

WEB – BASED HR RECRUITMENT

By

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June 2012

TO MY PARENTS

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Abstract: This project creates software that stores and manages all data related with recruitment human resources office. It includes recruiting new personnel in University by some phases. Software recruiting matches the requirements of University by each hierarchy positions of personnel with the skills of new recruiter. This is done by setting up the interview between University's staff; those people are in a selective commission that is related to the departments. Interviews are then conducted, and the candidates selected and approved in interview by the commission are recruited in University as new personnel.

It has a database administrator who has access to the entire database, in regards with viewing and update of information. This exclusive right is implemented using authorized access. Also viewing of all data and editing of personal data can be done by any employee or applicant that wants to update his/her information, this also using authorized access.

The data can be accessed, manipulated and retrieved very easily. The interface has been made very user friendly and informative about the human resource office.

This project examines the some issues related to Human Resource Management in University and implements a web – based application for recruiting new personnel in University. The system is implemented using as database (MySQL database) and coding in PHP programming language.

REKRUTIMI NE BURIMET NJEREZORE I BAZUAR NE WEB

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Qershor 2012

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Fakulteti: Fakulteti i Arkitekturës dhe Inxhinierisë

Abstrakti: Ky projekt krijon një software që ruan dhe menaxhon të gjitha të dhënat që kanë lidhje me zyrën e rekrutimit në burimet njerëzore. Ai përfshin rekrutimin e personelit të ri në Universitet duke kaluar në disa faza pranimi. Software-i i rekrutimit lidhet me kërkesat e Universitetit nga secili pozicion hierarkik i personelit me aftësitë e rekrutantëve të rinj. Kjo bëhet duke caktuar një intervistë midis stafit të Universitetit; të cilët janë persona që janë në komisionin e përzgjedhjes sipas departamenteve përkatëse. Më pas mbahen intervistat, dhe kandidatët e zgjedhur dhe të aprovuar në intervistë nga komisioni rekrutohen në Universitet si punonjës të rinj.

Programi ka një administrator databaze, i cili ka akses në të gjithë databazën, në të kontrolluarin dhe përditësim e informacionit. Kjo e drejtë ekskluzive implementohet duke përdorur një akses të autorizuar. Po kështu dhe kontrolli i të gjitha të dhënave si dhe modifikimi i të dhënave personale mund të bëhet nga çdo punonjës ose aplikant që dëshiron të përditësojë informacionin e vet, bëhet duke përdorur një akses të autorizuar.

Të dhënat mund të aksesohen, manipulohen dhe të tërhiqen në mënyre shumë të thjeshtë. Ndërfaqja është bërë në mënyrë të tillë që të jetë e njohur për përdoruesin dhe informative rreth zyrës së burimeve njerëzore.

Ky projekt ekzaminon disa pika në lidhje me Burimet Njerëzore në Universitet dhe implementon një aplikacion i bazuar në web për rekrutimin e personelit të ri në Universitet. Sistemi është i implementuar duke përdorur si databazë (MySQL database) dhe kodimi në gjuhën e programimit PHP.

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CHAPTER 1

INTRODUCTION

1.1 Introduction

Software recruiting matches the requirements of University by each hierarchy positions of personnel with the skills of new recruiter. This is done by setting up the interview between University's staff; those people are in a selective commission that is related to the departments. Interviews are then conducted, and the candidates selected and approved in interview by the commission are recruited in University as new personnel.

As not having flexible or proper software for Human Resource Management office has resulted in a problem in recruiting personnel. Many experienced and well – known Universities have found that offering their needs or vacancies for new personnel meets both flexibility and time.

Web-based applications are web sites with user interactivity. The key advantage of the web-based application is its availability, as it can be accessed by anyone connected to the Internet and multiple users can access it at the same time. The web-application can be designed as a three-tier architecture, which includes a web client, network servers, and a back-end information system supported by a suite of databases [1]. The goal of this project is to develop a user- friendly web-based application that automates the routine activities for a Human Resource manager.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

Software recruiting matches the requirements of University by each hierarchy positions of personnel with the skills of new recruiter. This is done by setting up the interview between University's staff; those people are in a selective commission that is related to the departments. Interviews are then conducted, and the candidates selected and approved in interview by the commission are recruited in University as new personnel.

As not having flexible or proper software for Human Resource Management office has resulted in a problem in recruiting personnel. Many experienced and well – known Universities have found that offering their needs or vacancies for new personnel meets both flexibility and time.

Management of employment relationship is strongly affected by increasing of knowledge – intensity in Western economies at the organizational level. The quality and the commitment of organizations` co-workers depend in their development. Huuiskamp (2002) says that, the rise of the flexible and innovation – drive type of organization explains the greatly increased attention paid to matters such as strategic HRM. The figure 1 shows the evolution of HR from simple business function to that of strategic partner. [2]

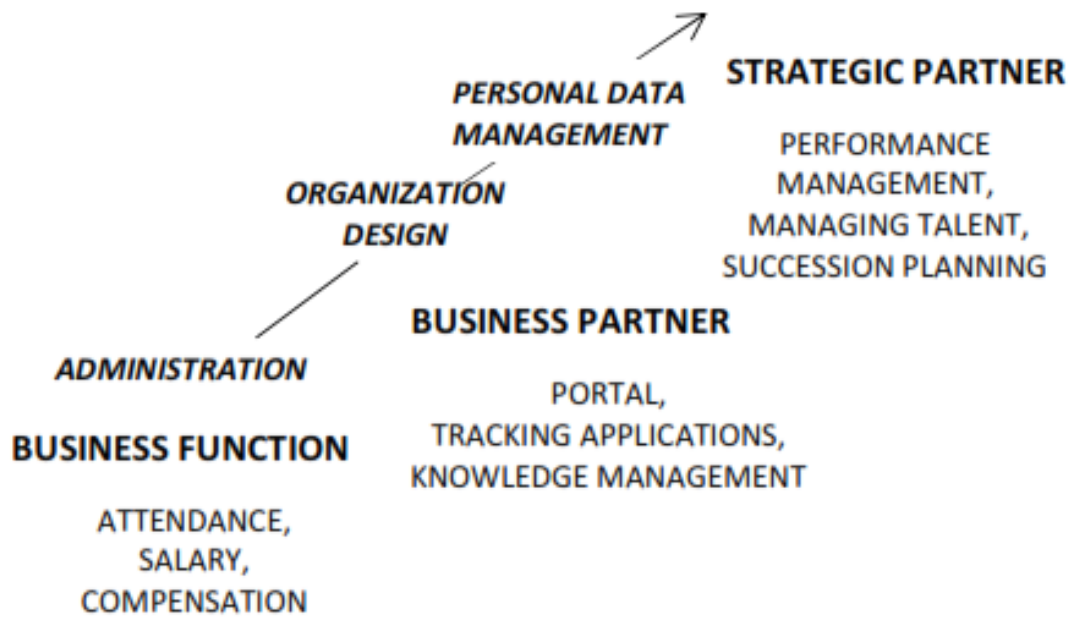


Figure 1: HR-Tree. Reprinted from “Evolution of the HR function” by Bhatia,T, 2008, HR Practices,9,1-10

Famous companies had success by the contribution of specialization in Human Resource Management, and through such companies have played a part in advancing the cause of civilization. [3]

To define ‘Human Resource Management’ is not easy because it is used in two different ways. On the one hand is used to describe the form of management activities covered in books. In this way HRM is really no more than a more modern and supposedly imposing name for what has long been labeled ‘personnel management’. [4]

Recruitment’s need is decided by figuring in the future the needed number of employees and making allowance for labour turnover rates during period. According to Robert Gatewood, Hubert S. Feild, Murray Barrick(2010), the technique of recruitment as a means of closing supply/demand gaps must be compared for effectiveness with other alternatives, such as increased human resource development[5].

CHAPTER 3

APPLICATION`S DESIGN

3.1 Introduction

University has three kinds of users that access the system, the Employee Applicant, the Department Representative and the Administrator. Employee Applicants are those who apply for the jobs through the website. The Applicant can update the existing details in the Applicant's database including their personal information and skills. Department Representative is who that updates for job vacancies, take in interview the applicants.

The Administrator matches the skills of its employee with the skills required by the department for a particular job and arranges an interview between the department representative and the Applicant. After a successful interview process, the Administrator will facilitate the consummation of the contract between the employee and employer.

Before designing the application, the relational database must be designed first. The data model and the process model are part of the design process. The data model focuses on how the database is structured while the process model deals with how the data is processed. In the context of the relational database, the data model is used to design the relational tables and the process model is used to design the queries that access and perform operations on those tables.

3.2 Data Model

A data model is a notation for describing data or information [9]. Data modeling is the formalization and documentation of existing processes and events that occur during application software design and development. Data modeling techniques and tools capture

and translate complex system designs into easily understood representations of the data flows and processes, creating a blueprint for construction and/or re-engineering.

A data model can be thought of as a diagram or flowchart that illustrates the relationships between data. Although capturing all the possible relationships in a data model can be very time-intensive, it's an important step and shouldn't be rushed. Well-documented models allow stake-holders to identify errors and make changes before any programming code has been written.

Data modeling is performed during the initial phases of the database development process. This data model is mainly focused on what data should be store in the database. The data is the information that is needed to build the data model. That information is collected from requirement analysis.

Data modeling is performed during the initial phases of the database development process. The data model focuses mainly on what information should be stored in the database. The information needed to build the data model is gathered during the requirement analysis. Data model should take into account the current and future needs of University.

To have an effective web – based application for Human Resource Management, departments must maintain accurate and up to date information about applicants and their needs in job vacancies.

Accommodating the required requirements, data model must be designed in a proper way. The essential entities and relationship those are present in a Human Resource Management application.

3.2.1 Entities

An Entity Relationship Diagram (ERD) gives a graphical representation of the entities in the database and the relation between them.

The entities (tables) are represented by a “rectangle”, while a “diamond” represents the relation between them and a diamond within a rectangle represents an associate entity.

An associative entity is an element of the entity-relationship model. The database relational model does not offer direct support to many-to-many relationships, even though such relationships happen frequently in normal usage. The solution to this problem is the creation of another table to hold the necessary information for this relationship. This new table is called an associative entity.

Also we have the cardinality that is the frequency of a relationship between two entities. The types of cardinality are

1. one to one (1:1), In a one-to-one relationship, each row in one database table is linked to 1 and only 1 other row in another table. In a one-to-one relationship between Table A and Table B, each row in Table A is linked to another row in Table B. The number of rows in Table A must equal the number of rows in Table B.[6]
2. one to many (1: M), In a one-to-many relationship, each row in the related to table can be related to many rows in the relating table. This allows frequently used information to be saved only once in a table and referenced many times in all other tables. In a one-to-many relationship between Table A and Table B, each row in Table A is linked to 0, 1 or many rows in Table B. The number of rows in Table A is almost always less than the number of rows in Table B.[6]
3. many to many (M: M), In a many-to-many relationship, one or more rows in a table can be related to 0, 1 or many rows in another table. In a many-to-many relationship between Table A and Table B, each row in Table A is linked to 0, 1 or many rows in Table B and vice versa. A 3rd table called a mapping table is required in order to implement such a relationship. [6]

If there is a many to many relationship between two entities, then the relationship between them is represented as Associative Entities. Figure 2 shows the data model for this application.

