>Post condition</b>	Employers can request to employees for offering job
<b>Inputs</b>	Company's info
<b>Processing</b>	<ol style="list-style-type: none"> <li>i. Connect to DB</li> <li>ii. Company information is inserted to employees' inbox table in DB system.</li> <li>iii. If the company information sends to employees' inbox successfully, confirmation message is displayed.</li> <li>iv. If the company information doesn't send to job seekers' inbox, error message is displayed.</li> </ol>
<b>Outputs</b>	<ol style="list-style-type: none"> <li>iii. Error message</li> <li>iv. Confirmation message</li> </ol>

### 3.2.1.10 Adding Success Stories

This function is already described in 3.2.1.4 part for employees. This part is available for employers.

### 3.2.3 Third User – Administrator

#### Administrator Functions

- ✓ Login
- ✓ Determine Authorization Level

- ✓ Change Password
- ✓ Forgot Password
- ✓ Approval of companies(Employers)
- ✓ Approval of users(Job seekers Employers)
- ✓ Approval of success stories about job life
- ✓ Active/inactive of account
- ✓ Reaching statistical data

### **3.2.3.1 Login**

This function is already described in 3.2.1.1 part for employees. This part is available for administrator.

### **3.2.3.2 Determine Authorization Level**

This function is already described in 3.2.1.2 part for employees. This part is available for administrator.

### **3.2.3.3 Change Password**

This function is already described in 3.2.1.3 part for employees. This part is available for administrator.

### **3.2.3.4 Forgot Password**

This function is already described in 3.2.1.3 part for employees. This part is available for administrator.

### **3.2.3.5 Active of companies (Employers)**

<b>Precondition</b>	Administrator of system login to system.
<b>Post condition</b>	Administrator of system can confirm company or not according to results of research.
<b>Inputs</b>	No input
<b>Processing</b>	<ul style="list-style-type: none"> <li>i. After administrator click to confirm button for employers, connect to DB</li> <li>ii. Employer who is new user insert to employer table.</li> <li>iii. If DB has a problem in inserting time, error message is displayed.</li> <li>iv. If employer insert to employer table, confirmation message is displayed.</li> </ul>
<b>Outputs</b>	<ul style="list-style-type: none"> <li>i. Error message</li> <li>ii. Confirmation message</li> </ul>

### **3.2.3.6 Active of Employees**

<b>Precondition</b>	Administrator of system login to system.
<b>Post condition</b>	Administrator of system can confirm employees or not according to results of research.

<b>Inputs</b>	No input
<b>Processing</b>	<ul style="list-style-type: none"> <li>i. After administrator click to confirm button for employees and connect to DB</li> <li>ii. Employees who are new user insert to employees table.</li> <li>iii. If DB have a problem in inserting time, error message is displayed</li> <li>iv. If employees insert to employees table, confirmation message is displayed.</li> </ul>
<b>Outputs</b>	<ul style="list-style-type: none"> <li>i. Error message</li> <li>ii. Confirmation message</li> </ul>

### 3.2.3.7 Inactive of Users' Account

<b>Precondition</b>	Administrator of system login to system.
<b>Post condition</b>	Administrator of system can active or inactive in system.
<b>Inputs</b>	User name
<b>Processing</b>	<ul style="list-style-type: none"> <li>i. Connect to DB</li> <li>ii. User's status column is update passively from user table.</li> <li>v. If DB have a problem in this time, error message is displayed Otherwise confirmation message is displayed.</li> </ul>
<b>Outputs</b>	<ul style="list-style-type: none"> <li>i. Error message</li> <li>ii. Confirmation message</li> </ul>

### 3.2.3.8 Reaching statistical Data

<b>Precondition</b>	Administrator of system login to system.
<b>Post condition</b>	Administrator of system can reach statistical data
<b>Inputs</b>	No input
<b>Processing</b>	<ul style="list-style-type: none"> <li>i. Connect to DB</li> <li>ii. Sum of all of the users' number according to employees and employers</li> <li>iii. Listing all of the data</li> </ul>
<b>Outputs</b>	Listing all of the data

### **3.3 PERFORMANCE REQUIREMENTS**

Online recruitment company's purpose is that webpage have high performance although increasing the number of users, because it's important that job seekers and employers' satisfaction. So loading time and response time is important them. For high performance, loading time of pages/forms or response time for intelligent search engine should be short. We think that response time of query will be set in between 5 and 10 seconds. On the other hand, if we want to be high performance, first of all, performance should be measure correctly.

