

INDIRA GANDHI NATIONAL OPEN UNIVERSITY

(BCSP-064)
Project Synopsis
Of

BACHELOR OF COMPUTER APPLICATION(BCA)
On

SPARK YOUR PROFILE

Submitted By:

ANKIT BISHT
ENROLMENT NO : 185491306

Under Guidance
Of
Mr. RAKESH SINGH BISHT

Submitted To:-

SCHOOL OF COMPUTER AND INFORMATION SCIENCES
Indira Gandhi National Open University
Maidan Garhi
New Delhi - 110068.

synopsis

Spark Your Profile

(Get Set For Your Dream Job)

“ A project that provide various job related services to job seekers to help them in getting job such as attractive resume writing”

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SYNOPSIS

Spark Your Profile

(Get Set For Your Dream Job)

INTRODUCTION

“SPARK YOUR PROFILE ” is an online web based system which is responsible for providing the various services to the job seekers where any one can become a member by just creating their account and submit their resume and **get set for their dream job.**

“Spark Your Profile” is your express and ultimate solutions for jobs that are available in your area of interest. Its purpose is to serve the needs of the candidates in the job market. While the job market has seen tremendous changes in the 21st Century.

“Spark Your Profile ” has products and services to meet the needs of professionals. Our mission is to support our Candidates, to achieve their Goals to provide expert knowledge and advice to create a total experience that educates and adds value to their process. We accept the challenge of catering the desired requirements in almost all industry segments.

Our project is developed to provide multiple services to the job seekers which increase their chances of getting their dream jobs easily. There are different services providing using this project for the job seekers such as Resume Broadcast ,Profile verification,Professional Resume,Interview and Soft

Skills,Cover Letter ,Social Media Profile .Any one can subscribe to these services by just becoming ther member of Spark Your Profile and pay for the services using the Paypal Payment Gateway.

The project starts with the very first module of Login where the only authorized user is permitted to enter inside and he has full authority to access functions according to their role ,there are two types of users- members and Admin. In the second module of Member signup, the job seekers registered with the site for getting the services provided by site . In the third module of Services , the services are created by admin shown in site and and fourth module Of subscribe and the payment handle the complete procedure of subscribing the services and the payment process of the services provided to the members of site is handled.

In the fifth module of cart ,the customer cart details is maintained.

And finally in the last module of admin ,which is one of the most important module of our project ,and it is one of the most vast module ,this module handle the complete process of managing services and pages and the members of site .this module is only restricted with the Admin of site,Only the Admin of site can access this module ,this module is able to handle the complete site and have complete access to the site.

OBJECTIVES OF THE PROJECT

This is intended to be an Internet based Application

The primary objectives behind the development of the “**Spark Your Profile**” are as follows:

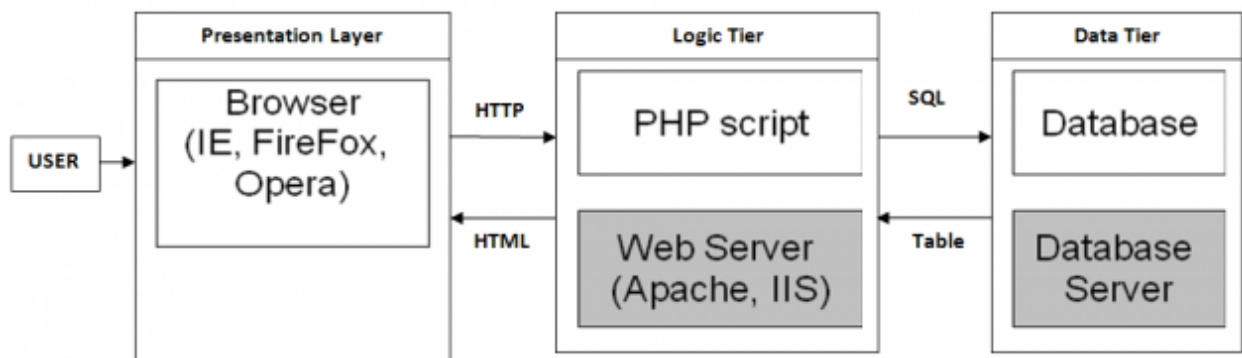
1. The main and the first objectives of this project is to Providing the quick and fast service to the job seekers to increase their chances of getting their dreams jobs.
2. Fulfill the job seekers needs on time by providing them job easily.
3. Due to the easy and secure accessing of site, multiple user access simultaneously.
4. Shining the profiles of the their members by providing different services.
5. Provide easily password change facility to members so that members can change their password ,if they forgot their passwords.
6. Applying a reliable and efficient functionality
7. To provide a better utilization of time and money.
8. Providing a great flexibility to members by providing easy and secure payment method that is Paypal payment.

PROJECT CATEGORY

“**SPARK YOUR PROFILE** ”is a Web Based Project which is developed using PHP and MYSQL.