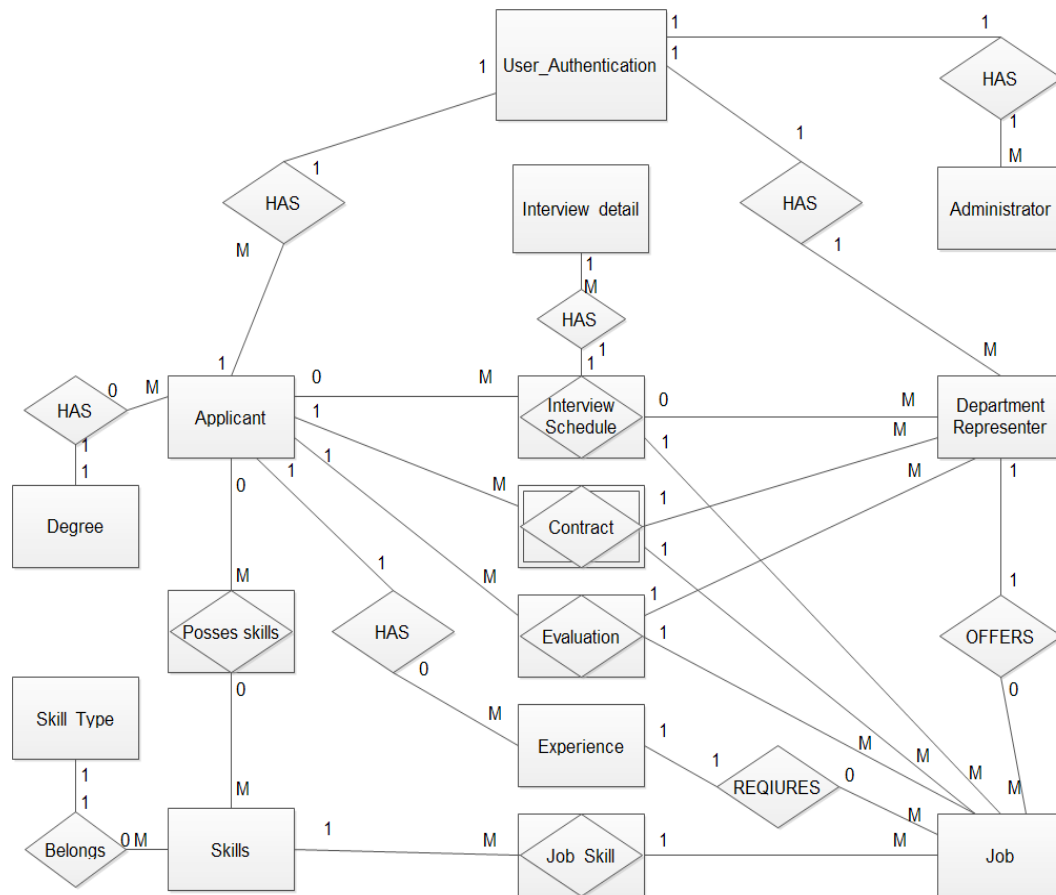


Figure 2: Data Model for Application

Protection of the access to the system, the users such as Administrator, Applicants and Department Representative must be authenticated. An Employee Applicant updates his/her skill and personal information including the experience and degree attained. A department representative adds a new job including details like the skill requirements for the job, start and the end date, number of vacancies. An Administrator schedules an interview for an Applicant, who possesses the skills required for the job. After the applicant is interviewed by department commission, if his/her interview succeed the administrator makes a contract with him/her.

3.2.2 Database Design

In the Relational Database model, each of the entities including the Associate entities is transformed into a table. The attributes (fields) of each of the entities for the ERD shown in Figure 2 are as follows from Table 1 to Table 15.

User Authentication

SNO	Name	Data Type	Width	Constraints
1	User_ID	INT	100	Primary Key
2	User_Name	CHAR	50	
3	Password	CHAR	50	
4	Role	CHAR	50	Admin, Applicant or Department Represented
5	Active	YES/NO	10	

Table 1

Administrator

SNO	Name	Data Type	Width	Constraints
1	ID	INT	100	Primary Key, (Foreign Key with User_ID)
2	Name	VarCHAR	50	
3	Surname	VarCHAR	50	
4	Address	VarCHAR	50	
5	City	VarCHAR	50	
6	Country	VarChAR	50	
7	Home_Phone	INT	30	
8	Mobile_Phone	INT	30	
9	e-mail	VarCHAR	50	
10	Gender	VarCHAR	10	
11	Birthday	DATE		
12	Marital_Status	VarCHAR	10	

Table 2

Applicant

SNO	Name	Data Type	Width	Constraints
1	Applicant_ID	INT	100	Primary Key, (Foreign Key with User_ID)
2	First_Name	VarCHAR	50	
3	Last_Name	VarCHAR	50	
4	Address	VarCHAR	50	
5	City	VarCHAR	50	
6	Country	VarChAR	50	
7	Home_Phone	INT	30	
8	Mobile_Phone	INT	30	
9	e-mail	VarCHAR	50	
10	Gender	VarCHAR	10	
11	Birthday	DATE		
12	Marital_Status	VarCHAR	10	
13	Degree	VarCHAR	50	Foreign Key
14	Experience	text		Foreign Key

Table 3

Applicant Skills

SNO	Name	Data Type	Width	Constraints
1	Applicant_ID	INT	100	Primary Key, Foreign Key
2	Skill_ID	CHAR	100	Primary Key, Foreign Key

Table 4

Contact(Department Representative)

SNO	Name	Data Type	Width	Constraints
1	Contact_ID	INT	100	Primary Key (Foreign Key)
2	Contact_Name	VarCHAR	50	
3	Department_ID	INT	100	Foreign Key
4	Phone	INT	30	
5	e-mail	VarCHAR	50	

Table 5

Contract

SNO	Name	Data Type	Width	Constraints
1	Applicant_ID	INT	100	Primary Key (Foreign Key)
2	Job_ID	INT	100	Foreign Key
3	Start_Date	DATE		
4	End_Date	DATE		
5	Active	VarCHAR	10	
6	Negotiated	Text		
7	Terms	Text		

Table 6

Departments

SNO	Name	Data Type	Width	Constraints
1	ID	INT	100	Primary Key
2	Name	VarCHAR	50	

Table 7

Evaluation

SNO	Name	Data Type	Width	Constraints
1	Applicant_ID	INT	100	Primary Key, Foreign Key
2	Job_ID	INT	100	Foreign key
3	Date	DATE		
4	Remark_by	INT	100	

Table 8

Experience

SNO	Name	Data Type	Width	Constraints
1	ID	INT	100	Primary Key
2	Experience_in	VarCHAR	50	

Table 9

Interview schedule

SNO	Name	Data Type	Width	Constraints
1	Interview_ID	INT	100	Primary Key
2	Applicant_ID	INT	100	Foreign Key
3	Job_ID	INT	100	Foreign Key
4	Interview_Type	VarCHAR	100	
5	Interview_Date	DATE		
6	Interview_Time	Time		

Table 10**Interview detail**

SNO	Name	Data Type	Width	Constraints
1	Interview_ID	INT	100	Primary Key,Foreign Key
2	Interview_By	INT	100	Foreign key(with Contact_ID)
3	Selected	VarCHAR	10	
4	Accepted	VarCHAR	10	

Table 11**Job**

SNO	Name	Data Type	Width	Constraints
1	Job_ID	INT	100	Primary Key (Foreign Key)
2	Contact_ID	INT	100	Foreign Key
3	Start_Date	DATE		
4	End_Date	DATE		
5	Open	VarCHAR	10	
6	Experience	Text		Foreign Key
7	NO_Vacancies	INT	50	
8	Job_Description	Text		

Table 12**Job Skill**

SNO	Name	Data Type	Width	Constraints
1	Job_ID	INT	100	Primary Key
2	Skill_ID	INT	100	Foreign Key

Table 13**Skills**

SNO	Name	Data Type	Width	Constraints
1	ID	INT	100	Primary Key
2	Name	VarCHAR	50	
3	Skill_Type	INT	100	Foreign Key

Table 14**Skill Type**

SNO	Name	Data Type	Width	Constraints
1	Skill_Type_ID	INT	100	Primary Key
2	Skill_Type_name	VarCHAR	50	
3	Information	Text		

Table 15

3.3 Process Model

Process model represent a network sequence of activities, objects, transformations, and events that embody strategies for accomplishing software evolution. Such models can be used to develop more precise and formalized descriptions of software life cycle activities. [7]

Functional Decomposition Diagrams and Data Flow Diagrams are two tools for process modeling. A decomposition diagram shows a high-level function, process, organization, data subject area, or other type of object broken down into lower level, more detailed components. Data flow diagrams illustrate how data is processed by a system in terms of inputs and outputs.

3.3.1 Decomposition Diagram

A decomposition diagram shows a high-level function, process, organization, data subject area, or other type of object broken down into lower level, more detailed components. It shows the structure of the system in a hierarchical structure. It breaks down a complex system into small manageable pieces. In general manner the Functional Decomposition Diagram precedes the Data Flow Diagram. The Functional Decomposition for this application is shown in Figure 3.

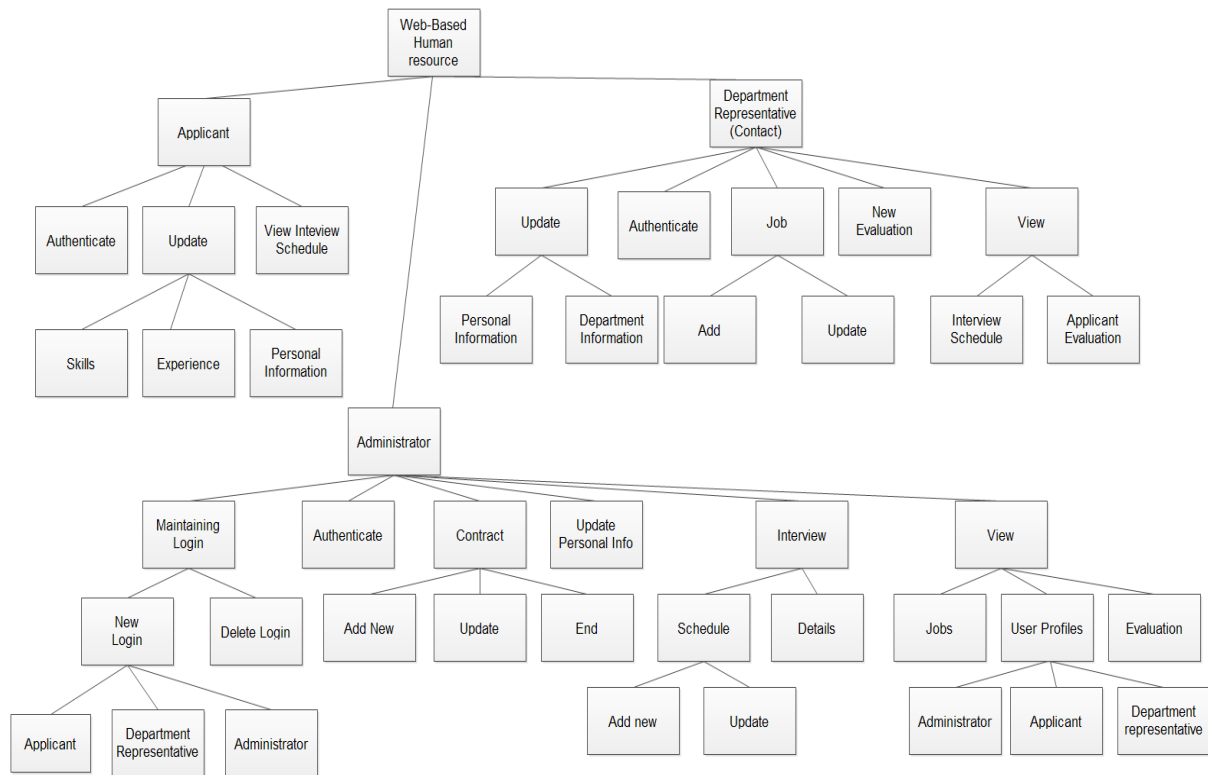


Figure 3: Decomposition Diagram

The whole application is divided into three small systems, Applicant, Administrator and Department Representative (Contact). Each sub system has its applications.

