

ASPIRIN SOFT

Online CV Portal (OCP)

INITIAL DESIGN REPORT



PROJECT ASSISTANT :

Ali Orkan BAYER

TEAM MEMBERS:

Bayram ERSOY

Emre ARSLAN

Gökhan ÇETİN

Berkay DEMİRER

TABLE OF CONTENTS

1. INTRODUCTION	4
A. PURPOSE OF THIS DOCUMENT	4
B. PROBLEM DEFINITION	4
C. PROBLEM SCOPE	5
D. WHAT HAS BEEN DONE SO FAR	6
1. <i>Work Summary</i>	6
2. <i>Project Overview</i>	6
2. DESIGN CONSTRAINTS	8
A. TIME CONSTRAINTS	8
B. SOFTWARE CONSTRAINTS	8
C. PERFORMANCE CONSTRAINTS	8
D. USER INTERFACE	9
3. SYSTEM DESIGN	10
A. PROCEDURAL DESIGN	10
1. <i>Use Case Diagrams</i>	10
2. <i>State Transition Diagrams</i>	15
B. INTERFACE DESIGN	17
C. ARCHITECTURAL DESIGN	23
1. <i>User Management Module</i>	23
2. <i>CV Management Module</i>	24
3. <i>Position Available Management Module</i>	26
4. <i>Search Management Module</i>	27
5. <i>Site Management Module</i>	28
D. DATA DESIGN	34
1. <i>Dataflow Diagrams</i>	34
2. <i>Database structure</i>	38
3. <i>Data Dictionary</i>	43
4. FUTURE WORK	47
5. TESTING	47
A. UNIT TESTING	47
B. INTEGRATION TESTING	48
6. GANNT CHART	49

ASPIRIN SOFT

1. INTRODUCTION

A. Purpose of This Document

The purpose of this document is to describe the overall structure of the project in detail. Starting with a problem definition and giving solutions to the problem topic then stating the current progress of the project. The design constraints is stated in the 2nd section and a perfect abstraction of the system design is given in the 3rd section. In the latter sections you can find information about the upcoming stages for the project.

This report also covers the updated versions of most of the requirement analysis report topics.

B. Problem Definition

Due to the rapidly increasing amount of internet usage by the jobseekers and companies to find jobs and/or fill empty positions, everyday one more career planning website is added to the arsenal. The bigger the site number gets the harder it is for the user to manage his work.

A common way of internet usage in the recent times is to seek what you are looking for from the portals that can create lists of data and links of one certain kind that you have been looking for and that makes it possible for the user to browse through the sites from a single entry point. (for example search engines that list products from many different online stores) The increasing number of career planning sites point the demand for a single entry portal in this area. The main idea lying behind the project is this single entry portal need.

The project aims to create a portal to organize the users' work somehow and make the internet usage for employment more time efficient and effortless. The portal is going to be in coordination with the present career planning sites and create a huge pool of CVs / available positions obtained from the associative sites.

We are naming the project "The ONLINE CV PORTAL" Since it is going to be on top of the other career planing sites and is going to be the portal of the online CVs, most suitable simple and direct name for the project.

There will surely be user specific needs since both jobseekers and employers will be included in the project from many different fields of the business world. The features of the Online CV Portal is discussed in detail in section 1.C.2.

C. Problem scope

The Online CV Portal aims to reach users from every fields of the business world. Anyone who seeks a job and every company is a potential user for the Online CV Portal. In the modern world internet usage is a part of the daily life, including people from each age and social class thus it is probably the best way to seek & find a job.

The portal users are going to be categorized in 2 main groups. The “jobseekers” and the “employer” Everyone is going to choose to be either a jobseeker or an employer during the registration process because both of them are going to have different interfaces and specific features.

More of the portal users are going to be the jobseekers since there are more people looking for jobs than the number of companies / employers. On the other hand the employers’ portal usage is going to be much more frequent since they will be dealing with multiple available positions of the company and so their work needs more organization (which is in fact the main reason for them to need the Online CV Portal)

The main functionality of the Online CV Portal is to supply more information in a much more organized way to the user. The main and in fact the only functionality of the Portal for the jobseeker is to find available positions and make him apply to one or more and find potential employees for the companies and make the companies call them for a job interview.

The Online CV Portal’s role starts with the submission of a CV / available position and finishes with a succesful job interview. If the job interview is not succesful the process goes on iteratively.

D. What has been done so far

1. Work Summary

Up to date the main functionalities and all the features of the Online CV Portal have been decided on. The abstract system design is nearly complete and we have started to work on the user interface although it was And initial version of it has been presented in the section 3.B From now on we only need to tune the details a bit more and continue with the implementation.

2. Project Overview

A. Project Features

Services Provided By the Portal:

To be able to distinguish what special services the Online CV Portal will provide we should first examine the services the user can find in a career planning site and then determine where it gets effort and time consuming to browse multiple sites. There are 2 parties in a career planning site; the jobseeker and the employer. There will be distinct features on the Online Cv Portal for both. Now lets have a look at the career planning sites and their services.

-What services does a jobseeker get from a career planning site?

A jobseeker creates a CV on a career planning site and simply browses through the positions available from different companies and applies to any position s/he likes that are in that websites database. Since most of the companies do not work with more than one career planning site, the jobseeker has to browse multiple sites in order to evaluate more positions available.

- What services does an employer get from a career planning site?

In the present career planning sites, an employer can submit a position available and can only interact with the jobseekers that reply unless the company makes a deal with the career planning site to be able to browse through the whole CV database which is rather costly for an average sized company. An employer can submit the companies available positions to any career planning site for free but would have to deal with all of them individually which brings some overhead that can easily be seen when examined in detail.

Now let's look at it from the Online Cv Portal point of view..

The main advantages of having the Online CV Portal:

First of all there is one thing that we need to make clear, helping a jobseeker find a job, or helping an employer to fill an empty position is basically the same thing. That is because when you help jobseekers find suitable jobs faster, that means you are making the companies find their employees faster. And when you help a company fill an empty position then you are making someone not wait to find the suitable job for him/her. Since there are a certain amount of available positions at a certain time you can only help jobseekers by making the filling of those positions faster and helping him find the most suitable position for him which is by making it possible for him to browse more positions available which is the main aspect of the Online Cv Portal as stated above.

The only other way to help a jobseeker would be to actually create available positions ☺ While it is not the place of a web-site to do that, the Online Cv Portal aims to help in that way also. Making things more time efficient and effortless in the online employment world will actually make more companies list their positions available and that means more options for a jobseeker... So the Online Cv Portal will not only make the online employment more efficient it will also help it get bigger overall.

Another thing that should be taken to account is that, the Online Cv Portal's database will have a huge size and that database will make it possible to keep statistics of many things really accurately. This will be used to create some useful features for the user.

B. Distinct Features of the Online CV Portal

The Online CV Portal is going to supply some distinctive features to the user. Two of which are crucial.

The user (both the jobseeker and the employer) is going to have an auto-notification system for which they can set the preferences. The auto notification handler is going to give notifications to the user when a CV or Position Available matching their preferences is submitted to the system. Detailed information about the auto-notification handler is going to be given in the final design report.

The second distinctive feature is the statistics feature. Which can give really detailed statistics obtained from the HUGE OCP Database. For example, users can see how much time it takes for a jobseeker of a certain job to find a new job or how much time it takes for a company to fill their empty positions. The complete list of the available statistics is going to be given in the final design report.

2. DESIGN CONSTRAINTS

A. Time Constraints

The Online CV Portal is a long term project and as stated previously on the analysis report we are planning to finalize it by June 2008. The Gantt chart shows the first term schedule and as you can see, a prototype & demo will be ready by the end of the semester. During the second term we will work on implementing the project by the help of the research material we got through the analysis and design stages. After finishing a prototype we will have only 4-5 months to complete the implementation, testing and debugging. Due to the short period of time we have for testing and debugging, we need to implement the system error free as much as possible. This is probably the most important constraint for the project.

B. Software Constraints

Featuring the webMethods product suite and Enterprise Transaction Systems products our corporate company SoftwareAG is one of the world's leading independent providers of Business Infrastructure Software. we are luckily supplied all of necessary tools by them to implement the project. We need to spend some time to learn how to use the tools. We are hoping them to be helpful on designing, deploying and re-using Web services, governing SOA-based initiatives.

Although we have all the necessary software for the implementation process we will need some extra software for the testing process. Because the Online CV Portal is going to interact with other websites and to be able to test the Online CV Portal we are going to need representative websites. We will have to implement them and test our system which is a necessity and a big overhead.

C. Performance Constraints

In the modern daily life performance is an issue in every business field, for example if your pizza delivery takes more than 30 minutes you get your pizza free! The same applies for everything even for an online portal.

We will assume that all potential users are monitoring their activities very closely and try to supply a high performance system.

The constraint on this subject is the size of the project. The Online CV Portal database is going to be the size of the total of many career planning sites' databases. Which makes it huge and difficult to run on high performance on every module. To overcome this the we

need to make integration of the system modules efficiently working. Firstly each on their own and then as a whole.

D. User Interface

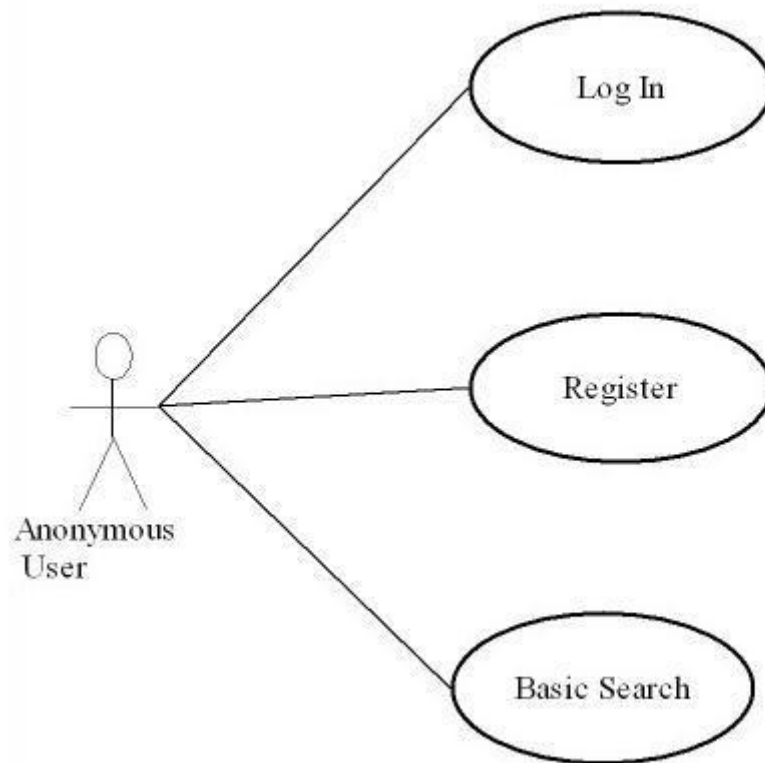
Although the Online CV Portal project is basically creating a Service Oriented Architecture it is going to be only a website for vast majority of the users. So the graphical interface has a significant importance for the project. Despite the limited amount of time we have to complete the infrastructure of the project (which in fact should be the main part of the project) we also need to spend a noticable amount of time on the interface design.