Therefore, we think that Pace Speed is a good tool for performance measurements. Through these tools, online recruitment company's performance analysis will be done and this tool will present some proposals. According to these proposals, system will be controlled by quality manager. Also, SQL optimization can effects performance. Results-oriented SQL will be preferred and optimized frameworks will be used.

### **3.4 LOGICAL DATABASE REQUIREMENTS**

Data entities and their relationships can be seen from the ER diagram in Appendix-Figure 1.1.

### **3.5 DESIGN CONSTRAINTS**

Every user (Job seekers and employers) will see their only related areas through different interfaces. However, administrator will see all of the interfaces with clicking related department.

### **3.6 SOFTWARE SYSTEM ATTRIBUTES**

#### **3.6.1 Security**

In order to protect itself from accidental or malicious access, use or modification, the system shall enforce supply of a valid username and password pair, when any user attempts to login to the system. The issues concerning the security of the operating system at the server site, which may lead security problems for the system, shall not be the responsibility

of team member. In addition to these, system keeps logs about all login and logout attempts from users on separate directory on server hard disk.

### ***3.6.2 Maintainability***

online recruitment company system is maintained by developer and database managers. When necessary, database design is controlled and changed. Also, coding part will be changed according to necessary by developer.

### ***3.6.3 Portability***

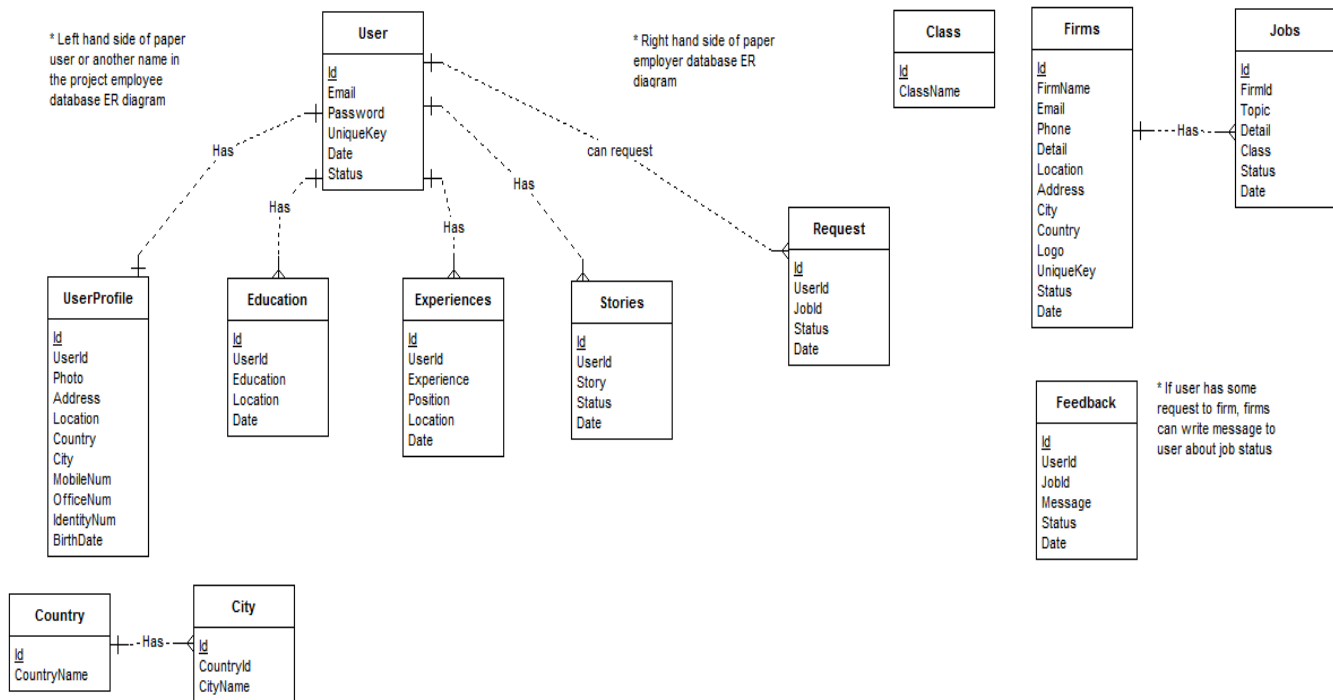
online recruitment company will provide portability option to PDAs or kind of cell phones which supports to navigation on internet.