Applicant can authenticate, update (skills, experience personal information) and view his/her job interview.

The Administrator has the largest sub system. He/she can maintain login, authenticate, contract (by adding new contract, updating it or ending it), update personal information, interview schedule (by adding and updating), interview details, view jobs, other user profiles and evaluation.

The Department representative (Contact) can update (personal information, department information), authenticate, add job or update job, new evaluation, view interview schedule and applicant evaluation.

3.3.2 Data Flow Diagram

Data Flow Diagram (DFD) is an important technique for modeling a system's high-level detail by showing how input data is transformed to output results through a sequence of functional transformations. DFDs reveal relationships among and between the various components in a program or system. DFD consists of four major components: entities, processes, data stores and data flow.

Figure 4 is an example of a typical DFD.

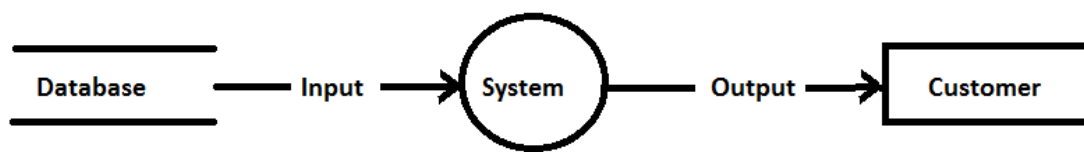


Figure 4: Example for typical DFD

A data flow diagram represents the following:

- External devices sending and receiving data
- Processes that change that data
- Data flows themselves
- Data storage locations

Data flow diagrams have replaced flowcharts and pseudo code as the tool of choice for showing program design. A DFD illustrates those functions that must be performed in a program as well as the data that the function will need. In spite of its strength, the beauty of DFD lies on its dependence upon just four symbols to express program design.

There only four symbols used to write Data Flow Diagram as follows:

1. External Entities → Rectangular box
2. Data Flow → Arrow headed lines
3. Process → Bubble (Circle or round corner square)
4. Data Store → Narrow opened rectangle

Figures from 5 to 18 show the DFD of our system. DFD are depending on sub systems.

Authentication

To have access in the system firstly each user, depending on role that they have, must authenticate. After that they log in subsystem that they refer. Figure 5 shows the DFD of User Authentication.

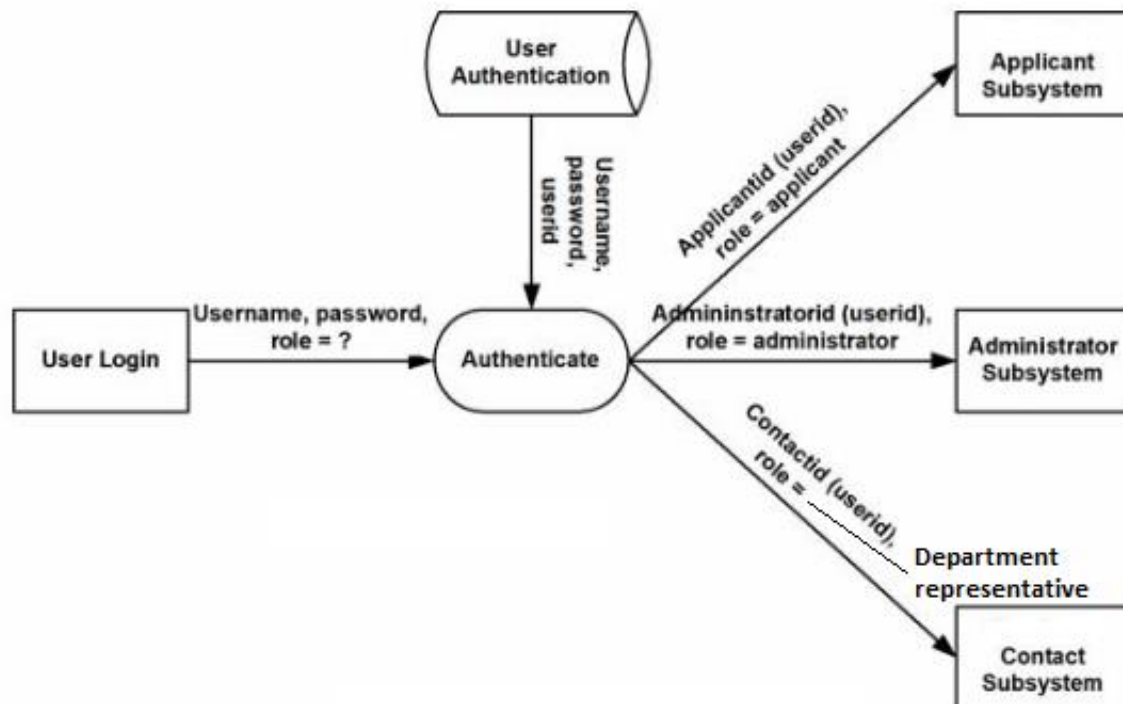


Figure 5: User Authentications DFD

Applicant Subsystem

Applicant by logging in with his/her username, password and role = applicant (Figure 5) he/she enters in Applicant Subsystem. Here he/she can update his/her personal information, experience. Also in other process they can update skills. Figure 6 shows DFD of update profile in Applicant subsystem.

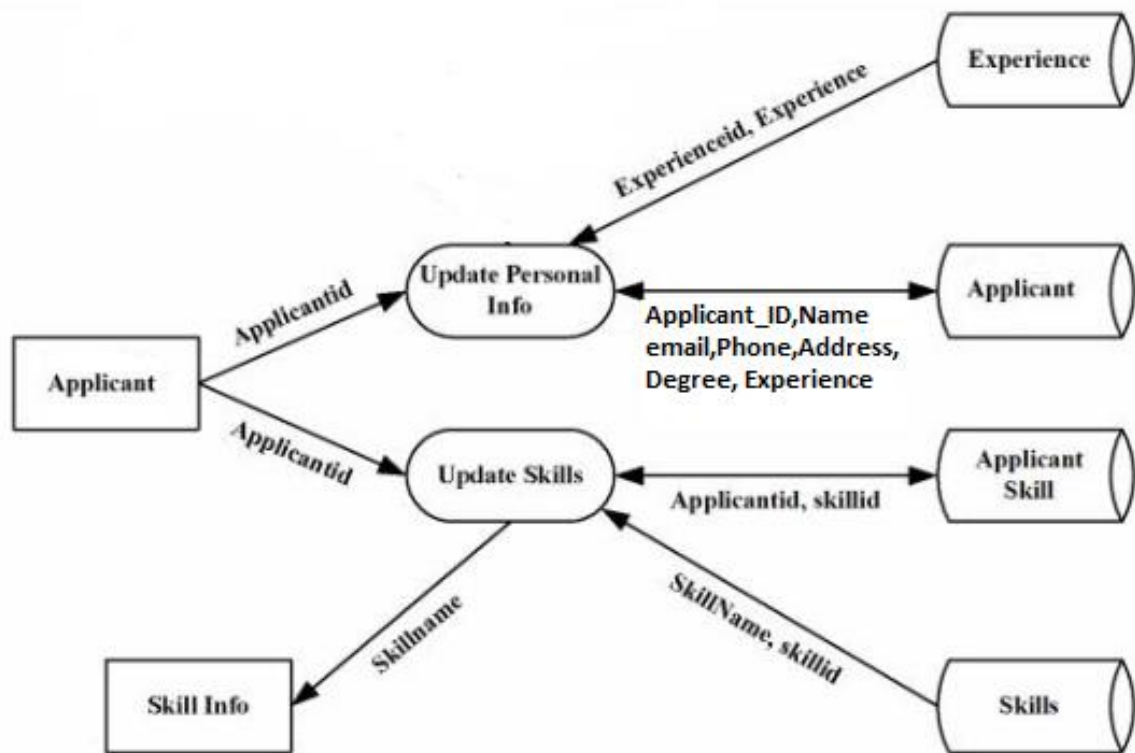


Figure 6: Applicant Subsystem – Update profile

Applicant also has ability to view all possible interview schedules and interview details. The Figure 7 shows that.