3. SYSTEM DESIGN

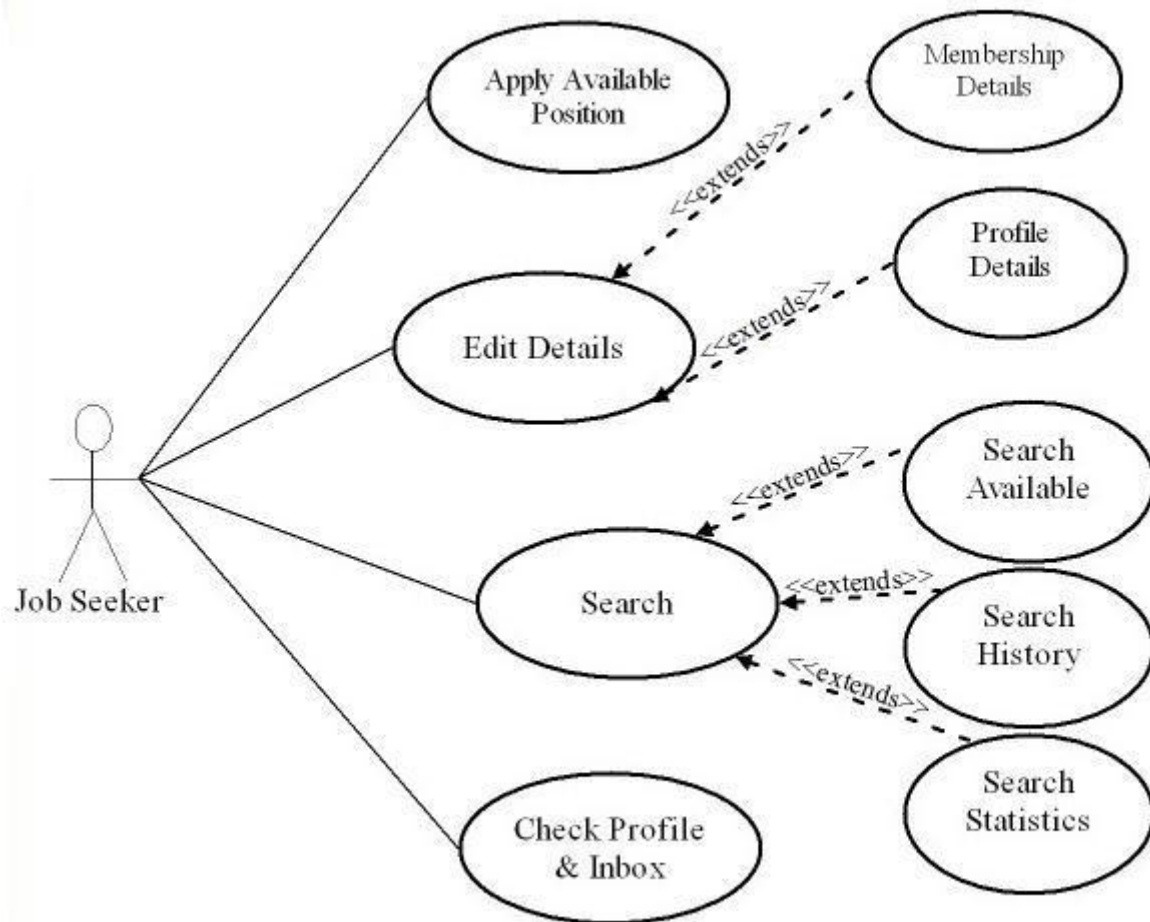
A. Procedural Design

1. Use Case Diagrams

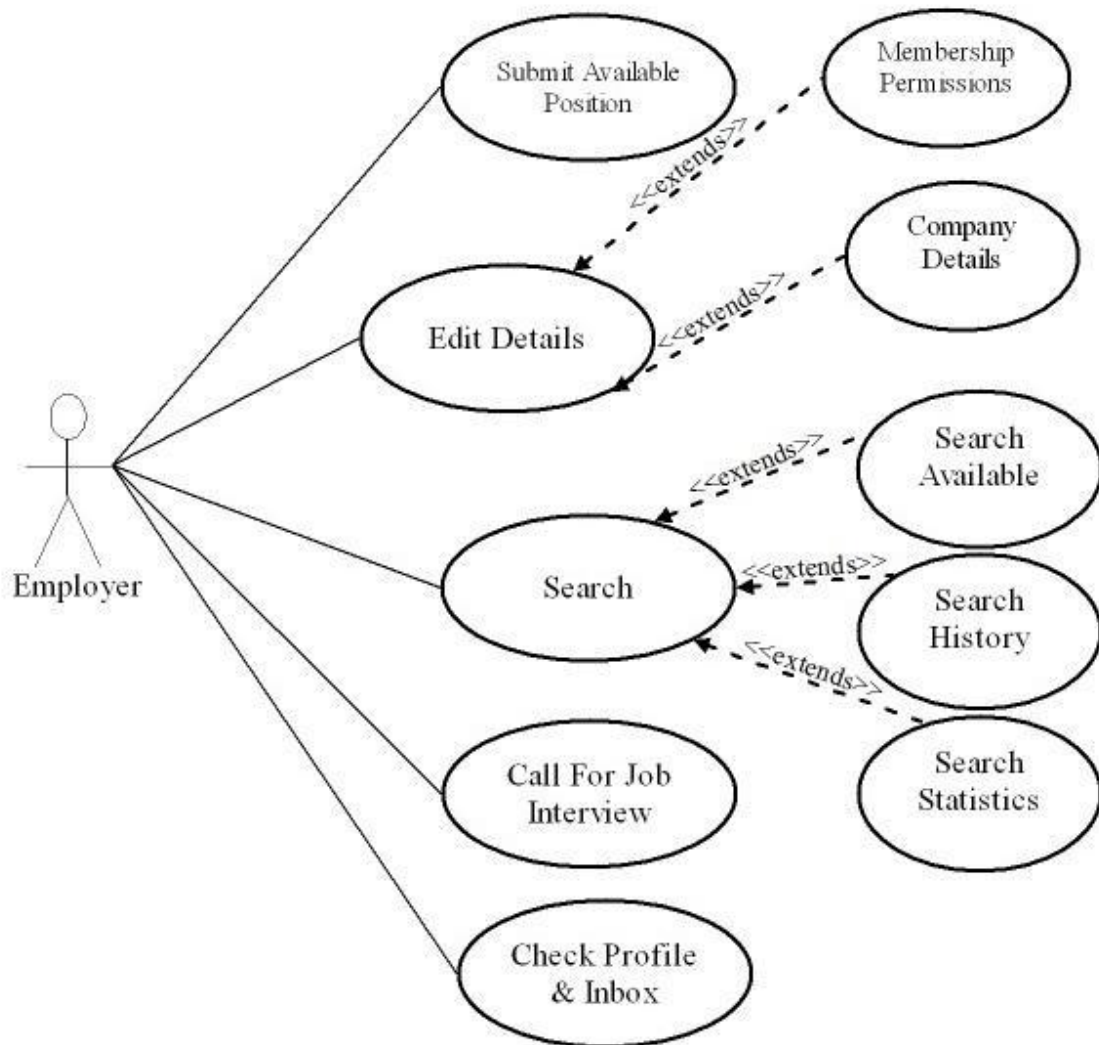
USE CASE DIAGRAM FOR THE ANONYMOUS USER:



USE CASE DIAGRAM FOR THE JOBSEEKER:



USE CASE DIAGRAM FOR THE EMPLOYER:



USE CASE DIAGRAM FOR THE ADMINISTRATOR:



1. Use Case Scenarios

Use case scenario for the anonymous user:

The anonymous user should register or login to the system by using the online form on the web gui. If the user doesn't log-in he or she can only make a basic search.

Use case scenario for the jobseeker:

After logging in as a jobseeker the user can edit his details and preferences, edit his CV and settings. He can check his inbox for any messages. He can do a search for the positions available and apply to a job.

Use case scenario for the employer:

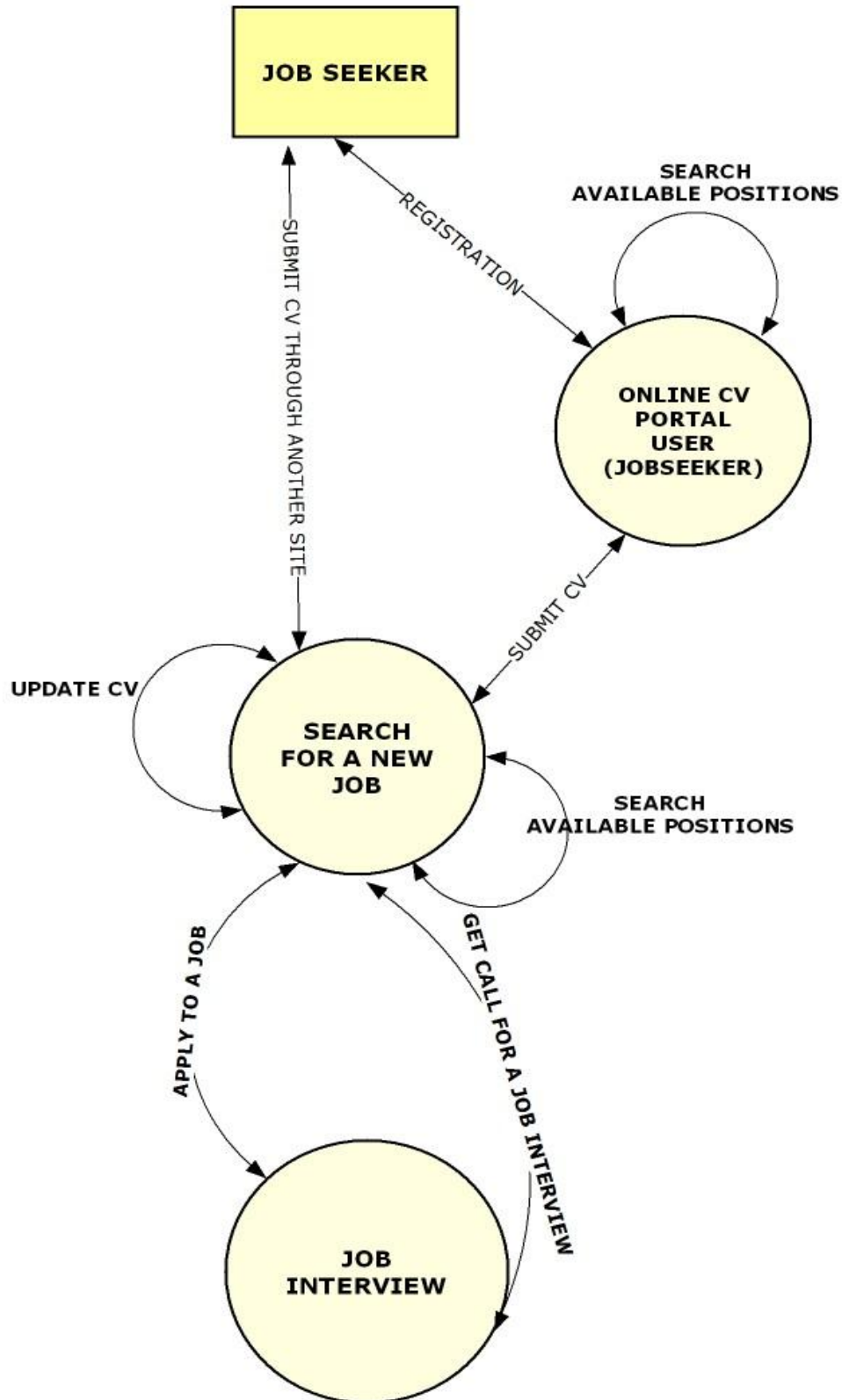
After logging in as an employer the user can edit details and preferences, settings and check his/her inbox for any messages. He can do a search for the CVs and call a jobseeker for a job interview.

Use case scenario for the administrator:

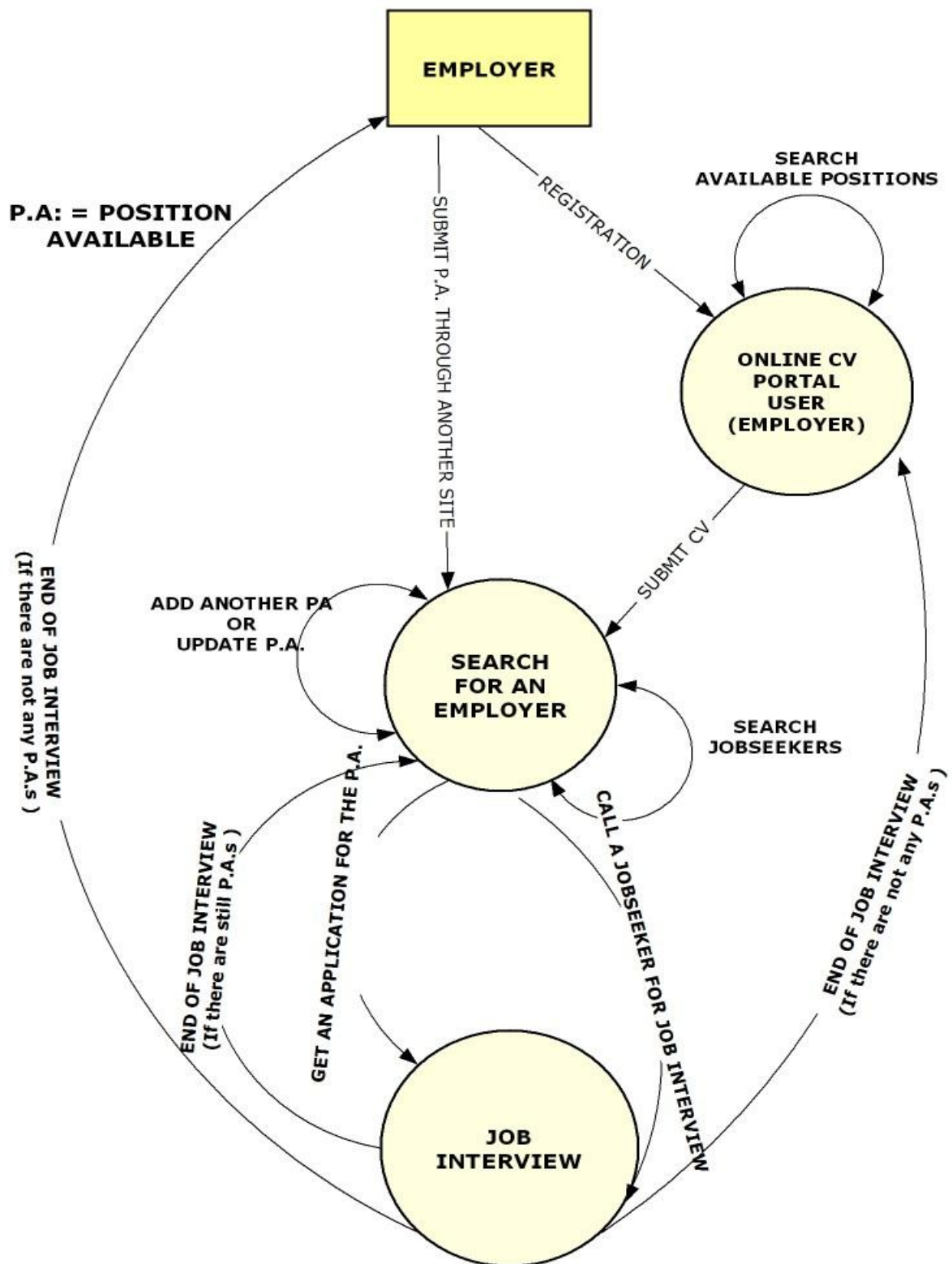
The system administrator can edit details of the users (jobseeker & employer) which includes confirmation of the user account and deletion of the account on possible violation of terms of use. The administrator is also responsible for the websites layout after logging in as an administrator s/he can change or add banners and apply any updates on the website's layout. Lastly the administrator can check system messages / complaints and send messages.

