# **Analysis**

# 3.4 Case Diagram:-

The case diagram of the project explain the main tasks that user (Admin, Visitor) can do while working with the solution.

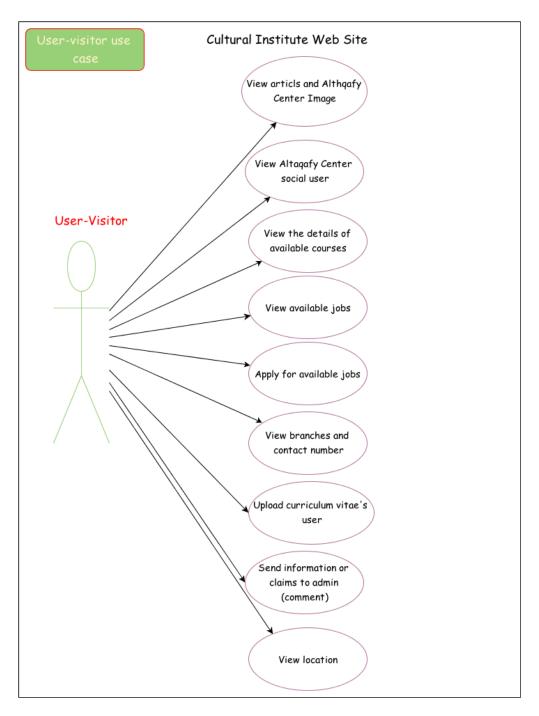


Figure 26:User-Visitor Use Case Diagram

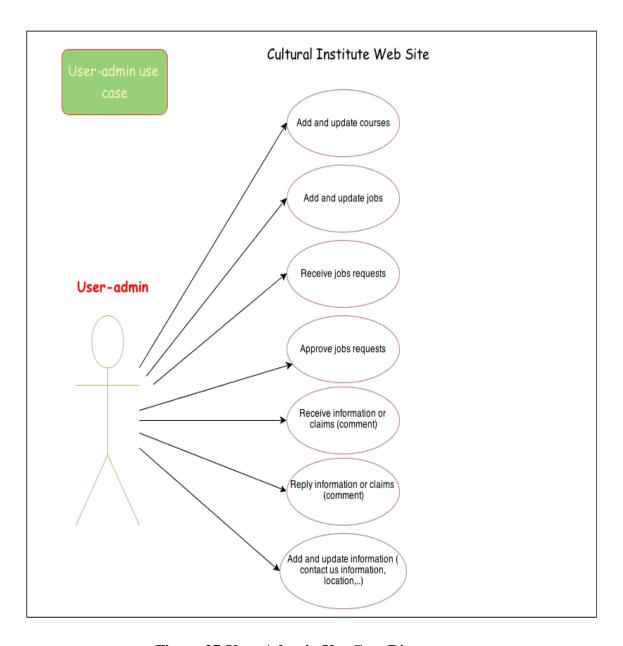


Figure 27:User-Admain Use Case Diagram

### 3.5 Data Flow Diagram:-

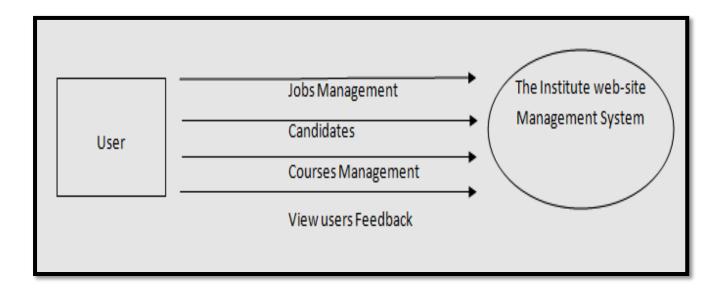


Figure 28: Data Floaw diagram

# **DATABASE DESIGNING**

#### **4.1 Normalization:**-

The process of organizing data to minimize redundancy. Normalization usually involves dividing a database into tables and defining relationships between the tables. The objective is to isolate data so that additions, deletions, and modifications of a field can be made in just one table and then propagated through the rest of the database via the defined relationships.