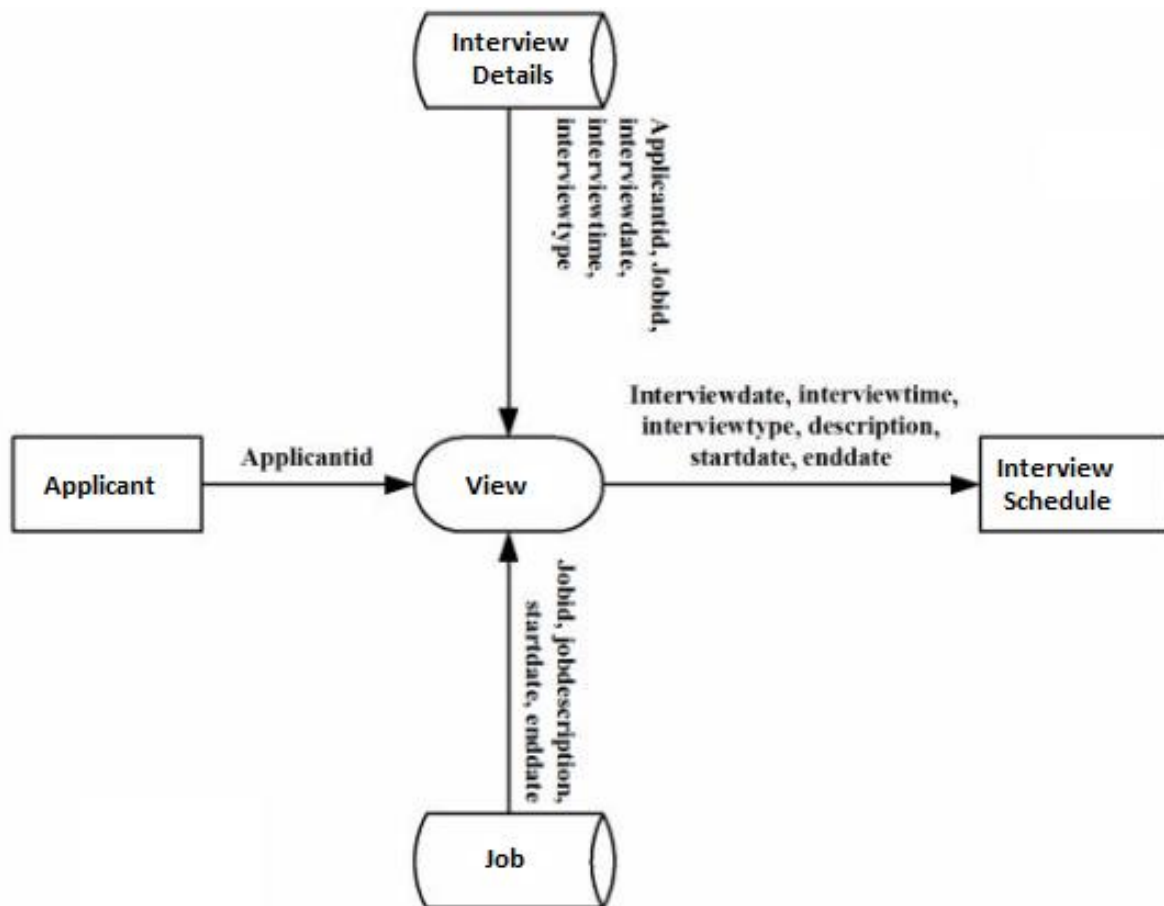


Figure 7: Applicant Subsystem – View process

Department Representative Subsystem

Department Representative by entering his role, contact Id he/she logs in Department Representative. Department Representative updates personal information, department information. Figure 8 shows in a general view the updating process of Department Representative.

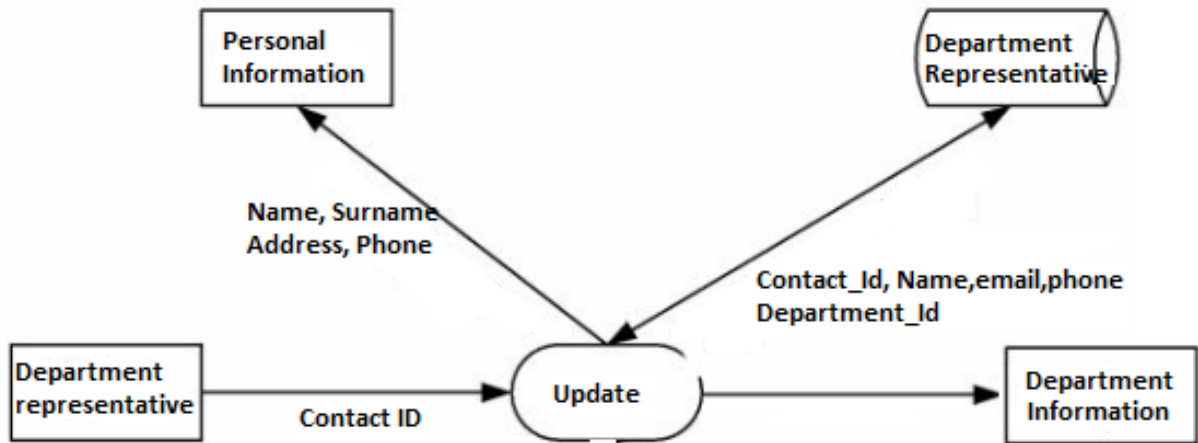


Figure 8: Department Representative – General DFD of Update process

Authenticated Department Representative can also add a new job or can update the old ones.

Figure 9 shows detailed DFD of Job process.

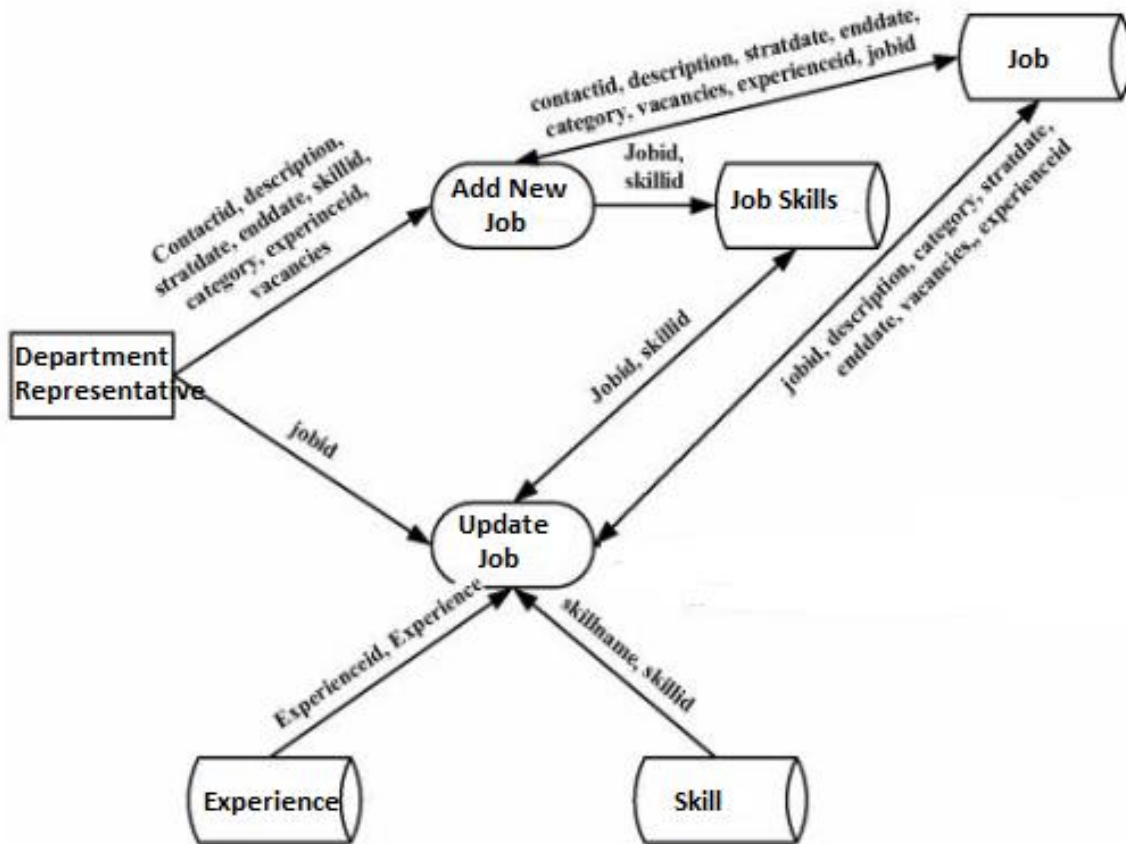


Figure 9: Department Representative – DFD for Job process

Another application that Department Representative can do is Evaluation that evaluates the performance of the applicant. DFD for evaluation is represented in figure 10.



Figure 10: Department Representative – Evaluation process

Department Representative that is authenticated can view the evaluations of an Applicant that were added for any job or contact. Also Department Representative can view the interview schedule. Figure 11 and Figure 12 shows those two DFD, respectively.