2. State Transition Diagrams

STATE TRANSITION DIAGRAM FOR THE JOBSEEKER



STATE TRANSITION DIAGRAM FOR THE EMPLOYER



B. Interface design

The interface design is one of the most important parts of the subject as stated above in the design constraints section. This is an initial design of the interface, and is going to be updated shortly, the functionality remaining the same.

THE OCP MAIN PAGE SCREEN SHOT

Here there is a screen shot of the OCP main page. As it can be seen, there is a user login panel using username and password fields ; if the user forgets his/her password by using password reminder button system automatically sends an e-mail to the user's e-mail that was given before during registration. Below that part you can see the registration and firms that are members of the OCP. In the middle, new member firms can be seen and anybody who wants to give advertisement will use the rightmost link.

There are some buttons also upside which are formed of sectors , departments , cities/countries, date of positions and key word .First the ones that user needs are selected and then the search button will be pushed to see available positions for him/her.

THE REGISTRATION PAGE SCREEN SHOT

OnlineCV PORTAL

Tüm Sektörler Departmanlar Ülke/Şehir İlan Tarihi Anahtar Kelime İlan Ara

Üye Girişi
Kullanıcı Adı:
Şifre:

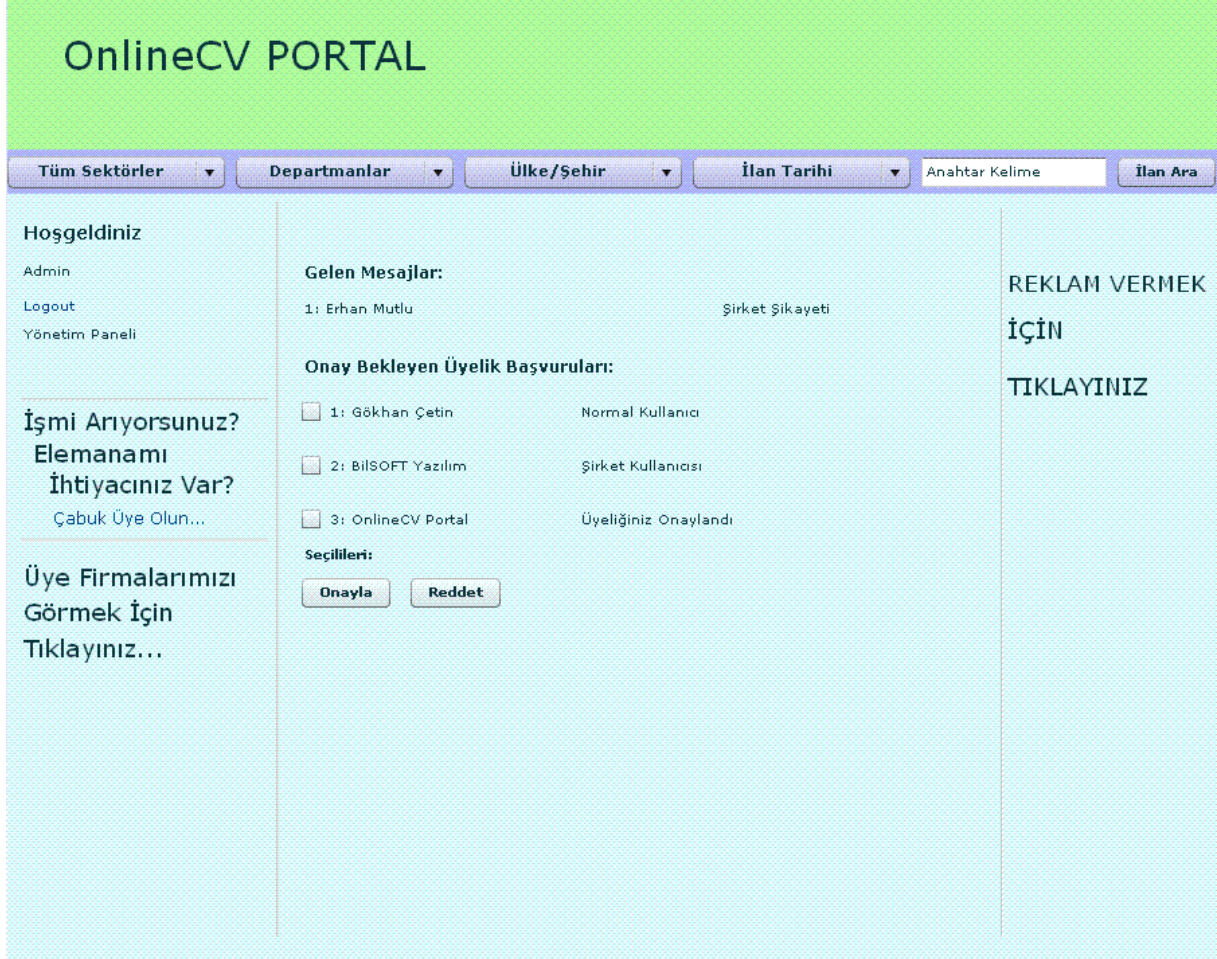
İşmi Arıyorsunuz? Elemanımı İhtiyacınız Var? Çabuk Üye Olun...

Yeni Üyelik Başvuru Formu:
Ad:
Soyad:
TC Kimlik NO:
e-mail:
e-mail tekrar:
Şifre:
Şifre Tekrar:
☐ Şirket Hesabı ☐ Normal Kullanıcı
Şirket Bilgilerini Girmek İçin Tıklayınız.
Cv Ekleme İçin Tıklayınız.

REKLAM VERMEK İÇİN TIKLAYINIZ

Here you can see the registration page. User must fill the name "Ad", surname "Soyad", T.C. id no "TC Kimlik NO", e-mail "e-mail", e-mail confirmation "e-mail tekrar", password "Şifre", password confirmation "Şifre Tekrar" forms. And must select the type of memberance and then if a normal user can fill his/her Cv by "Cv Ekleme İçin Tıklayınız" link. If it is a firm memberance, they can fill firm information by "Şirket Bilgilerini Girmek İçin Tıklayınız" link.

THE ADMIN PAGE SCREEN SHOT



Here you can see the admin page. Different parts here are in the middle. Admin can see new messages with username and subject information. Under that awaiting memberance applications with usernames or firm name and memberance status. The admin can logout by using the “Logout” button and can go through his/her control panel by using “Yönetim Paneli” button.

THE EMPLOYER'S PAGE SCREEN SHOT

OnlineCV PORTAL

Tüm Sektörler

Departmanlar

Ülke/Şehir

İlan Tarihi

Anahtar Kelime

İlan Ara

Hoşgeldiniz

Uzman İnsan Kaynakları

Bilgilerimi Güncelle

İşmi Arıyorsunuz?
Elemanamı
İhtiyacınız Var?

Çabuk Üye Olun...

Üye Firmalarımızı
Görmek İçin
Tıklayınız...

Gelen Başvurular:

1: Erhan Mutlu	Beklemede
2: Mahmut Yusuf Güngören	Görüşme İsteği İletildi
3: Bayram Ersoy	Reddedildi

Gelen Mesajlar:

☐ 1: OnlineCV Portal Admin	Şirket Bilgi Güncelleme
☐ 2: OnlineCV Portal Admin	Özel Üyelik Onaylandı
☐ 3: OnlineCV Portal	Üyeliğiniz Onaylandı

Seçilileri:

Sil

Cevapla

Yeni İş İlanı:

İş İlanı verme sayfasına gitmek için tıklayınız.

REKLAM VERMEK
İÇİN
TIKLAYINIZ

Here you can see firm user's page. Member can see incoming applications by name and status information. Under that there are coming messages by name and subject information. User can select any combination of them and can delete by "Sil" button and can reply by "Cevapla" button. And can give a new position by using "İş ilanı verme sayfasına gitmek için tıklayınız" link.

THE JOBSEEKER'S PAGE SCREEN SHOT

OnlineCV PORTAL

Tüm Sektörler

Departmanlar

Ülke/Şehir

İlan Tarihi

Anahtar Kelime

İlan Ara

Hoşgeldiniz

Bayram ERSOY

Bilgilerimi Güncelle

İşmi Arıyorsanız? Elemanımı İhtiyacınız Var?

Çabuk Üye Olun...

Üye Firmalarımızı Görmek İçin Tıklayınız...

İş Başvurularım:

1: AspirinSOFT Yazılım Uzmanı	Beklemede
2: Uzman İnsan Kaynakları Sistem Uzmanı	Beklemede
3: NT Solutions Web Developer	Reddedildi

Gelen Mesajlar:

☐ 1: AspirinSOFT	İş Başvurusu Hakkında
☐ 2: Uzman İnsan Kaynakları	İş Başvurusu Hakkında
☐ 3: OnlineCV Portal	Üyeliğiniz Onaylandı

Seçilileri:

Sil

Cevapla

Yeni Mesaj Yaz:

Kime:

Mesaj:

Gönder

REKLAM VERMEK İÇİN TIKLAYINIZ

Here you can see the jobseeker's page. His/her name and surname can be seen. Applied positions are categorized by type and status. Under that user sees incoming messages by name and subject information. User can select any combination of them and can delete by "Sil" button and can reply by "Cevapla" button. And can write a new message with receiver information and by pushing "Gönder" button message is sent.

THE SEARCH RESULT PAGE SCREEN SHOT

OnlineCV PORTAL

Tüm Sektörler

Departmanlar

Ülke/Şehir

İlan Tarihi

Anahtar Kelime

İlan Ara

Üye Girişi

Kullanıcı Adı:

Şifre:

Giriş

Şifremi Unuttum

İşmi Arıyorsanız? Elemanamı İhtiyacınız Var?

[Çabuk Üye Olun...](#)

Üye Firmalarımızı Görmek İçin Tıklayınız...

ARAMA SONUÇLARI:

İş İlanı:	Şirket:	İlan Tarihi:
1: Yazılım Uzmanı	Aero Soft	22.11.2007
2: Yazılım Uzmanı	Aero Soft	22.11.2007
3: Network Uzmanı	Sisko Systems	22.11.2007
4: Proje Yöneticisi	NetSoft	22.11.2007
5: Müşteri İlişkileri Uzmanı	Karfur	22.11.2007
6: Satış Elemanı	Red Jeans	22.11.2007
7: Yazılım Uzmanı	MilkSOFT	22.11.2007
8: Yazılım Uzmanı	MilkSOFT	22.11.2007
9: Yazılım Uzmanı	MilkSOFT	22.11.2007
10: Sekreter	Uzan Dış Tic.	22.11.2007
11: Müdür	Uzan Dış Tic.	22.11.2007
12: Yazılım Uzmanı	MilkSOFT	22.11.2007

< << 1 2 3 4 5... > >>

REKLAM VERMEK İÇİN TIKLAYINIZ

Here you can see sample search result page. Available positions are categorized by job types, firm names, and date. User can see other positions by using page number links at bottom.

C. Architectural design

The component oriented architectural design of the OCP is described module by module below.

1. User Management Module

User management module does the authentication job of the entire site for jobseekers and employers. It has 3 handlers as login handler, signup handler and mail confirmation handler.

Login Handler uses Jobseeker/Employer

Login handler uses jobseeker or employer tables to give authentication to users. It has 3 states as authenticated mode, invalid user mode and forgot password mode. In forgot password mode it uses mail handler to send new password to users.