There are three main normal forms, each with increasing levels of normalization:

1. First Normal Form (1NF): Each field in a table contains different information. For example, in an employee list, each table would contain only one birthdate field.

- 2. Second Normal Form (2NF): Each field in a table that is not a determiner of the contents of another field must itself be a function of the other fields in the table.
- 3. Third Normal Form (3NF): No duplicate information is permitted. So, for example, if two tables both require a birthdate field, the birthdate information would be separated into a separate table, and the two other tables would then access the birthdate information via an index field in the birthdate table. Any change to a birthdate would automatically be reflecting in all tables that link to the birthdate table.

There are additional normalization levels, such as Boyce Codd Normal Form (BCNF), fourth normal form (4NF) and fifth normal form (5NF). While normalization makes databases more efficient to maintain, they can also make them more complex because data is separated into so many different tables.

#### 4.2 Entity Relationship Diagram (ERD):-

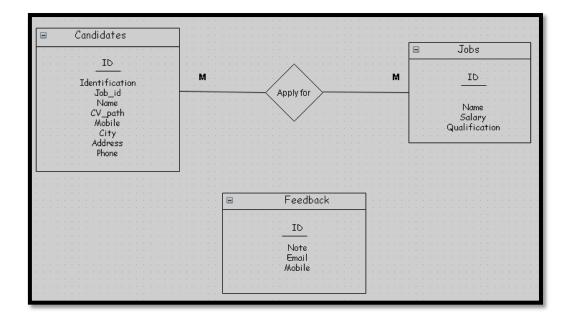


Figure 29: ERD

# **4.2.1 Entities Description:-**

Entity Name	Description
Jobs	Data about jobs
Candidates	People that can apply for new jobs
Notes	Feedback of users

**Table 1: Entities Description** 

# 4.2.2 creation of tables :-

# 4.2.2.1 Candidate table:

ADMIN-DC8F2Cbo.candidates				
Column Name	Data Type	Allow Nulls		
candidate_ID	int			
candidate_Identification	nvarchar(500)			
candidate_Name	nvarchar(500)			
candidate_CV_Path	nvarchar(500)			
candidate_Job_ID	int			
Mobile	nvarchar(50)			
Email	nvarchar(50)			
City	nvarchar(50)			
Address	nvarchar(50)			
Phone	nvarchar(50)	<b>~</b>		

Figure 30: Candidate table

#### 2- Jobs table:

ADMIN-DC8F2C7ite - dbo.Jobs					
	Column Name	Data Type	Allow Nulls		
<b>₽</b> 8	Job_ID	int			
	Job_Name	nvarchar(100)	<b>✓</b>		
	Job_Salary	decimal(18, 0)	<b>✓</b>		
	Job_Qualification	nvarchar(100)	<b>✓</b>		

# Figure 31: Jobs table

# **3-Notes table:**

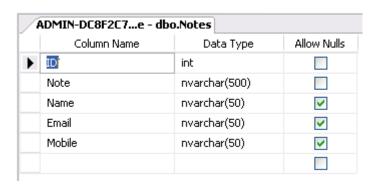


Figure 32: Notes table

# **SYSTEM DEVELOPMENT**

# **5.1 System Development Tools:**

# System design:-

System design consists of system architecture, case diagrams, and database models and data dictionary.

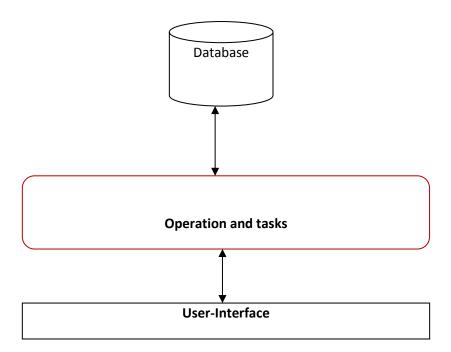


Figure 33 : System Design

#### 1- Data base development: MS Sql-server.

MS Sql-server is a <u>relational database management system</u> developed by <u>Microsoft</u>. As a database, it is just a software product whose primary function is to store and retrieve data as requested by other software applications, be it those on the same computer or those running on another computer across a network (including the Internet). There are at least a dozen different editions of Microsoft SQL Server aimed at different audiences and for different workloads (ranging from small applications that store and retrieve data on the same computer, to millions of users and computers that access huge amounts of data from the Internet at the same time).