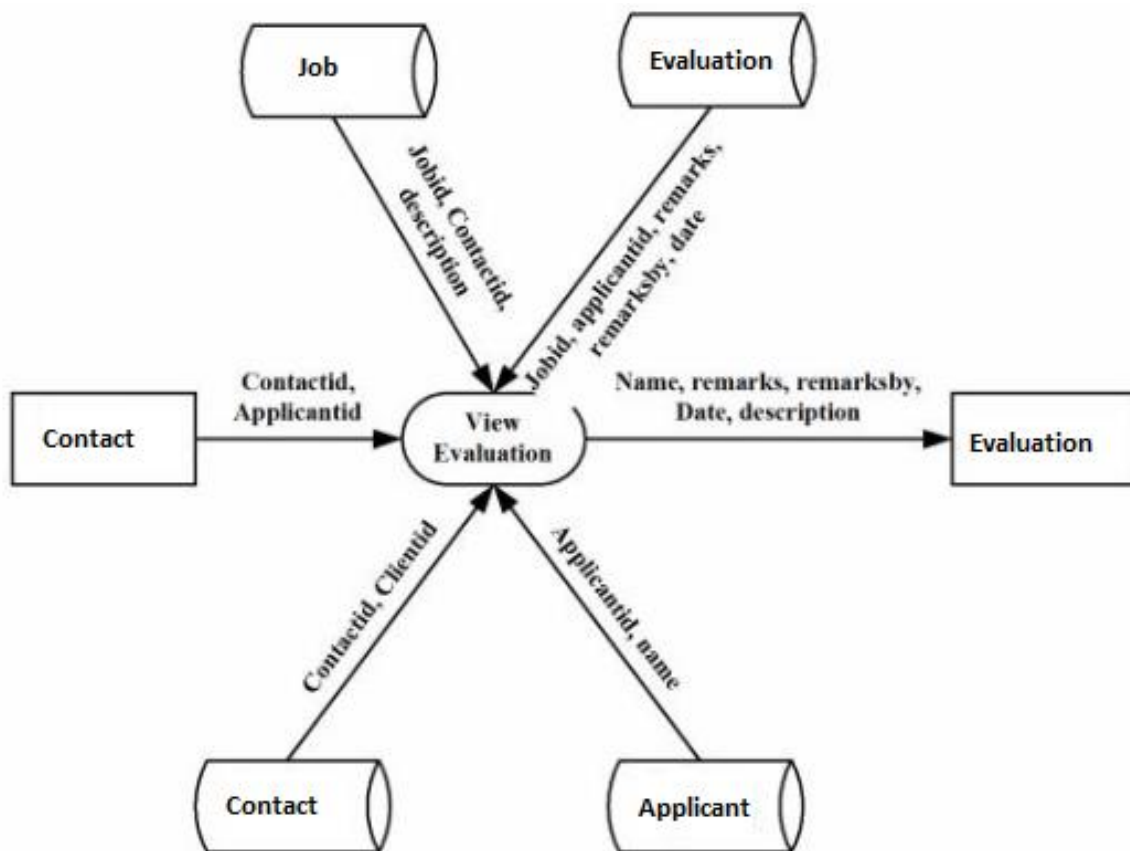


Figure 11: Department Representative - DFD for viewing Evaluation

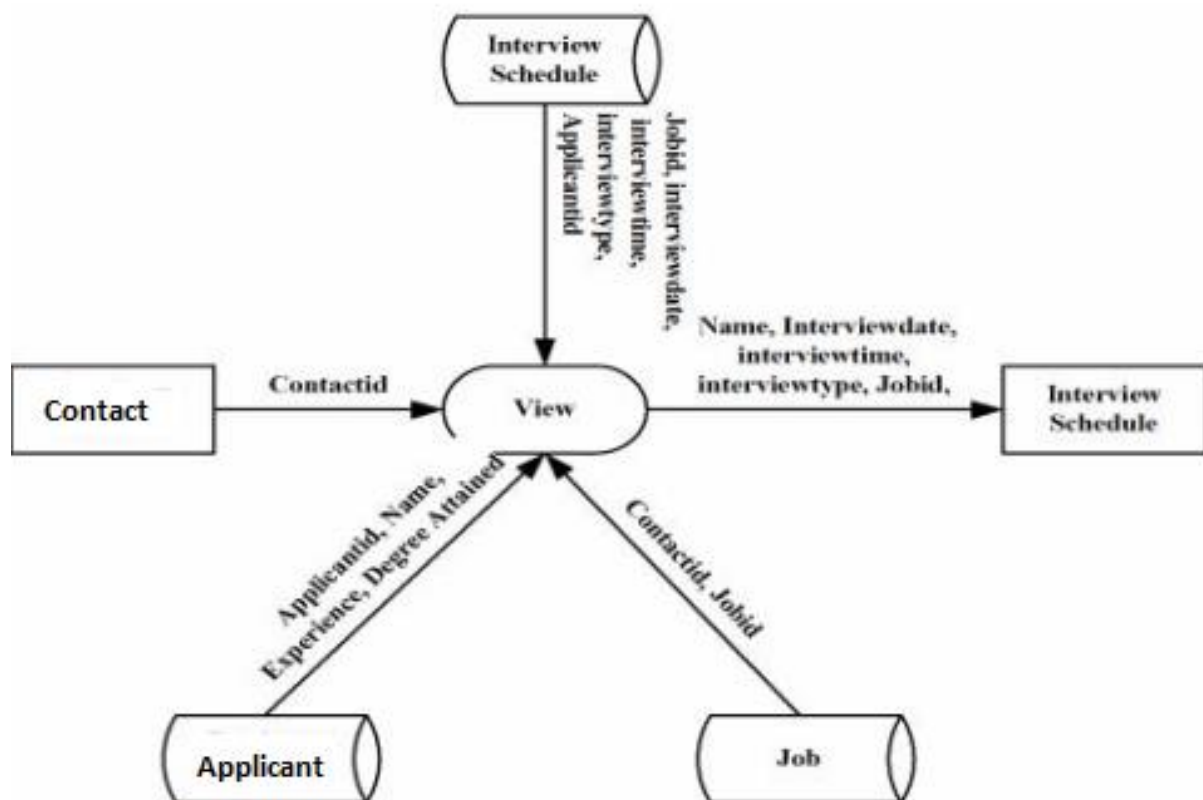


Figure 12: Department Representative – DFD for viewing Interviews

Administrator Subsystem

An Authenticated Administrator can update his/her personal information. Figure 13 shows the DFD of update process.

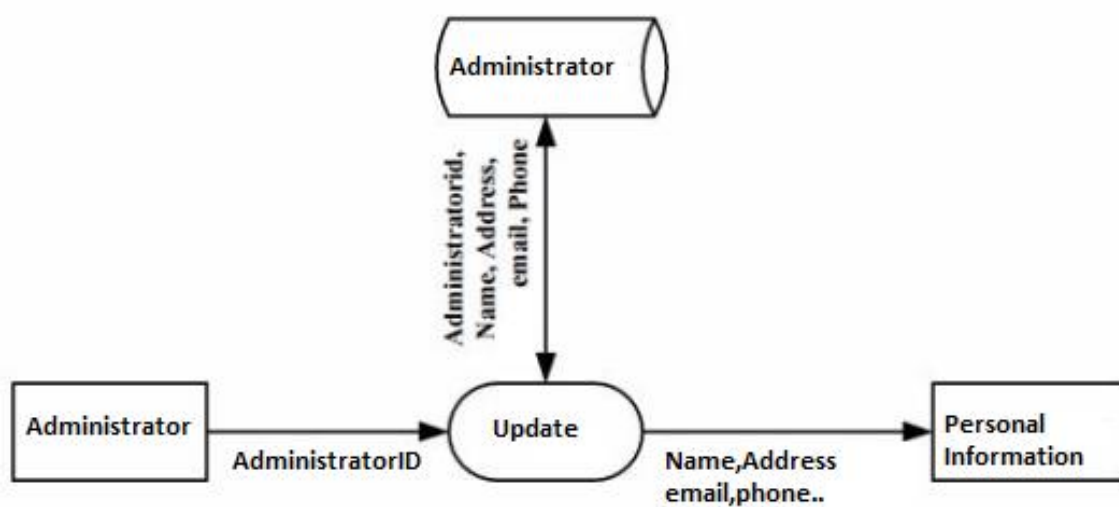


Figure 13: Administrator – DFD of Update process

Administrator has the right to create a new user login as well as creating a new user profile. This DFD is shown in Figure 14.

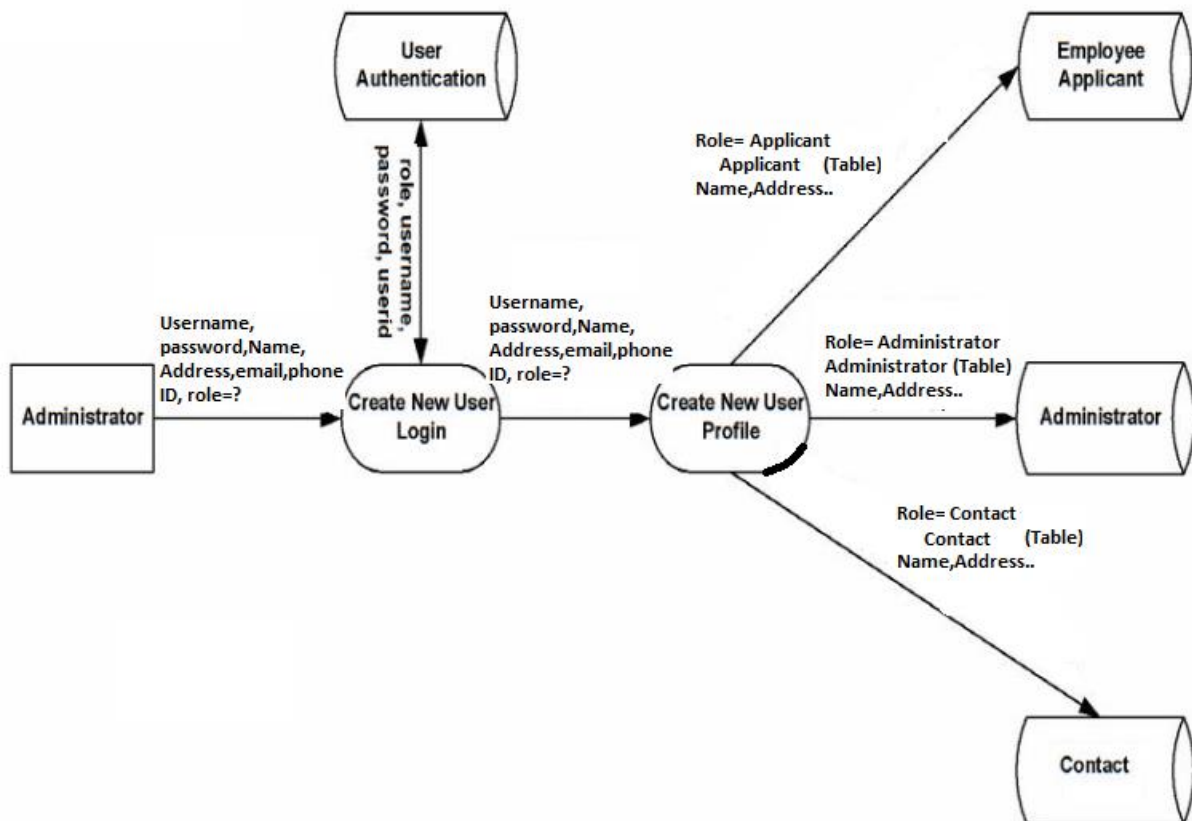


Figure 14: Administrator – DFD of creating new user login and new user profile

Another ability of Administrator is to delete one or some user profile. This is shown in Figure 15.

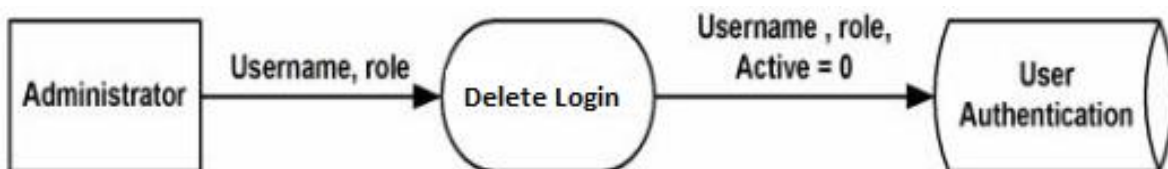


Figure 15: Administrator – DFD of deleting login

Administrator can maintain the job. She/he can add job contract, end job contract and also can update job contract. This is shown in Figure 16.

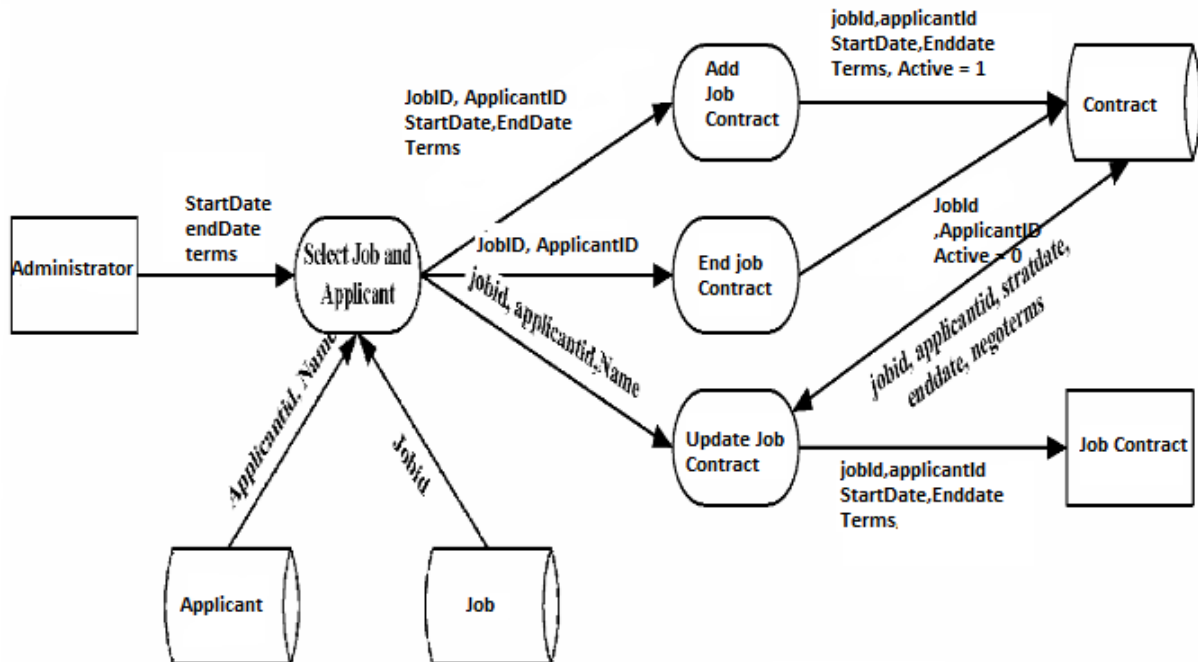


Figure 16: Administrator – DFD for Job contract

An Authenticated Administrator can make interview schedule, interview details. in interview schedule he/she can add new schedule or update. After updating an existing interview schedule administrator can detail it. This is shown in figure 17.