### ***3.6.4 Reliability***

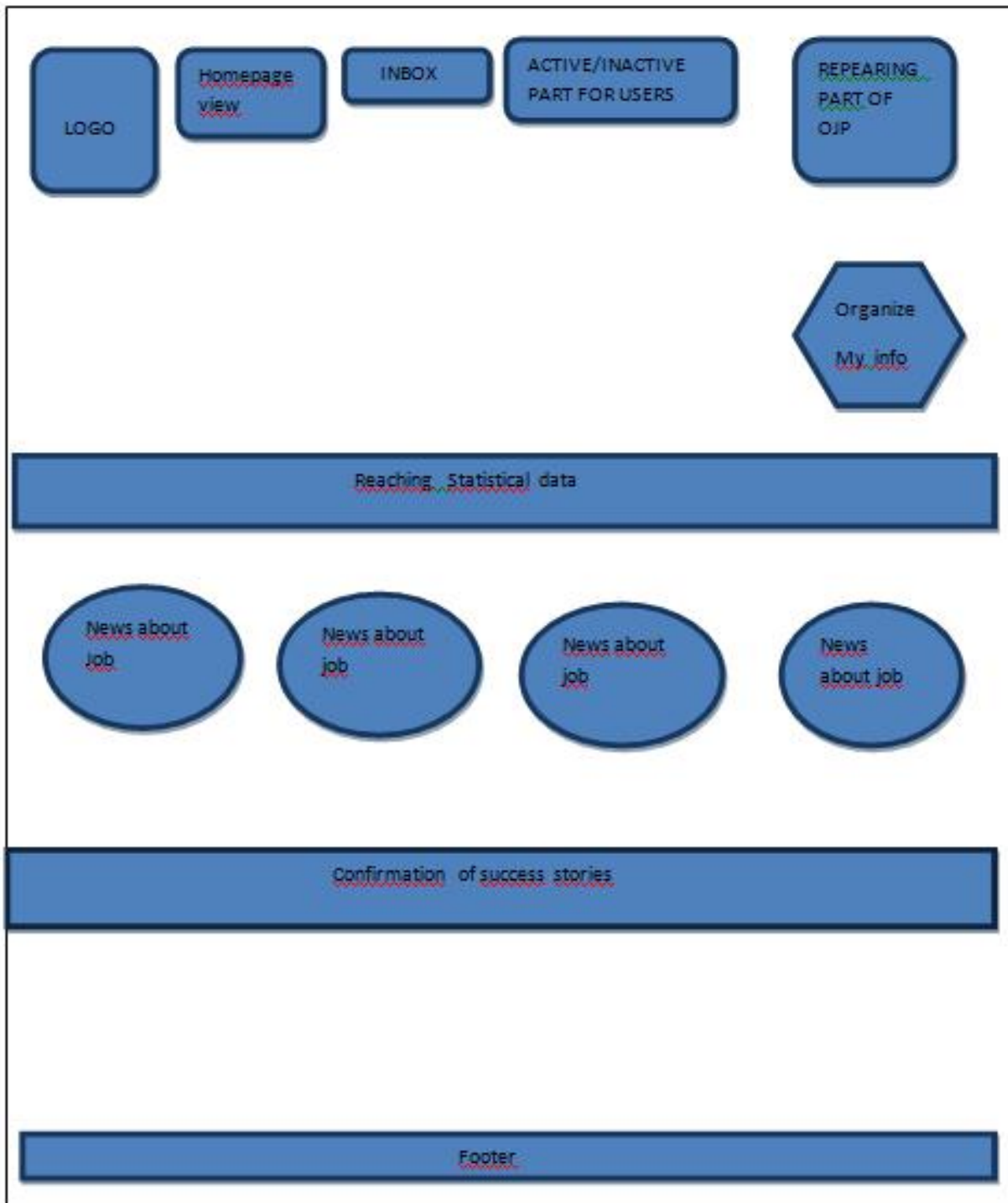
The system has to operate 98% of the time. The number of defect should not exceed 10 per function. Firewall is installed on server side for reliability of system. Moreover, in server side and also client side system uses secure connections to increase reliability. This communication and also complete program will be tested by in different aspects by using some special cases.