#### 2- Interface and function tool: Microsoft .net c# and asp.

ASP.NET is a Web application framework developed and marketed by Microsoft to allow programmers to build dynamic web sites, web applications and web services. It was first released in January 2002 with version 1.0 of the .NET Framework, and is the successor to Microsoft's Active Server Pages (ASP) technology. ASP.NET is built on the Common Language Runtime (CLR), allowing programmers to write ASP.NET code using any supported .NET language. The ASP.NET SOAP extension framework allows ASP.NET components to process SOAP messages.

#### **3- Telerikcontrols** (http://www.telerik.com/company.aspx):

It is a vendor whichprovides rich Windows/ASP.NET/WPF controls and component for which you have to pay.

### 4- Graphical Design Tool: Photo editor:

A picture editor, sometimes known as a photo editor, is a professional who collects, reviews, and chooses <u>photographs</u> and/or <u>illustrations</u> for publication in alignment with preset guidelines. Publications include, but are not limited to, <u>websites</u>, <u>books</u>, <u>magazines</u>, <u>newspapers</u>, <u>art galleries</u>, <u>museum</u> catalogs, and corporate products, such as <u>catalogs</u> and annual reports. In choosing photographs and illustrations, picture editors take into account their publication's standards, needs, and budget.

# 5- Design Tools: VISIO.

Microsoft Office Visio) is a 2D-object drawing application and is part of the Microsoft Office suite.

#### 6- Gliffy.com:

Professional-quality flowcharts, diagrams, floor plans, technical drawings and more.

The system development process involves applying each of the activities identified in project methodology chapter. The process includes system analysis, design and implementation and design.

# **SYSTEM IMPLEMENTATION**

The web-site consists of many web-forms, the user when access the web-site, first look will be the Home-page.

The Home page as shown contains images that describe the work inside the institute.

Also contain a menu in the right side of the page that will exists in all the pages of the web-site.



Figure 33: Home page

#### 6.1 Home page:

The home page consists of header part and main.

- 1) The header contains 2 images.
- 2) The right hand side contains the login user and also the menu.
- 3) The main part contains information about the web-site

The menu contains also items

- 4) Available Courses
- 5) Jobs
- 6) Feedback
- 7) Contact us
- 8) Location on Map.

### **6.2** Pages Description:-

# **6.2.1** Available Courses Page:

The page contains all courses that offered by the institute.



Figure 34: Available Courses Page

#### 6.2.2 Jobs page:

This page enables user to apply to available jobs by sending their information and CV.



Figure 35: Jobs page

This page enables users to send their notes or claims.

ا حالت الله الله الله الله الله الله الله ا	العالي للآ حوري و تر وزارة التربية والتما الموسسة العامة للتدريب
ملاحظات الاسم:  الاسم:  الاسم:  البريد لالكثروني: *  الجوال:  ملاحظات: *	الصفحة الرئيسة الدورات المتوفرة التوظيف ملاحظاتكم اتصل بنا موقعنا

Figure36 : Feedback page

### **6.2.4** Contact us page:

This page shows all contacts of the institute in the al cities that the institute exits.



Figure 37: contact us page

# 6.2.5 Location page:

The page shows the map location in Riyadh branch.



Figure 38: Location page

# **SYSTEM TESTING**

We put our solution "INSTITUTE WEB-SITE" into the action, and we tried to take the feedback from the users of the system about main questions like

- How easy the system?
- Is the system covers all the main activities?
- Is there a difficulty in the introduction of processes and data retrieval?
- Evaluate the web-site with some remarks Advantages and disadvantages.
- What the main activities that should be developed into the system in the coming versions?

These are the main questions that we tried to answer by system users.

# **FUTURE WORK**

The application can be improved by adding more functionality like reports and financial and accounting subsystem .

- 1- Statistically reports like
- 2- Financial subsystem.
  - a. Billing.
  - b. Receivable.
  - c. Costs.