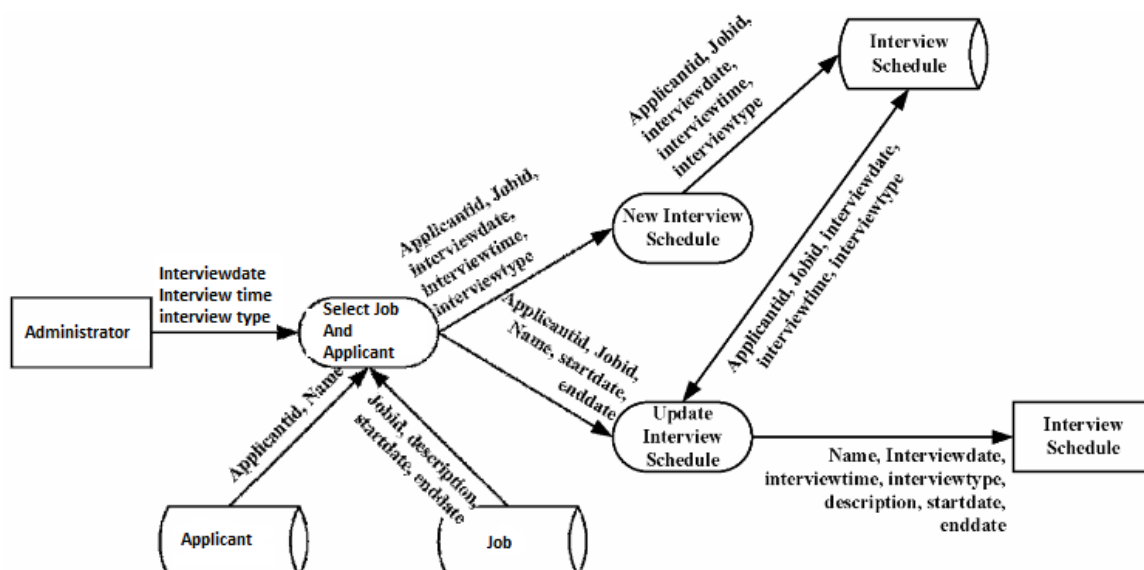


Figure 17: Administrator – DFD of Interview

Another option for Authenticated Administrator is view Evaluation. Administrator can view Evaluation. This is shown in Figure 18.

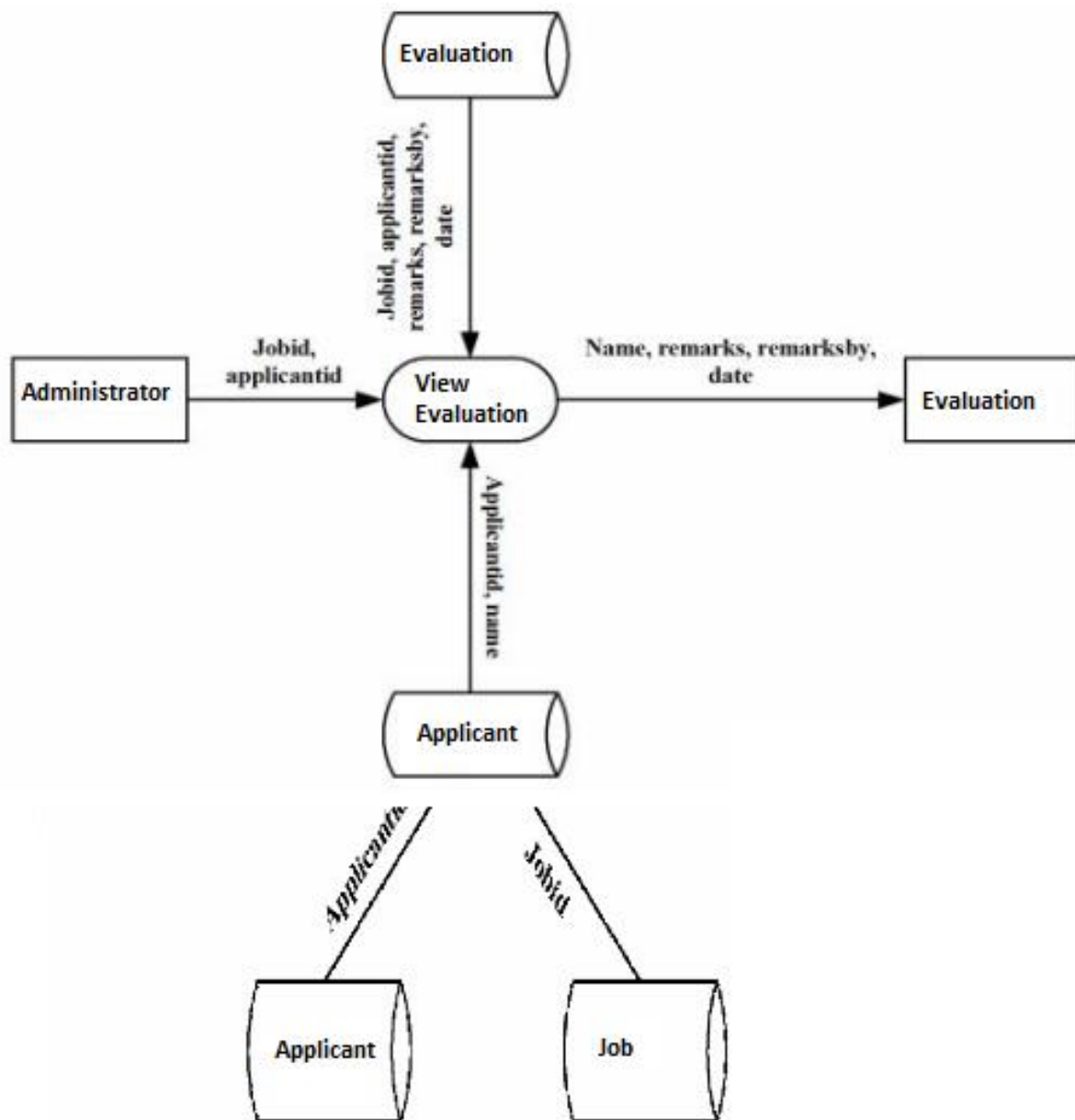


Figure 18: Administrator – DFD of Viewing Evaluation

CHAPTER 4

ARCHITECTURE

4. Three – tier architecture

While implementing the project a client – server architecture model is required because it is a web application. The architecture models are one tier, two tiers and three tier.

The used architecture model in this project is three – tier model. The purpose of selecting this architecture model is because of the development time, future flexibility and maintenance of the application.

The three – tier architecture model is the fundamental framework for the logical design model. It separates into three tiers of services an application's components.

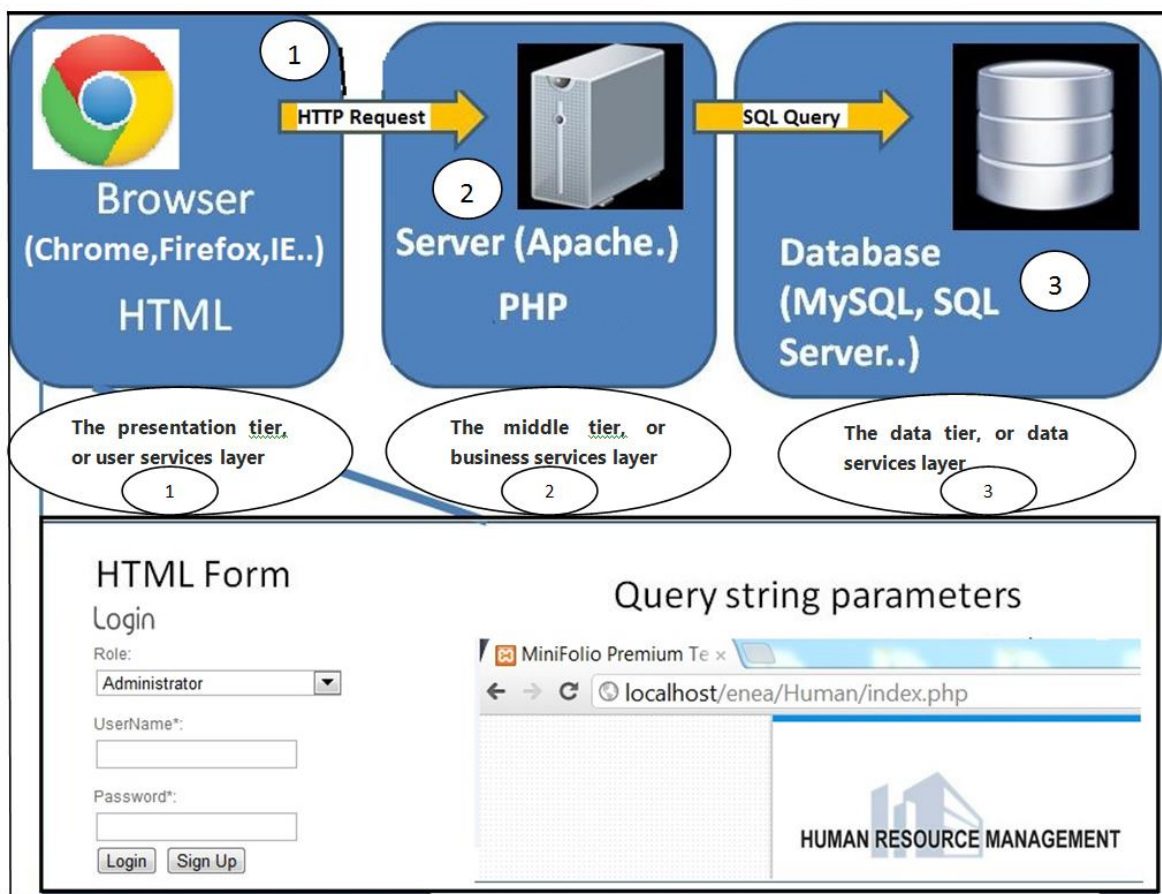


Figure 19: Representation of Three – Tier Architecture

4.1.1 Three – tiers` Layers

Here are the descriptions of the three layers (tiers):

1. The presentation tier, or user services layer. This layer gives to user an access to the application. In this layer data are been presented to the user. The main type of user interface for this layer is the Web – based application. This is done through use of Dynamic HTML.
2. The middle tier, or business services layer. This layer consists of data rules. In the middle tier developers can solve critical problems and get major productivity advantages. The components that make up this layer can exist on a server machine, to assist in resource allocation. These components can be used to enforce business rules, such as business algorithms and legal or governmental rules and regulations of the data, which are designed to keep data structures in line or within databases individual or multiple. Because these middle tier components are associated with a particular client, they can be used by all applications and can be moved to different locations, such as response time and other rules require. For example, simple edits can be placed on the client side to minimize network round-trips, or the rules of data can be placed in stored procedures.
3. The data tier, or data services layer. This tier interacts with persistent dada usually stored in database or in permanent storage. Here is Database Management System access layer. It can be accessed through the hierarchy of three tier architecture mode, through the middle layer. In some cases it can be accessed by the user layer.