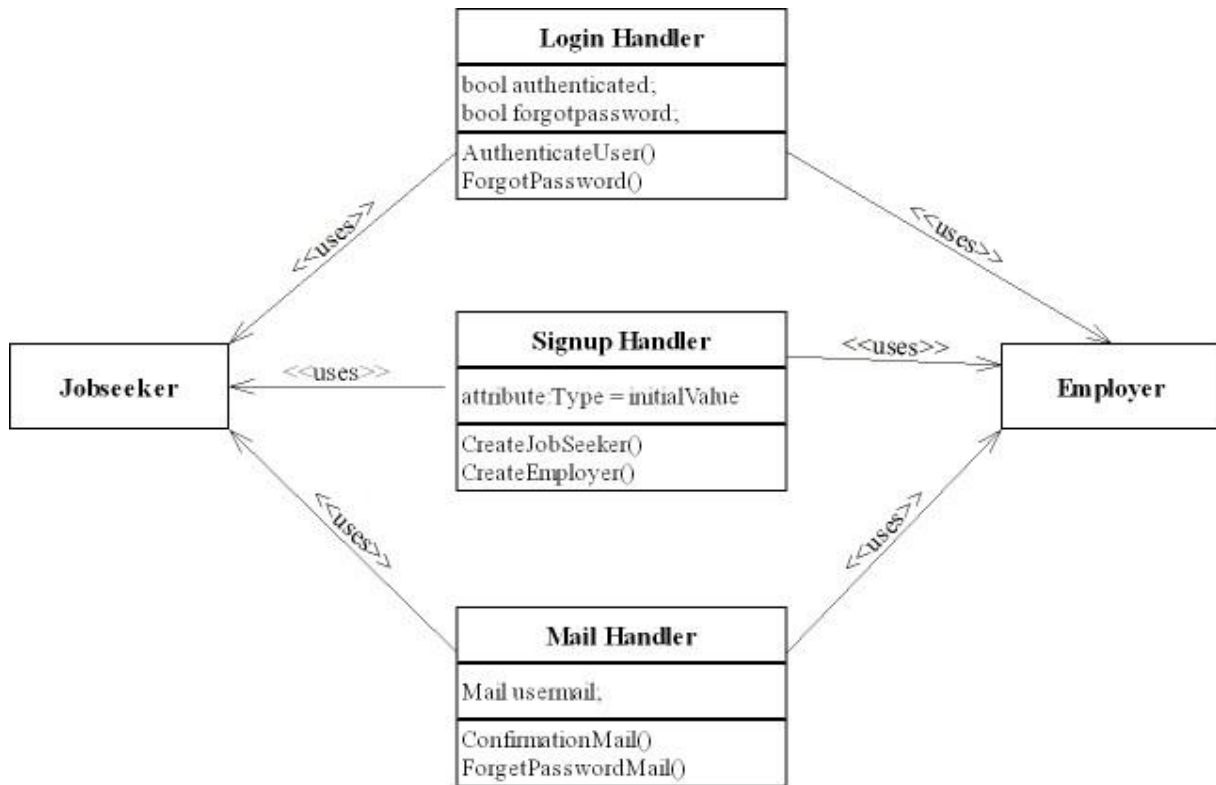
Signup Handler uses Jobseeker/Employer

Signup handler uses jobseeker or employer tables. It creates new users and give them access to the site. Signup handler also validates jobseekers from government sites by comparing their names and T.C. Kimlik No s.

Mail Handler uses Jobseeker/Employer

Mail handler uses jobseeker and employers tables. Mail handler sends confirmation sends mails to the new users' mails. Also mail handler sends new passwords to the users who have forgotten their passwords as long as they knew their hint answers to supply security.

CLASS DIAGRAM FOR THE MODULE:



2. CV Management Module

CV management module uses 3 handlers.

CV handler uses Jobseeker/CV

CV handler enables jobseekers to create new CVs or edit their past CVs. It also uses validation handler to get correct information about jobseekers from governmental sites.

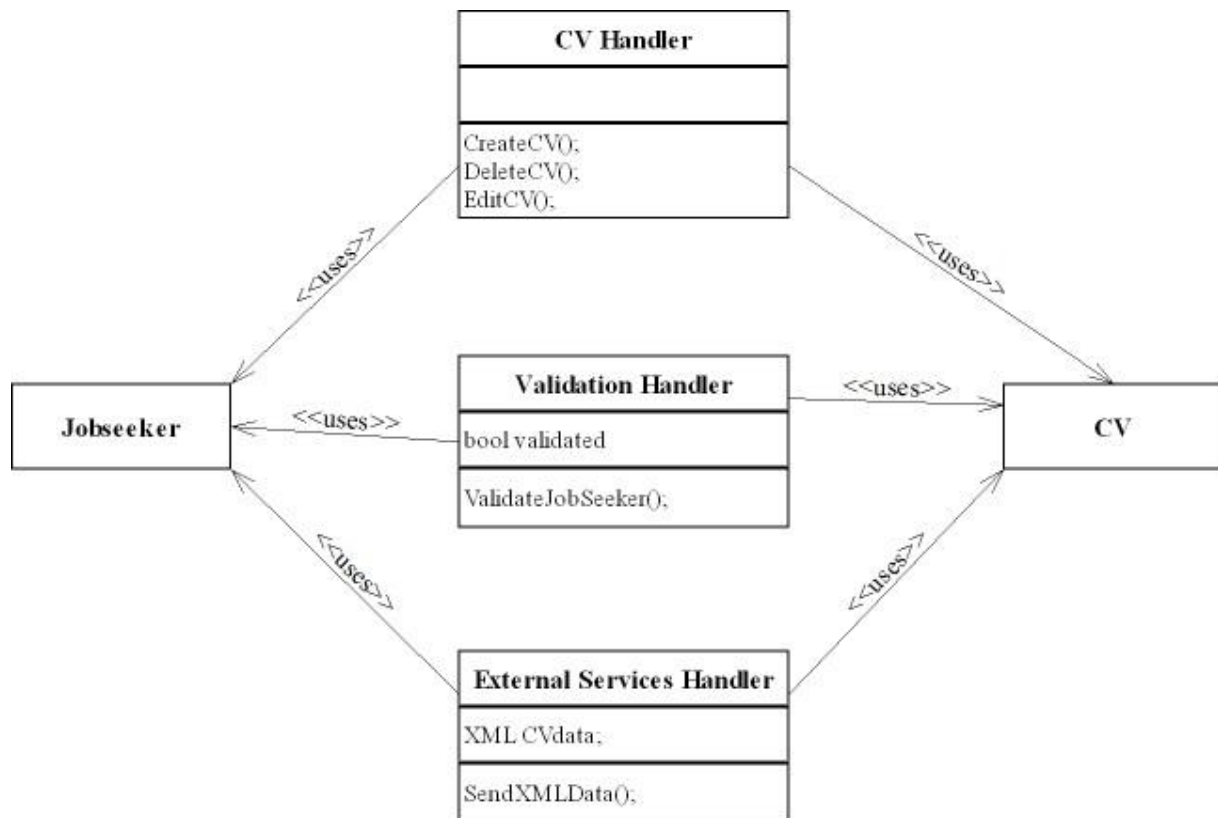
Validation Handler uses Jobseeker/CV

Validation handler validates jobseekers and confirms their CVs from governmental sites. If validation is not complete it doesn't allow the user to complete their CV.

External Services Handler

External services handler sends XML data to the external sites' web services when a jobseeker submits a new CV or edit an older CV.

CLASS DIAGRAM FOR THE MODULE:



3. Position Available Management Module

Position Available management module has 2 handlers.

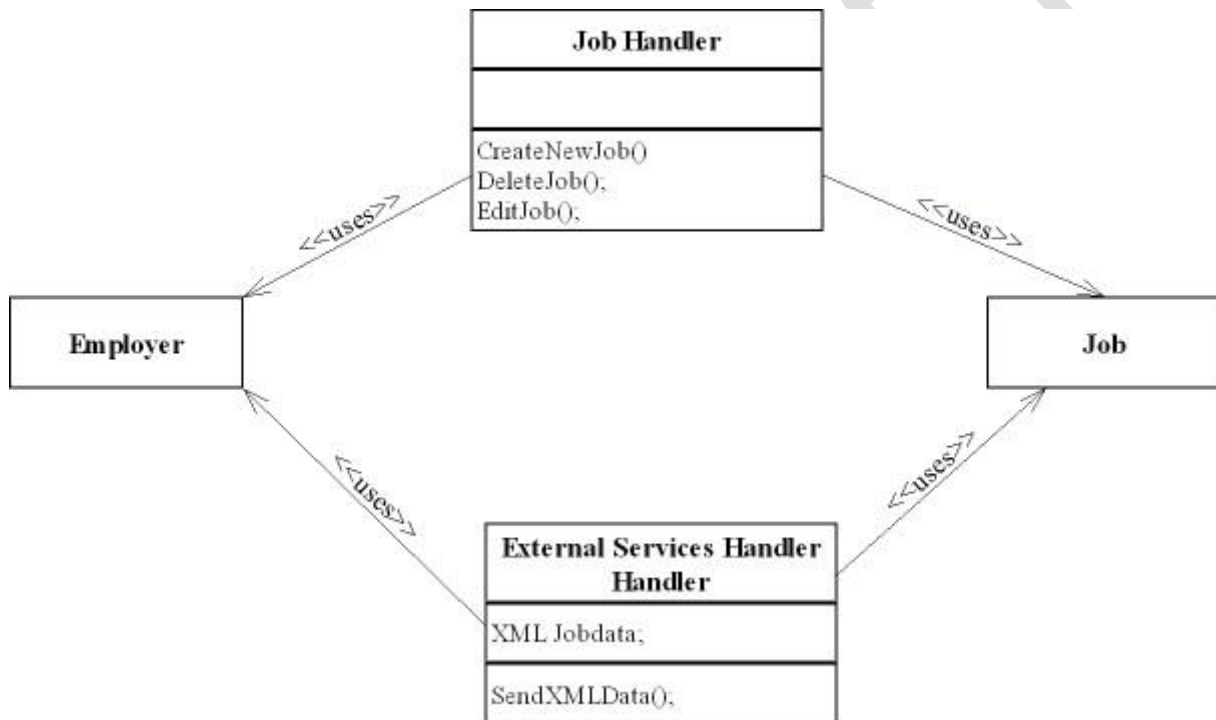
Job Handler

Job handler enables employers to create new available positions. It can also update or delete an available position.

External services handler

External Services Handler sends XML data to external sites' web services when an employer submits a new available position or edits or deletes an available position.

CLASS DIAGRAM FOR THE MODULE:



4. Search Management Module

CV Search Handler

Cv search handler enables employers to search among different CVs

Job Search Handler

Job search handler enables jobseekers to search among different available positions.

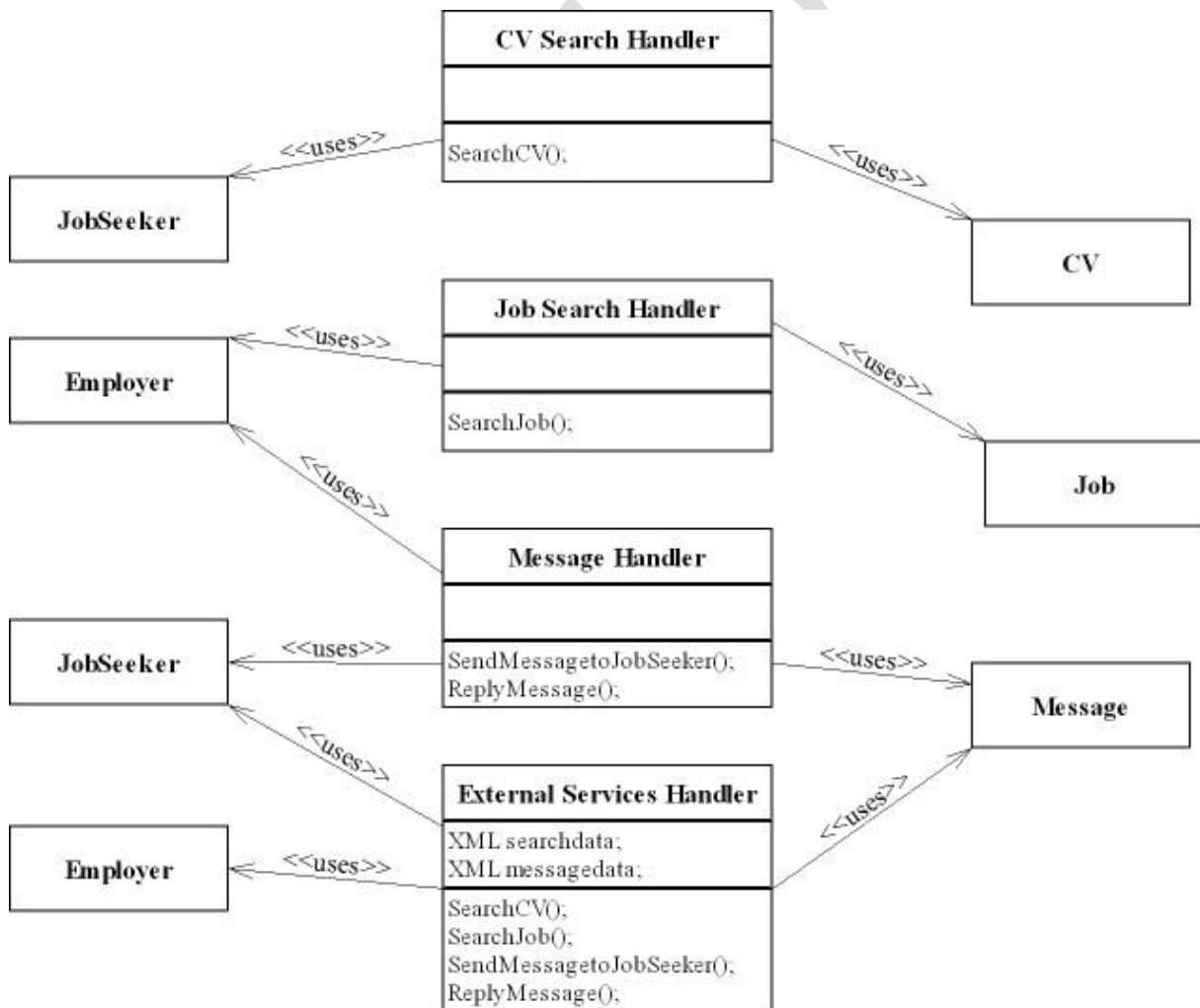
Message handler uses jobseeker/employer/message

Message handler manages messages between employers and jobseekers. It gives notifications to their personal pages.