## 8. APPENDIX

### ER Diagram of online recruitment company



**Figure 1.1 ER Diagram of online recruitment company**





**Figure 1.2 Detailed Home Page**

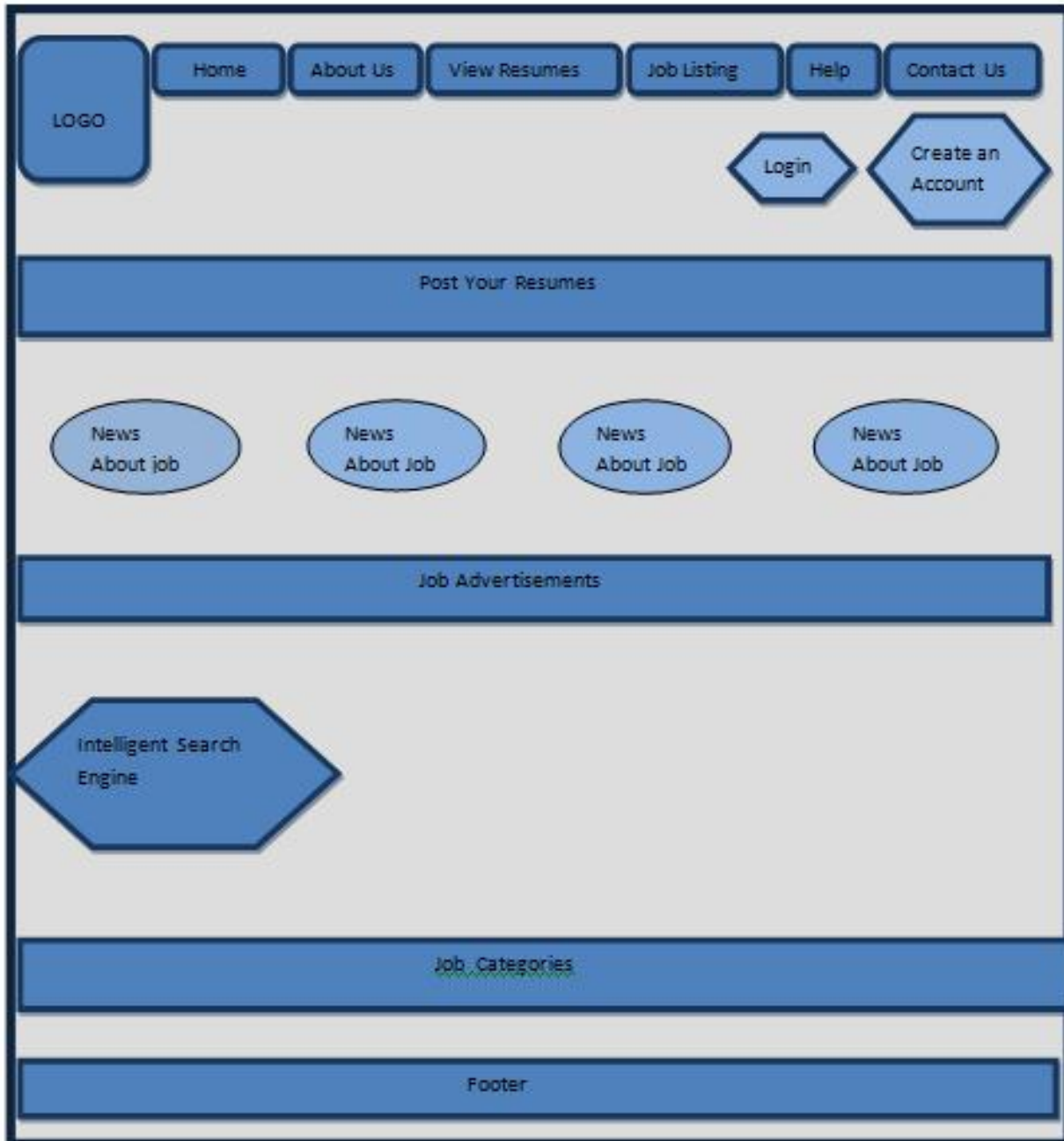
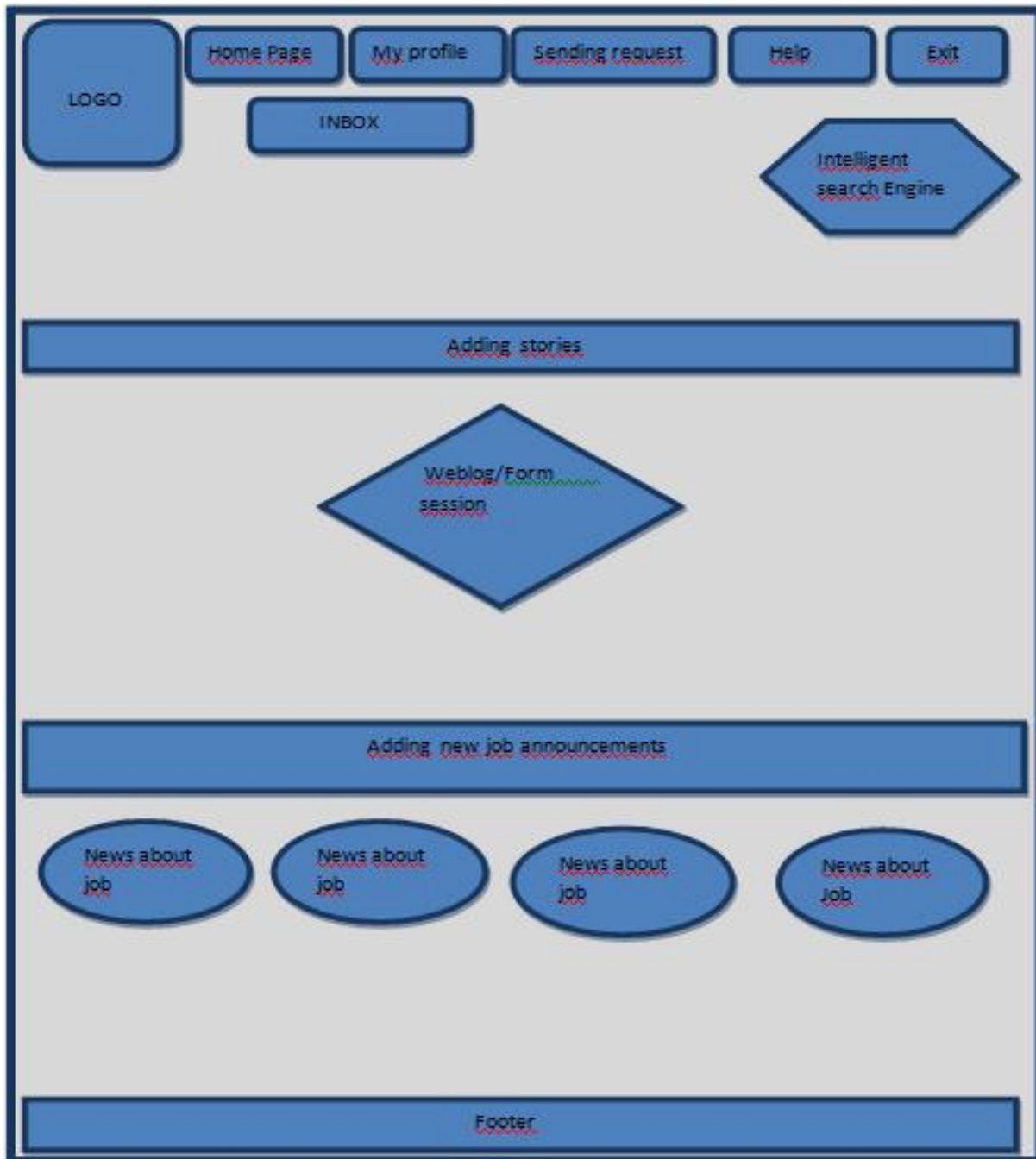


Figure 1.3 Detailed Admin



**Figure 1.4 Detailed Employer**