4.2 Advantages of Using Three – tier Architecture

The advantages of my project while using three – tier approach provides flexibility, manageability, maintainability and scalability.

CHAPTER 5

USED TECHNOLOGY

5.1 PHP

5.1.1 Definition

According to Neil Smyth (2007), PHP is a server side scripting language. It allows developers to build logic into creation of web page content and handle data returned from web browser. In PHP are a number of extensions that make it easy to interact with databases, extracting data to be displayed on a web page and storing information entered by web site visitor back into the database [8].

With PHP, it is simple matter to embed dynamic activity in Web pages.

5.1.2 Advantages

The script is executed on the server, because of this PHP is fast and efficient. It takes advantage of multi – processing, large scale memory and other such enterprise level hardware features.

Using PHP, we have unlimited control over our Web Server [10].

PHP is easy to learn and use. It works seamlessly with HTML, this makes it accessible a broad community web designers.

Another main advantage is that it interacts with MySQL database to retrieve and store data. [8].

5.2 MySQL

MySQL is free to use and installed on vast numbers of Internet Web Servers, rises superbly to the occasion. It is robust, rich and exceptionally fast database management system that uses English – like commands.

The highest level of MySQL structure is a database.

CHAPTER 6

APPLICATION

6.1 Introduction


Software recruiting matches the requirements of University by each hierarchy positions of personnel with the skills of new recruiter. This is done by setting up the interview between University's staff; those people are in a selective commission that is related to the departments. Interviews are then conducted, and the candidates selected and approved in interview by the commission are recruited in University as new personnel.

The project develops a user- friendly web-based application that automates the routine activities for a Human Resource manager in Recruitment side.

To have access to the system all user must be authenticated. The project has a URL in the browser, after typing that URL the home page is displayed. The home page has a login application, where the users enter in the system after they have been authenticated.

The home page is shown in the Figure 20.

In login application the user enters depending in his/her role. She/he types his/her username and password. In case of being new applicant he/she clicks in Apply New button. In Figure 20 is shown also news, opinions and lasted updates from departments for job offers.



[Home](#)
[About us](#)
[Contact Us](#)



Welcome to Human Resource Management

This project creates software that stores and manages all data related with recruitment human resources office. It includes recruiting new personnel in University by some phases. Software recruiting matches the requirements of University by each hierarchy positions of personnel with the skills of new recruiter. This is done by setting up the interview between University's staff, those people are in a selective commission that is related to the departments. Interviews are then conducted, and the candidates selected and approved in interview by the commission are recruited in University as new personnel.

Login

Role:

Administrator

UserName*:

Enea

Password*:


Login
Apply

Apply for a New Job




Are you Graduated? Do you need a job? Apply here and improve your skills.


Latest Updates



New Job offer in
[Civil Engineering](#)
[Department](#)



New Job offer in
[Banking](#)
[Department](#)



New Job offer in
[Architecture](#)
[Department](#)

[read more](#)

Links


[Google](#)
[Yahoo](#)

Opinions of ex-Candidates

“ It is very good working here. People here are very polite.... ”

» [xxxx, xxx Department](#)

Gallery



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Figure 20: Home Page

6.2 Users

The users are Applicant, Department Representative and Administrator. They enter in system after being authenticated.

6.2.1 Applicant

After entering the role as Applicant and if he/she has applied before and he/she just want to see his/her profile, he/she enters his/her username and password. Otherwise he/she must click button Apply New to apply. Figure 21 shows the profile for current applicant and Figure 22 shows the application form.



Figure 21: Applicant Page

**HUMAN RESOURCE MANAGEMENT**

[Home](#) [About us](#) [Contact Us](#)

Application Form

First Name:	
Last Name:	
Address:	
City:	
Country:	
Home_Phone:	
Mobile_Phone:	
e-mail:	
Degree:	
Gender_Male:	Yes/No
Birthday:	0000-00-00
Marital_Status:	Yes/No
Experience:	

submit

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Figure 22: Application Form

Applicant can update his/her personal information. This is shown in Figure 23.

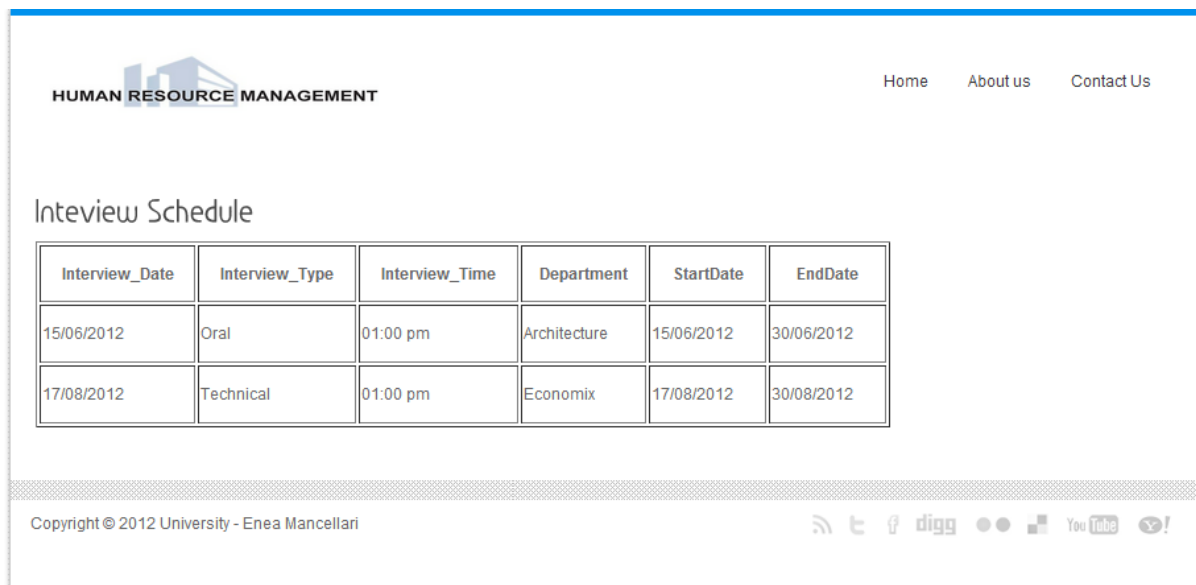
The screenshot shows a web application interface for updating personal information. At the top, there is a logo for 'HUMAN RESOURCE MANAGEMENT' and navigation links for 'Home', 'About us', and 'Contact Us'. The main heading is 'Update Your Personal Information'. Below this, there is a form with various fields, each with a label and a value. The fields are: First Name (Enea), Last Name (Mancellari), Address (Rr. Gani Homcani, L4), City (Pogradec), Country (Albania), Home_Phone (0035583223859), Mobile_Phone (00355673212831), e-mail (emancellari@epoka.edu.al), Degree (Graduated), Gender_Male (Yes), Birthday (1990-06-23), Marital_Status (No), and Experience (Xxxxxx). An 'Update' button is located at the bottom left of the form. The footer contains copyright information: 'Copyright © 2012 University - Enea Mancellari', and a row of social media icons including RSS, Twitter, Facebook, Digg, and YouTube.

Field	Value
First Name:	Enea
Last Name:	Mancellari
Address:	Rr. Gani Homcani, L4
City:	Pogradec
Country:	Albania
Home_Phone:	0035583223859
Mobile_Phone:	00355673212831
e-mail:	emancellari@epoka.edu.al
Degree:	Graduated
Gender_Male:	Yes
Birthday:	1990-06-23
Marital_Status:	No
Experience:	Xxxxxx

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Figure 23: Update Form

Applicant in his/her profile has another right that is Viewing Interview schedule. This is shown in Figure 24.



Interview_Date	Interview_Type	Interview_Time	Department	StartDate	EndDate
15/06/2012	Oral	01:00 pm	Architecture	15/06/2012	30/06/2012
17/08/2012	Technical	01:00 pm	Economix	17/08/2012	30/08/2012

Figure 24: Interview Schedule

6.2.2 Department Representative

After entering the role as Department Representative then he/she enters his/her username and password. The profile is shown in Figure 25.



ADD

[New Job](#)

Update

[Personal Information](#)

[Job](#)

View

[InterviewSchedule](#)

[Applicant skills](#)