External Services Handler jobseeker/employer/message

External services handler enables job ,cv searches and messages between online cv portal and external sites through web services.

CLASS DIAGRAM FOR THE MODULE:



5. Site Management Module

Admin handler uses admin

Admin handler gives access to admins through the cv portal. It enables admins to change layout of the site.

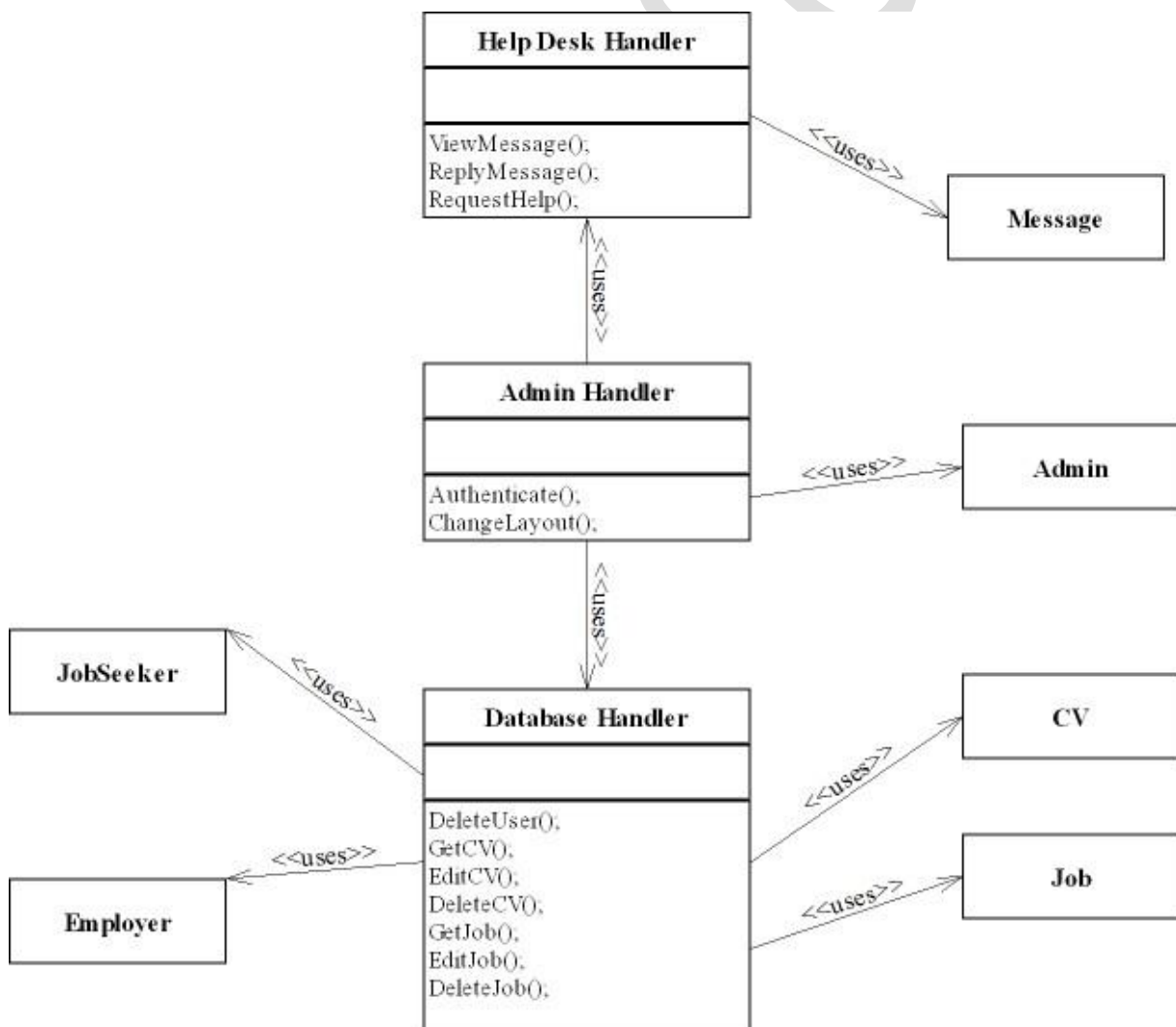
Database handler uses jobseeker/employer/cv/job/message

Database handler enables admins to view, edit, delete any user related data

Help Desk Handler uses message

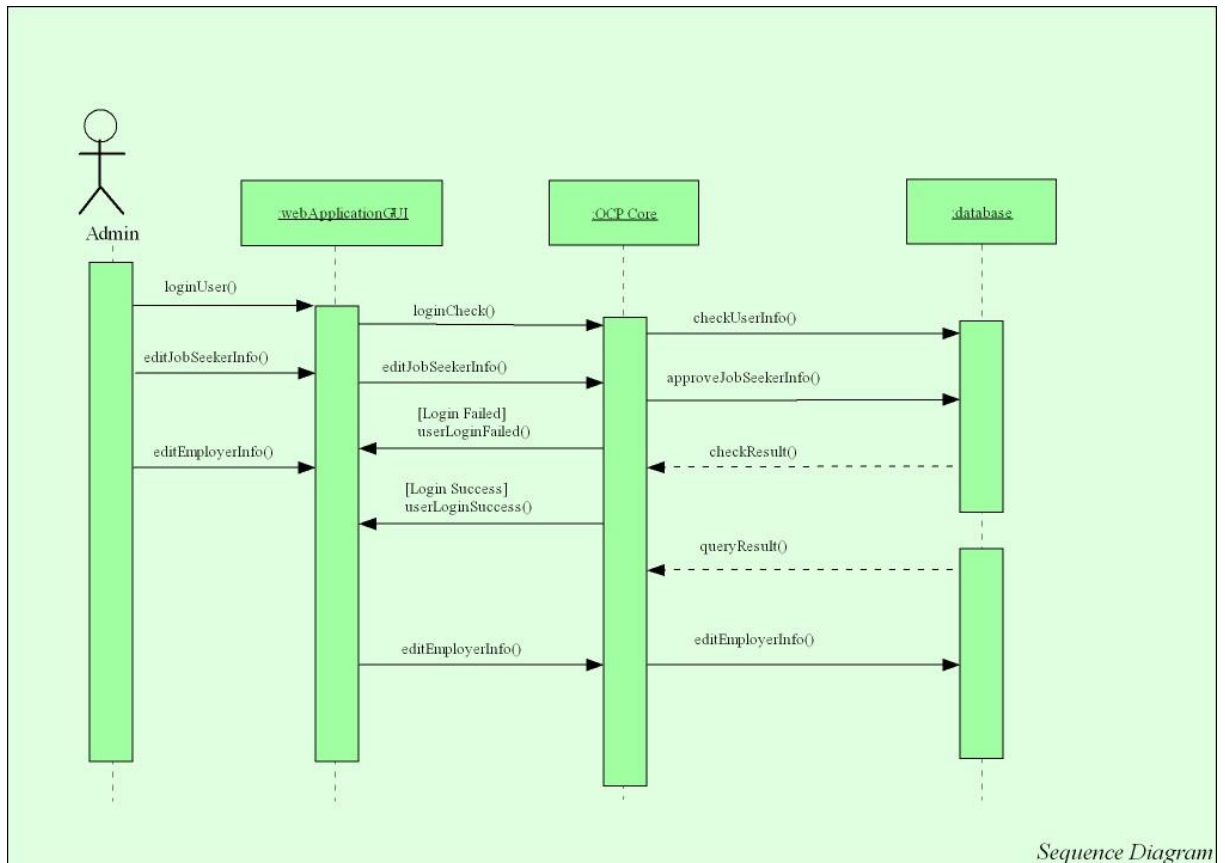
Help desk handler enables admins to view and reply help related topics that are submitted by users. It enables users to apply to help desk when a problem occurs through the site.

CLASS DIAGRAM FOR THE MODULE:

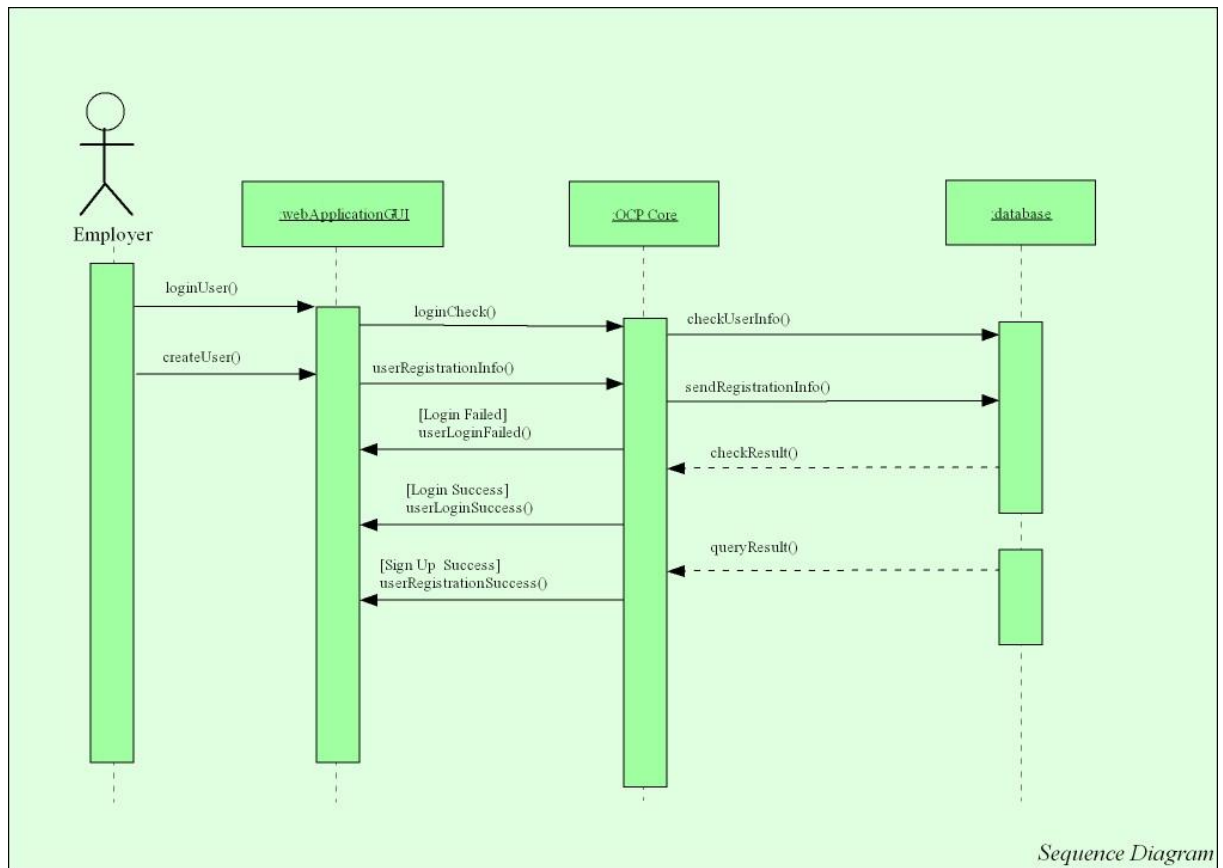


SEQUENCE DIAGRAMS:

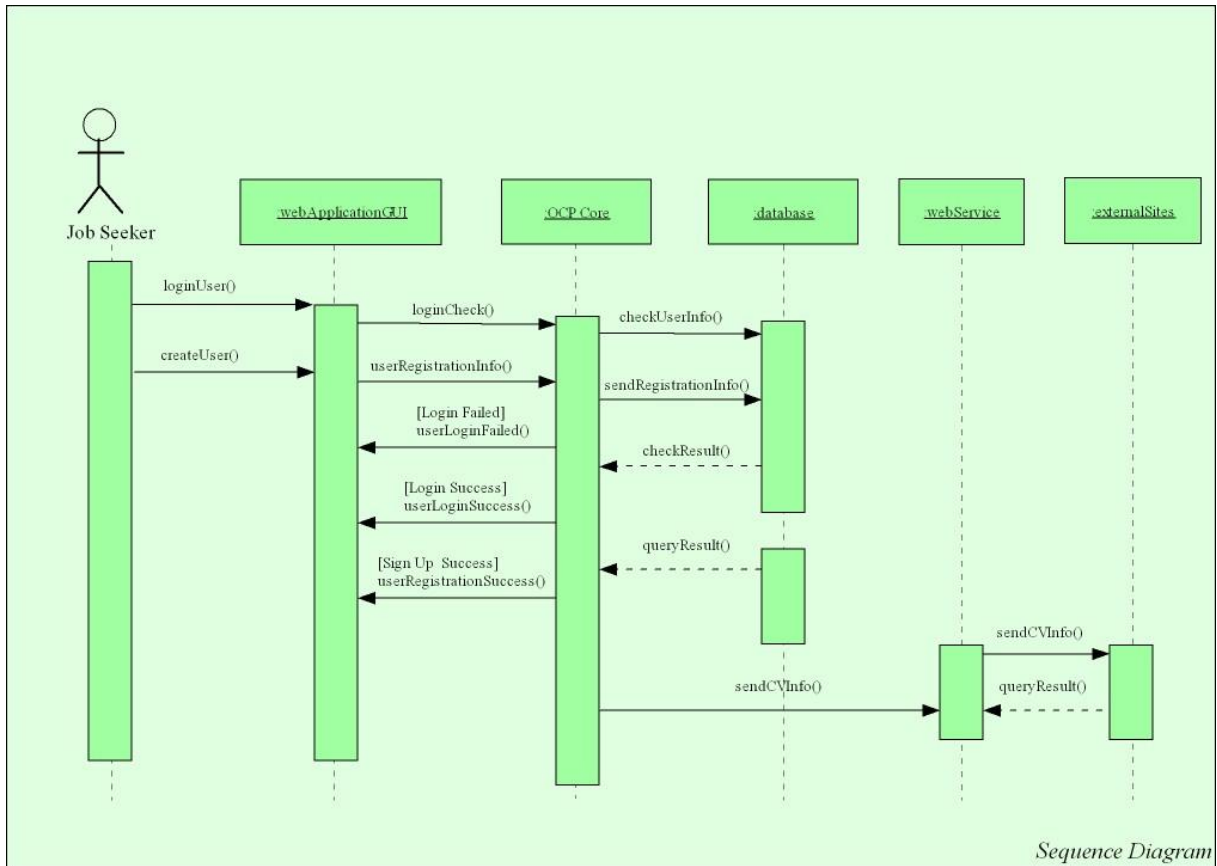
Administrator Sequence Diagram:



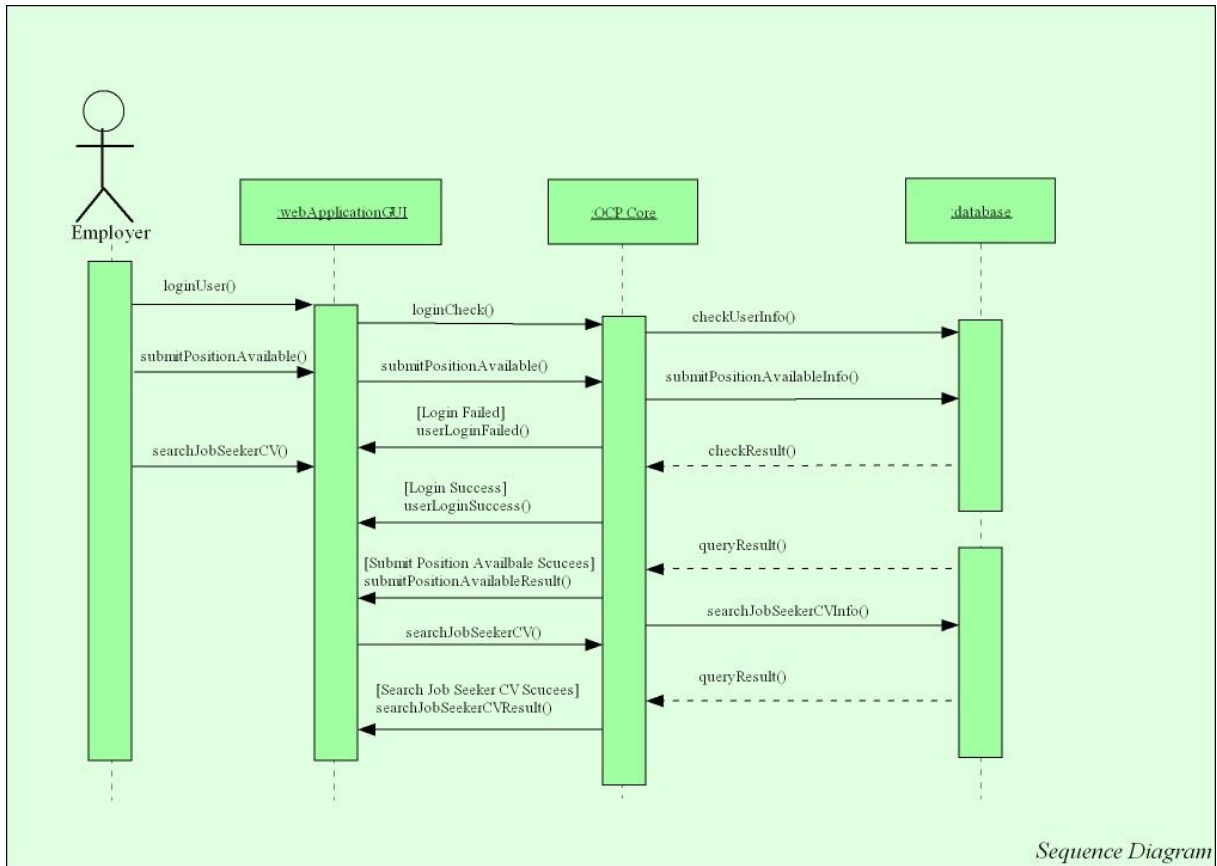
Employer Registration Sequence Diagram:



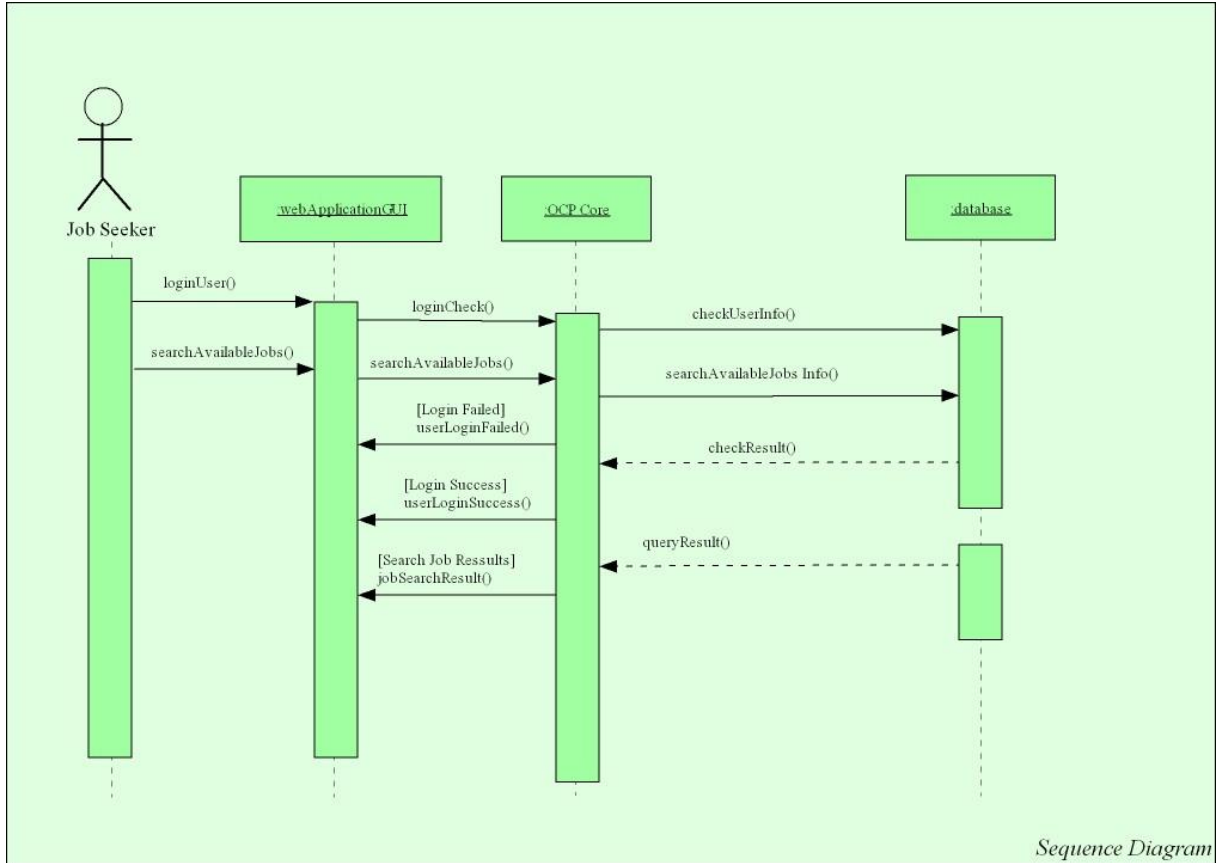
Jobseeker Registration Sequence Diagram:



Employer Site Activity Sequence Diagram:



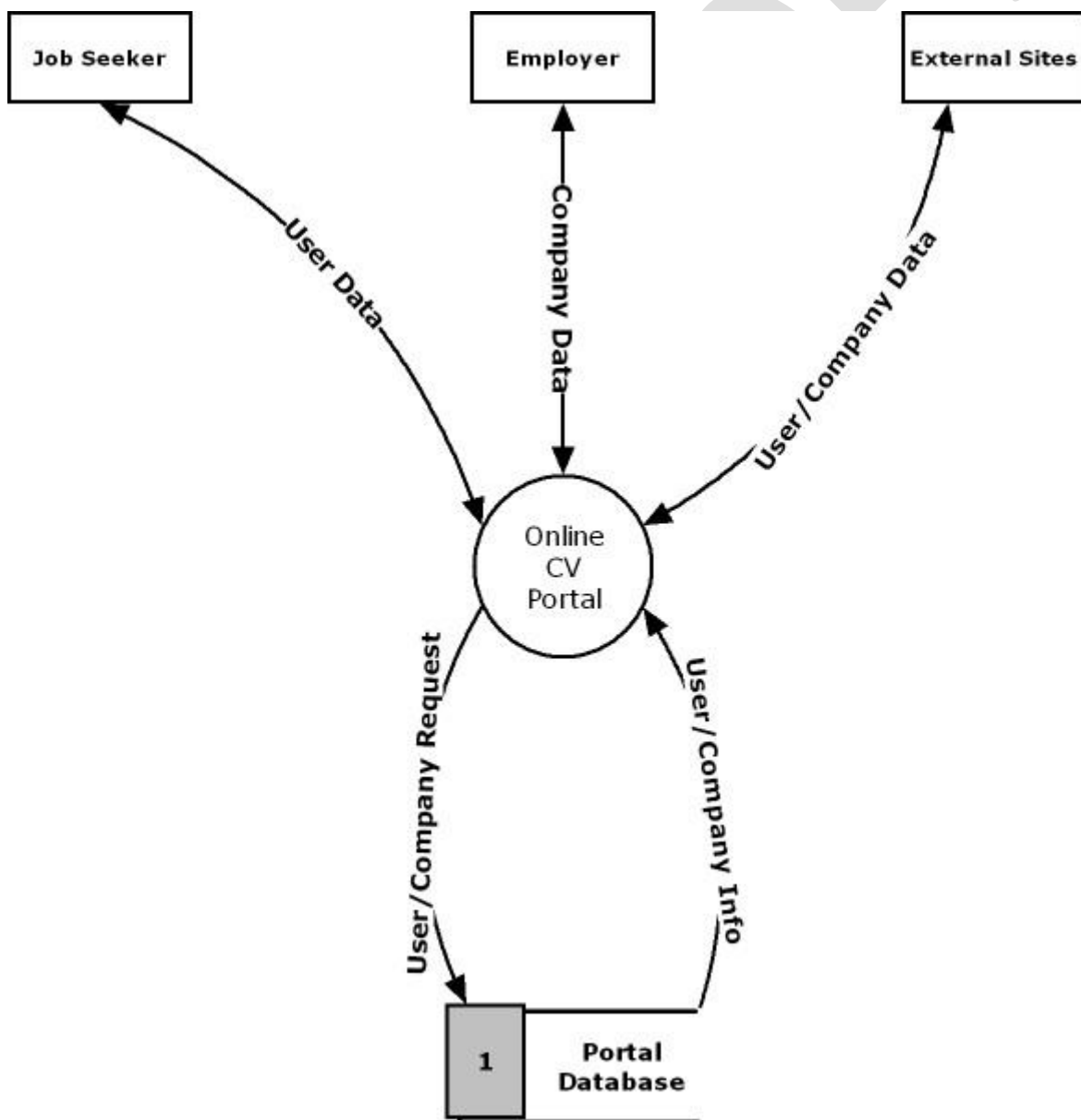
Jobseeker Site Activity Sequence Diagram:



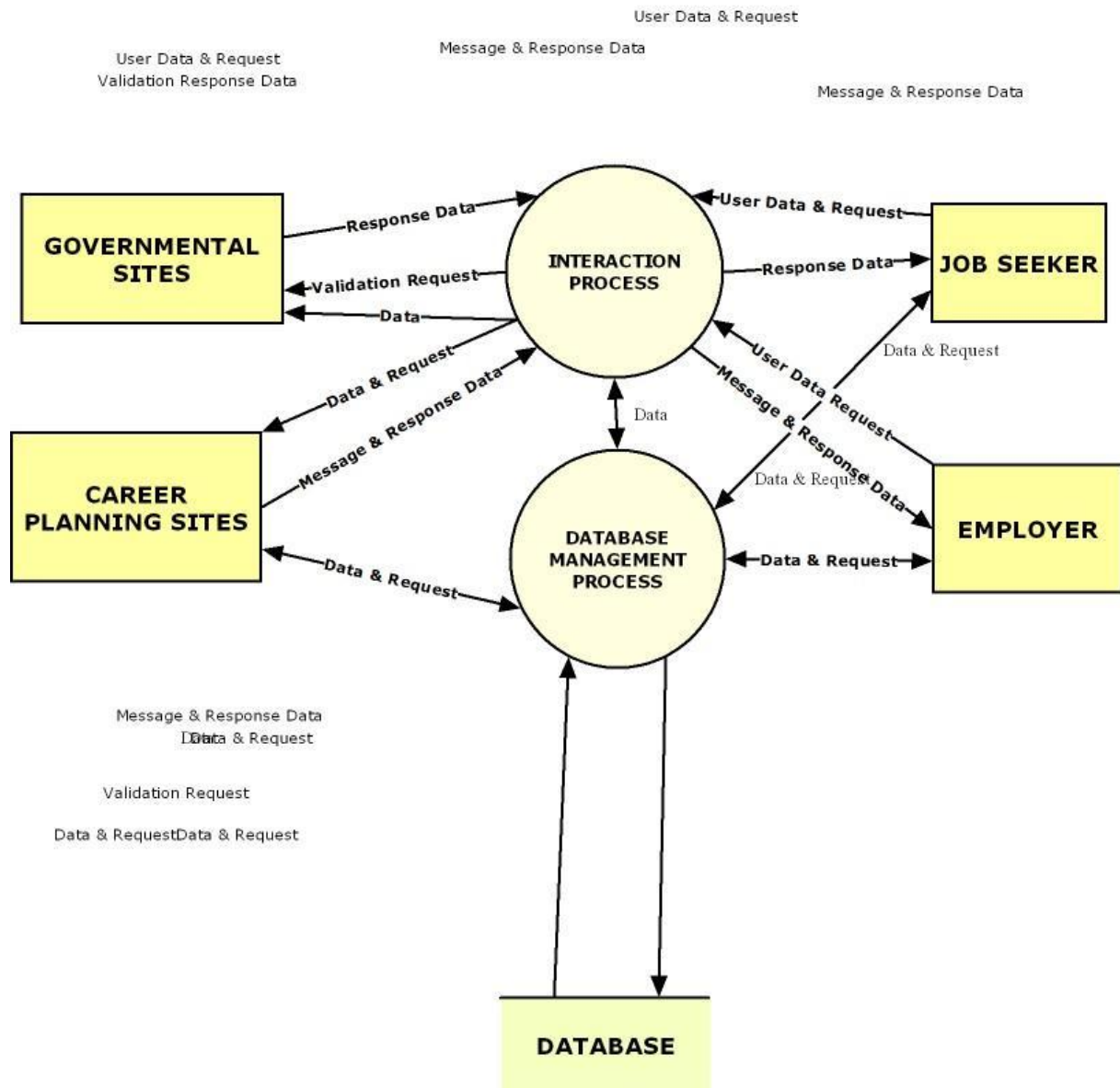
D. Data Design

1. Dataflow Diagrams

THE ONLINE CV PORTAL LEVEL 0 DATA FLOW DIAGRAM



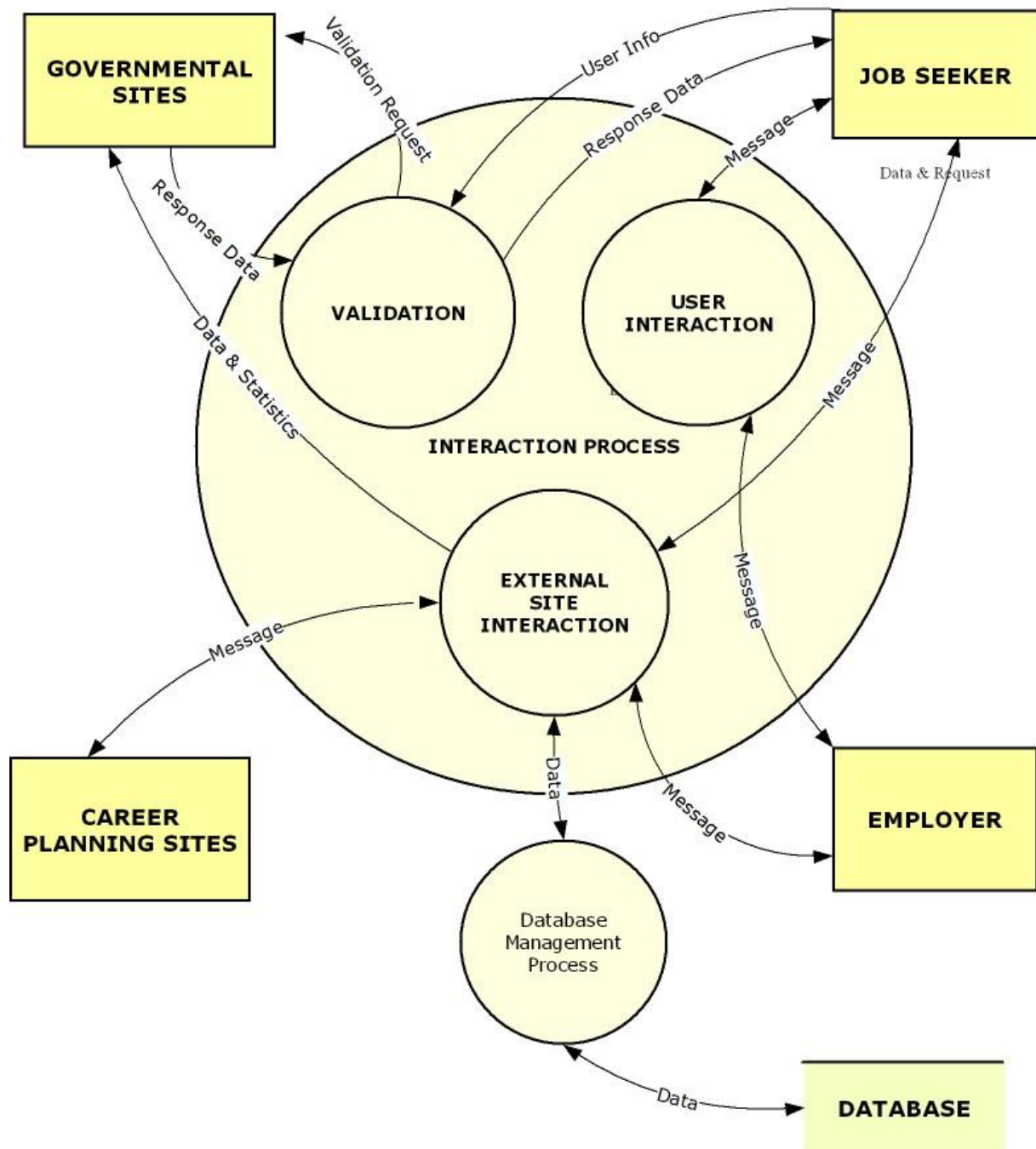
ONLINE CV PORTAL LEVEL 1 DFD DIAGRAM



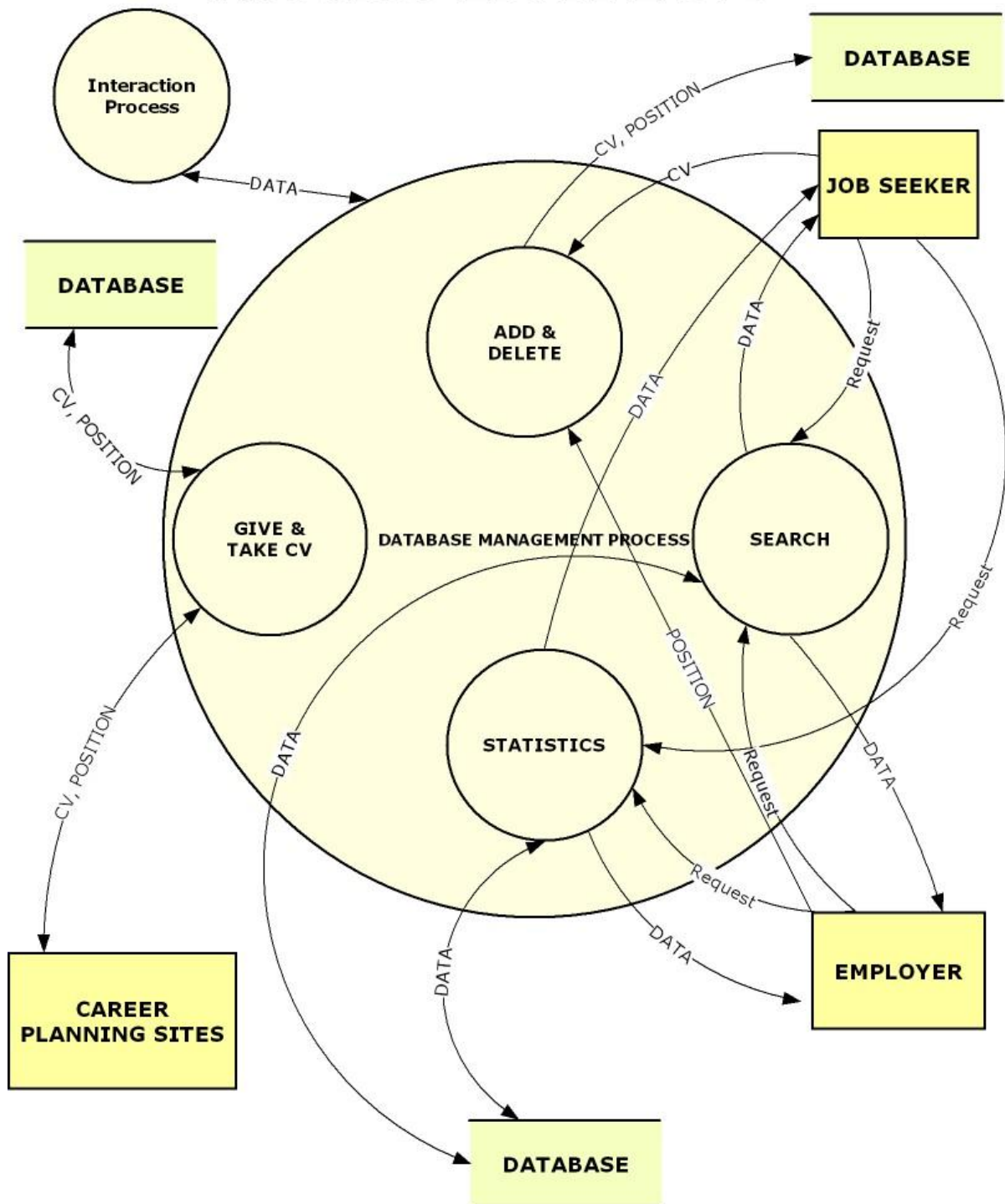
INTERACTION PROCESS

LEVEL 2 DFD

Validation Response Data



DATABASE MANAGEMENT PROCESS LEVEL 2 DFD



2. Database structure

DATABASE TABLES

Admin Table

Below is the database table for an administrator account in the OCP.

Name	Type	Supplementary Information
ID	Int32	Primary Key
Username	Varchar(20)	NOT NULL
Password	Varchar(250)	NOT NULL

JobSeeker Table

Below is the database table for a jobseeker account in the OCP.

Name	Type	Supplementary Information
ID	Int32	Primary Key
Firstname	Varchar(20)	NOT NULL
Lastname	Varchar(20)	NOT NULL
Email	Varchar(20)	Unique Key
Password	Varchar(250)	NOT NULL
Hint Question	Varchar(20)	NOT NULL
Hint Answer	Varchar(20)	NOT NULL
TC Kimlik No	Varchar(20)	Unique Key
Activity	Tinyint	NOT NULL

Employer Table

Below is the database table for an employer account in the OCP.