Logout

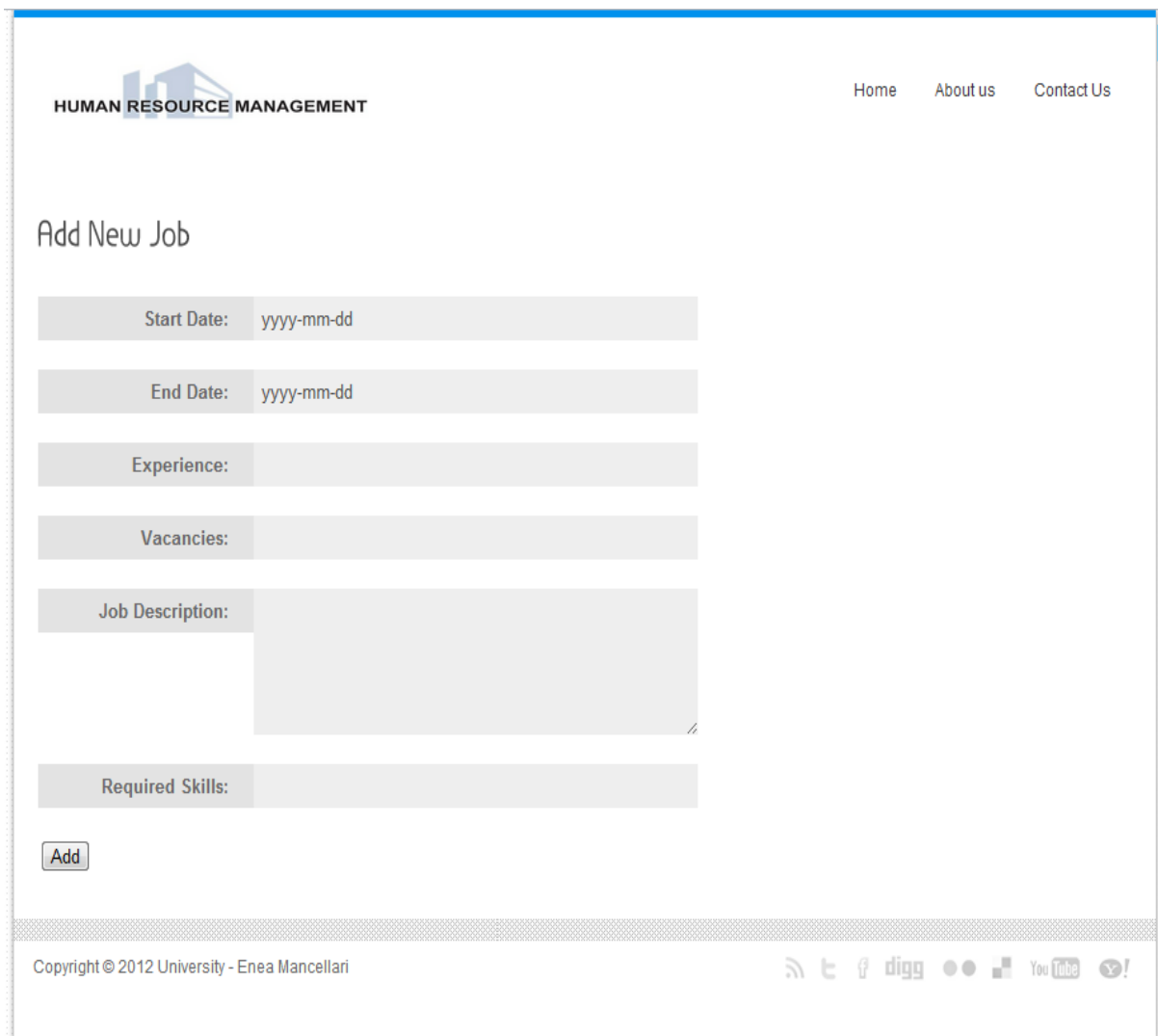
Apply for a New Job



Are you Graduated? Do you need a job? Apply here and improve your skills.

Figure 25: Department Representative page

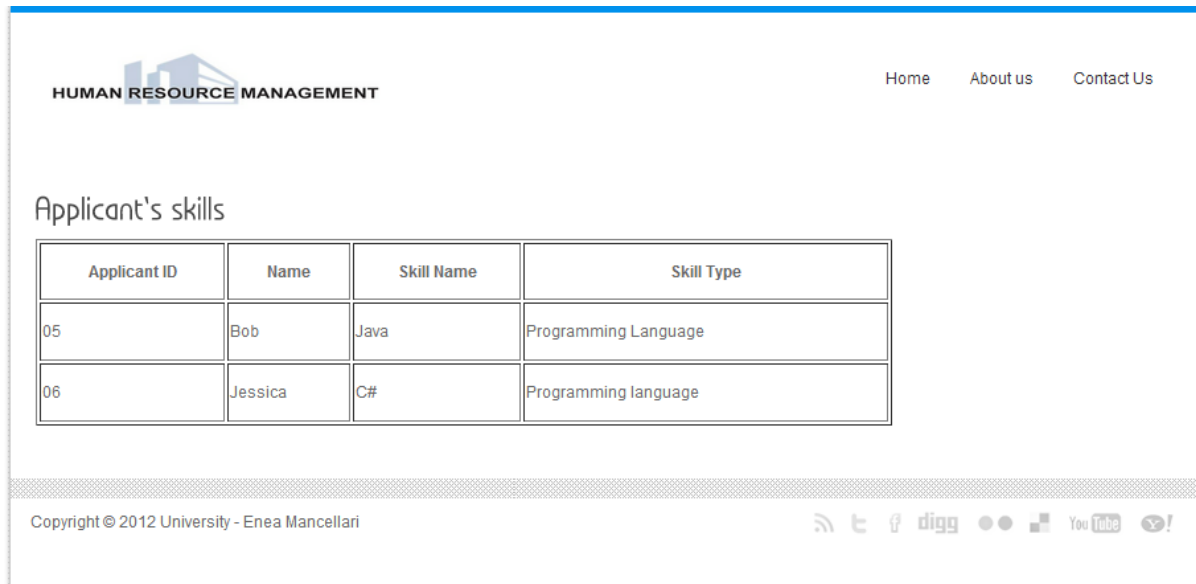
Department Representative can update personal information. An extra right of Department Representative is Adding New Job. This is shown in Figure 26.



The screenshot displays a web application interface for 'HUMAN RESOURCE MANAGEMENT'. The header includes a logo and navigation links for 'Home', 'About us', and 'Contact Us'. The main section is titled 'Add New Job' and contains a form with the following fields: 'Start Date' (placeholder: yyyy-mm-dd), 'End Date' (placeholder: yyyy-mm-dd), 'Experience', 'Vacancies', 'Job Description' (a large text area), and 'Required Skills'. An 'Add' button is located below the form. The footer contains copyright information 'Copyright © 2012 University - Enea Mancellari' and a row of social media icons including RSS, Twitter, Facebook, Digg, and YouTube.

Figure 26: Add New Job Form

Department representative can view Interview Schedule. He / She can also view the skills of applicants that have applied for job. Figure 27 shows the skills of applicants.



HUMAN RESOURCE MANAGEMENT

Home About us Contact Us

Applicant's skills

Applicant ID	Name	Skill Name	Skill Type
05	Bob	Java	Programming Language
06	Jessica	C#	Programming language

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Twitter Digg YouTube

Figure 27: View skills of Applicants Page

6.2.3 Administrator

After entering the role as Administrator then he/she enters his/her username and password. In Administrator profile are many features. Administrator has the control of the system. The profile is shown in Figure 28.

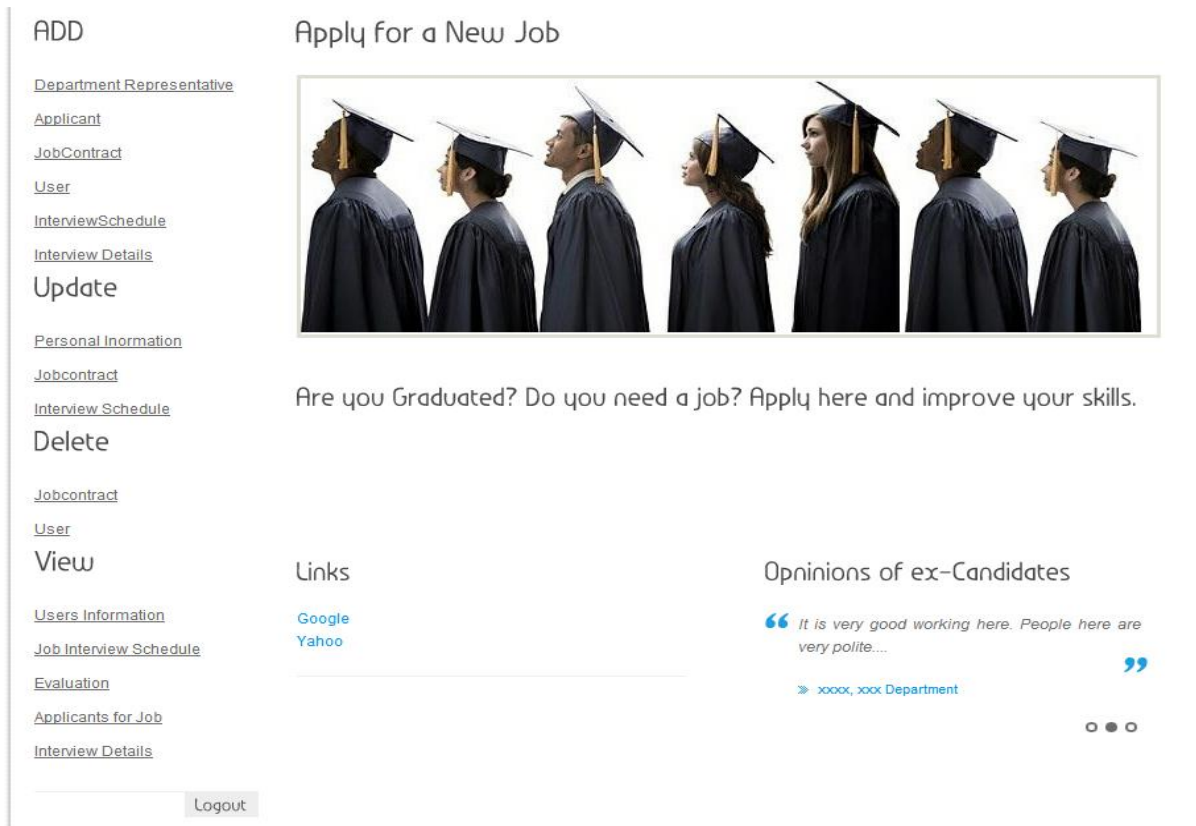


Figure 28: Administrator Profile Page

Administrator has the right to add a Department Representative, an Applicant, a Job Contract also he / she can add a user login depending on his / her role. Figures 29 – 32 shows those applications respectively.

HUMAN RESOURCE MANAGEMENT

[Home](#) [About us](#) [Contact Us](#)

Add a Department Representative

Name:

Department ID:

Phone:

e-mail:

[Add](#)

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[RSS](#) [Twitter](#) [Facebook](#) [Digg](#) [Google+](#) [YouTube](#) [Vimeo](#)

Figure 29: Add a Department Representative

**HUMAN RESOURCE MANAGEMENT**

[Home](#) [About us](#) [Contact Us](#)

Add new applicant


First Name:	
Last Name:	
Address:	
City:	
Country:	
Home_Phone:	
Mobile_Phone:	
e-mail:	
Degree:	
Gender_Male:	Yes/No
Birthday:	0000-00-00
Marital_Status:	Yes/No
Experience:	

Add

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Figure 30: Add a New Applicant

HUMAN RESOURCE MANAGEMENT

[Home](#) [About us](#) [Contact Us](#)

New Contract

Applicant ID:

Job ID:

Start Date:

yyyy-mm-dd

End Date:

yyyy-mm-dd

Active:

Negotiated:


Terms:

Add

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Figure 31: Add a New Job Contract

HUMAN RESOURCE MANAGEMENT

[Home](#) [About us](#) [Contact Us](#)

Add new User Login

Username:

Password:

Role:

Active:

Add

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Figure 32: Add a New User Login

CHAPTER 7

CONCLUSION

7.1 Conclusion

Beside the main knowledge, we noted and detected a number of additional aspects.

Introducing HR recruitment in University provides an opportunity for an HR department to get a good profile and better image.

Making the application Web – Based helps the Applicant to be less emotional in giving their skills and to be more clear, because of a structured form. In this case application is flexible to the applicant. Also it is flexible to the administrator, she/he has not to be confused in what the applicant`s skills are and for what job is interested. She/he just manages and directs them to the related department.

Also the department representative has flexibility in using the application because she/he can view the applicants that applied for job vacancies that department has.

Having and guaranteeing security and confidentiality of input data is another important issue for the users. Overall guaranteeing security to the applicants for their given data and they will be fell safe.

Final observation is that this project develops a user- friendly web-based application that automates the routine activities for a Human Resource manager in Recruitment side.

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