Name	Type	Supplementary Information
ID	Int32	Primary Key
Firstname	Varchar(20)	NOT NULL
Lastname	Varchar(20)	NOT NULL
Company Name	Varchar(20)	NOT NULL
Company Info	Varchar(250)	
Email	Varchar(20)	Unique Key
Password	Varchar(250)	NOT NULL
Hint Question	Varchar(20)	NOT NULL
Hint Answer	Varchar(20)	NOT NULL
Activity	Tinyint	NOT NULL
Customer Level	Int32	NOT NULL

CV Table

Below is the database table for a CV submitted to the OCP.

Name	Type	Supplementary Information
ID	Int32	Primary Key
JobSeekerID	Int32	Foreign Key(JobSeeker.ID)
SiteInfo	Int32	
Firstname	Varchar(20)	NOT NULL

Lastname	Varchar(20)	NOT NULL
TC Kimlik No	Varchar(20)	Unique Key
Gender	Varchar(10)	NOT NULL
Date of Birth	Datetime	NOT NULL
Place of Birth Country	Varchar(20)	NOT NULL
Place of Birth City	Varchar(20)	NOT NULL
Marital Status	Varchar(20)	NOT NULL
Phone	Varchar(20)	NOT NULL
Cell Phone	Varchar(20)	NOT NULL
Cell Phone 2	Varchar(20)	NOT NULL
Job	Varchar(30)	
Email	Varchar(20)	NOT NULL
Address	Varchar(100)	NOT NULL
Education Level	Int32	NOT NULL
High School	Varchar(30)	
University 1	Varchar(30)	
Department	Varchar(30)	
University 2	Varchar(30)	
University 3	Varchar(30)	
Languages	Varchar(40)	
Certificates	Varchar(40)	
Experience	Int32	NOT NULL
Previous Employments	Varchar(50)	

Position Available Table

Below is the database table for a Position Available submitted to the OCP.

Name	Type	Supplementary Information
ID	Int32	Primary Key
EmployerID	Int32	Foreign Key(Employer.ID)
SiteInfo	Int32	
Company Name	Varchar(30)	NOT NULL
Company Info	Varchar(100)	NOT NULL
Date	Datetime	NOT NULL
Job Name	Varchar(30)	NOT NULL
Department	Varchar(30)	NOT NULL
Position	Datetime	NOT NULL
City	Varchar(20)	NOT NULL
Education Level	Int32	NOT NULL
Experience	Int32	NOT NULL
Gender	Varchar(20)	NOT NULL
Salary	Int32	NOT NULL
Work Period	Int32	NOT NULL

Message Table

Below is the database table for a message sent through the OCP.

Name	Type	Supplementary Information
ID	Int32	Primary Key
SenderId	Int32	NOT NULL
SenderSiteInfo	Int32	NOT NULL
ReceiverId	Int32	NOT NULL
ReceiverSiteInfo	Int32	NOT NULL
Subject	Varchar(100)	NOT NULL
Text	Varchar(MAX)	NOT NULL

3. Data Dictionary

The data that is going to be submitted through the modules of the Online CV Portal and to the external sites are the database tables in the XML format.

Following are a list of the database tables and the explanations for the data fields.

CV

- **ID** : Unique id of the cv that is assigned while the cv is submitted to the portal.
- **SITE INFO**: The source site of the CV. (0 if it was submitted through our portal)
- **JOBSEEKER ID**: Jobseeker's user id
- **FIRST NAME** : Jobseeker's name
- **LAST NAME** : Jobseeker's last name
- **TC ID NO**: Jobseeker's T.C. Kimlik No
- **GENDER**: Jobseeker's gender
- **DATE OF BIRTH**: Jobseeker's date of birth
- **PLACE OF BIRTH COUNTRY**: Jobseeker's country of birth.
- **PLACE OF BIRTH CITY**: Jobseeker's city of birth.
- **MARITAL STATUS**: Jobseeker's marital status.
- **ADDRESS**: Jobseeker's present address.
- **PHONE** : Jobseeker's phone number (home).
- **CELL PHONE**: Jobseeker's cell number.
- **CELL PHONE (2)**: Jobseeker's secondary cell number.
- **EMAIL**: Jobseeker's e-mail address.
- **EDUCATION LEVEL**: The level of graduation the jobseeker has.
- **HIGH SCHOOL**: The high school the jobseeker graduated from.
- **UNIVERSITY**: The university the jobseeker graduated from.

- **DEPARTMENT:** Jobseeker's department of graduation.
- **UNIVERSITY (2):** A master program of the jobseeker if there is any.
- **UNIVERSITY (3):** A Phd of the jobseeker if there's any.
- **JOB:** Jobseeker's present job if any.
- **PREVIOUS EMPLOYMENTS:** Jobseeker's previous jobs.
- **EXPERIENCE:** Jobseeker's hands on experience.
- **LANGUAGES:** The languages the jobseeker can speak.
- **CERTIFICATES:** Jobseeker's certificates if there are any.

POSITION AVAILABLE

- **ID :** Unique ID of the position available that was assigned while the position is submitted.
- **SITE INFO:** The source site of the available position (0 if it was submitted through our portal).
- **COMPANY:** The name of the company.
- **COMPANY INFO:** The info of the company submitting the position available.
- **DATE:** Date of the submission.
- **JOB:** The name of the job .
- **DEPARTMENT:** The name of the department the employee will work in.
- **POSITION:** The name of the position.
- **CITY:** The name of the city.
- **EDUCATION LEVEL:** The necessary education level for the job.
- **EXPERIENCE:** The necessary experience for the job.
- **GENDER:** The gender of the wanted employee.
- **SALARY:** The amount of the monthly salary.

- **WORK PERIOD:** The time period of the job, full time or part time.

ADMIN

- **ID:** The id of the administrator.
- **USERNAME:** The username of the administrator.
- **PASSWORD:** The password of the account.

JOBSEEKER

- **ID:** The name of the company
- **FIRST NAME:** The first name of the jobseeker.
- **LAST NAME:** The last name of the jobseeker.
- **EMAIL:** The email address of the jobseeker.
- **PASSWORD:** The hint question for resetting account password..
- **HINT QUESTION:** The hint question incase the jobseeker forgets his password.
- **HINT ASNWER:** The hint question answer.
- **TC KIMLIK NO:** The Turkiye Cumhuriyeti ID number of the jobseeker.
- **ACTIVITY:** The status of the jobseeker's account.

EMPLOYER

- **ID:** The name of the company
- **FIRST NAME:** The first name of registred employer.
- **LAST NAME:** The last name of the registered employer.
- **COMPANY NAME:** The name of the company .
- **COMPANY INFO:** Information about the company.
- **EMAIL:** The email address of the employer.
- **PASSWORD:** The password of the employer's account.

- **HINT QUESTION:** The hint question for resetting account password.
- **HINT ANSWER:** The hint question answer.
- **TC KIMLIK NO:** The Türkiye Cumhuriyeti ID number of the employer.
- **ACTIVITY:** The status of the employer's account.
- **CUSTOMER LEVEL:** The permission level for the employer account.

MESSAGE

- **ID:** The id of the message.
- **SENDER ID:** The username of the sender.
- **SENDER SITE INFO:** The name of the site the message was submitted from.
- **RECEIVER ID:** The username of the receiver.
- **RECEIVER SITE INFO:** The name of the site the message was submitted through.
- **SUBJECT:** The message subject.
- **TEXT:** The body of the message.

4. FUTURE WORK

To be able to describe the design structure completely in this document we got ahead of the planned schedule a bit. The gui and the component level design was supposed to be done during the 2nd-4th weeks of December. We have just given quick basic designs on that aspects in this document. So the next on the list are the interface design & component level design completion. Since the Online CV Portal is basically a website, the user interface is probably one of the most important aspects. %99 of the users will have no idea about the infrastructure of the project which makes the interface really important. We're planning to work on & improve the interface design until the end of the project.

After the component level design is also completely done we will be starting to work on the prorotype which is probably the biggest mile stone of the project. By the end of the prototype we will have a new schedule for the whole implementation process

5. TESTING

Testing is a crucial process in our project, since the system will comprise of many components it can be too time consuming to detect an error after the system is up and running as a whole. So during the testing process we need to determine the errors in the components precisely. It will most probably be the only possible way to create an error-free Service Oriented Architecture . After starting to test the system as a whole if a component base error occurs that will cause a big overhead in the testing project.

The main problem about the testing process is the big overhead of creating representative websites for the actual websites that the Online CV Portal is going to interact with. For each web service inside the system we need to create a representative website in order to be able to test those webservices.

A. Unit Testing

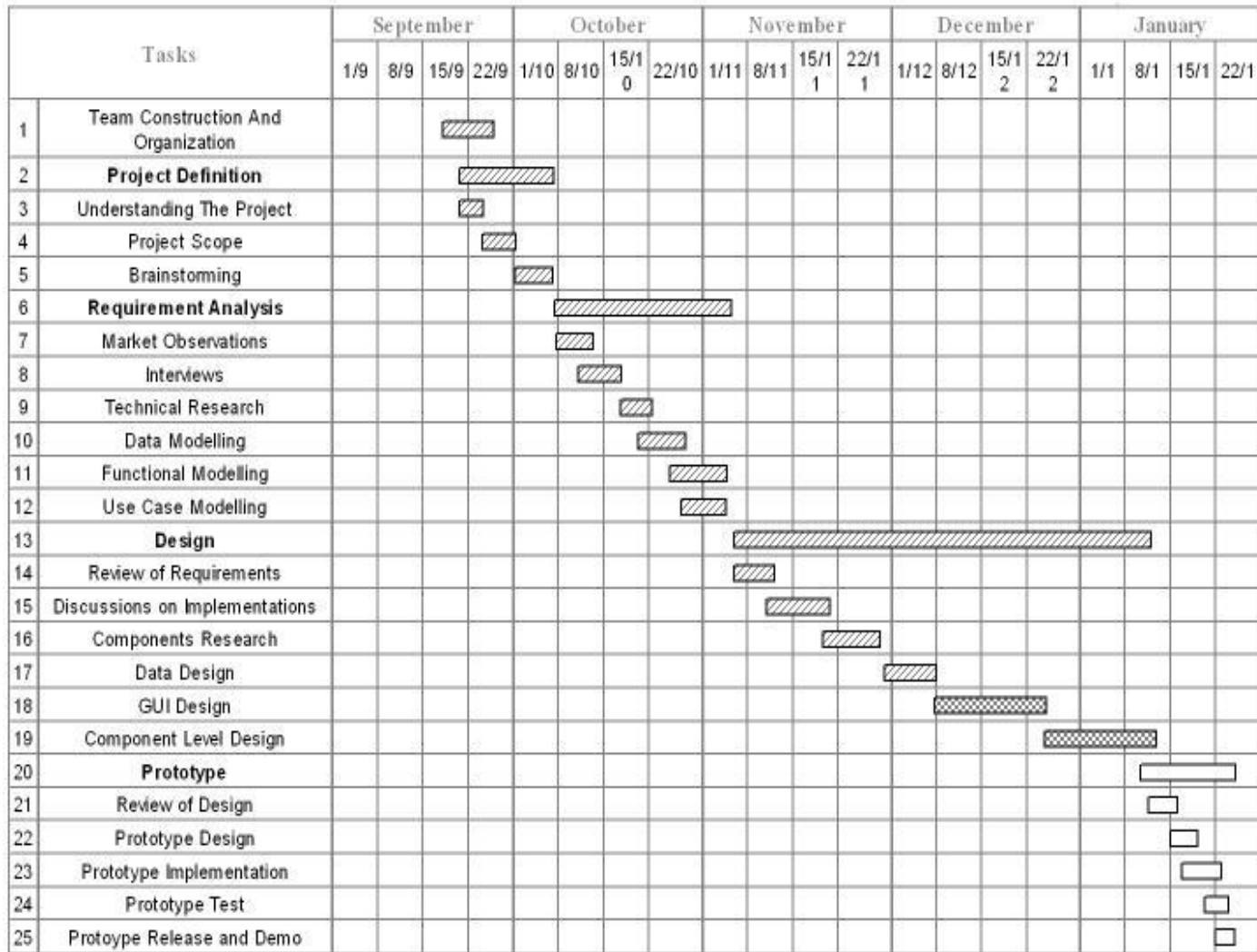
Unit testing is going to be done in a sequential approach. For example each web service is going to be checked on its own and when we make sure it is working the way it should, we will start testing the other web service. This way all the modules are going to be tested. This sequential approach is necessary because to be able to test the database modules we need to have perfectly working web services since they are going to be the data sources for the database modules. Without completely working web services we won't be able to test the database modules thus the database process. After this sequential unit testing process is done we will start the integration.

B. Integration Testing

The sequential approach is still going to be necessary at this stage since the modules are tied up to each other inside the system, nearly none of them are independent. We will integrate some of the modules, test them as a group and then continue the same way. When we detect an error if it is caused by a component we will turn back to debugging the components.

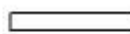
6. GANTT CHART

Below is the updated Gantt Chart for the Online CV Portal project.



 : Done

 : Working on

 : Future Work