This project is based on **three tier architecture**. The three tier architecture where the application is divided into three logical constituents. And the three logical constituents are as follows:

1. **Presentation tier**
2. **Logic tier**
3. **Data tier**



1. Presentation layer

In the presentation layer the user interaction takes place . The user enters the address in the web browser and in the browser the URL is decoded into protocol/host/file, i.e. host name converted to IP address. Then an issue request is sent to remote server using appropriate protocol (usually HTTP).

Also a returned HTML from the logic tier might be accepted. In the presentation layer interaction with client side scripts (e.g. using DHTML) is supported and user inputs of variety controls on the form are accepted.

2. Logic Tier

In the logic Tier the application's functionality is done by performing detailed processing of data from presentation layer. Server such as Apache (or IIS) or Server Script (such as PHP) can be used to support this.

With Server (Apache or IIS) the appropriate action to be taken is identified, such as fetching a file, or passing request to an interpreter. Also it sends an output back to caller in MIME package. As such support for thousands for concurrent users, multithreading (allow multiple processor to run concurrently) and caching (holding results in a temporary store to reduce recalculation) is achieved).

With Server script (example in PHP) interacting with server such as accessing input or generating input is done. It interprets the requests according to business rules and past transactions from this client, and requests appropriate data from the persistence layer. It also computes the derived data and creates HTML (or GIF...) for the page.

3. Data Layer

This tier consists of database servers. The interaction with the database is done using standard languages such as SQL queries using database specific protocol over TCP/IP. The data structures (for example tables) are defined and modified themselves, that insertion, updating and deleting of data for example. Data maintenance should be maintained with backup and recovered. Access to compilation of queries should be optimized, with indexing or replication of tables

Advantages of the three tier architecture:

The main benefits of the 3-tier architectural style are:

- **Maintainability:** Because each tier is independent of the other tiers, updates or changes can be carried out without affecting the application as a whole.
- **Scalability:** Because tiers are based on the deployment of layers, scaling out an application is reasonably straightforward.
- **Flexibility :** Because each tier can be managed or scaled independently, flexibility is increased.
- **Availability:** Applications can exploit the modular architecture of enabling systems using easily scalable components, which increases availability

TOOLS/PLATFORM, HARDWARE AND SOFTWARE REQUIREMENT SPECIFICATION

Tools/Platform

Project is developed using **PHP** and **MYSQL** for storing data.

Hardware requirement Specification

The hardware which was required for developing the application is as under:

Altogether a Computer with following components:

- ❑ Pentium IV 100 MHz or above Processor
- ❑ 512 MB Memory (RAM)
- ❑ Hard Disk 10 GB
- ❑ Color Monitor
- ❑ Keyboard
- ❑ Mouse
- ❑ Printer

Software requirement Specification

The software which was required for developing the application is as under:

- ❑ Operating System :- Microsoft Windows 7
- ❑ Front End :- PHP
- ❑ Back End :- MYSQL
- ❑ Server :- WampServer
- ❑ Client- side Scripting Language :- JavaScript,JQuery
- ❑ Markup Language :- HTML
- ❑ Style Sheet Language :- CSS
- ❑ Documentation :- Microsoft office 2003

FRONT END TOOL : PHP

WHAT IS PHP ?

PHP is an Open Source web application development technology.

Programmers can use it to build dynamic web sites, web applications and XMLweb services.

REASONS FOR USING PHP

- Speed and robustness.
- Superior Memory Management
- No Hidden Costs with PHP

- Integration with MySQL database.
- Closer to Java/C++ Style of Programming.
- No Show Stopper Bugs.
- Cross Platform Migration Strategy.

ADVANTAGES OF PHP:

- Exceptionally short learning curve and simplicity.
- Enriched tool support.
- Quick development time.
- Very high performance and security.
- supports all major platforms (UNIX, Windows and even mainframes).
- Features native support for most popular databases.

BACK END TOOL :MYSQL

WHAT IS MYSQL?

MySQL is a open source Relational Database Management System. MySQL is very fast reliable and flexible Database Management System. It provides a very high performance and it is multi threaded and multi user Relational Database management system.

MySQL is one of the most popular relational database Management System on the web. The MySQL Database has become the world's most popular open source Database, because it is free and available on almost all the platforms. The MySQL can run on Unix , window, and Mac OS. MySQL is used for the internet applications as it provides good speed and is very secure.

MySQL was developed to manage large volumes of data at very high speed to overcome the problems of existing solutions. MySQL can be used for variety of applications but it is mostly used for the web applications on the internet.

MYSQL ADVANTAGES:

- **Reliability and Performance :**MySQL is very reliable and high performance Relational database management system. It can be used to store many GB's of data into database.
- **Cross-Platform support:** MySQL supports more than twenty different platform including the major Linux distribution ,Mac OS X ,Unix and Microsoft windows.
- **Powerful Uncomplicated software :** The MySQL has most capabilities to handle most corporate database application and used to very easy and fast.

MYSQL FEATURES:

1. It is very fast and much reliable for any type of application.
2. MySQL is very Lightweight application.
3. MySQL Supports indexing and binary objects
4. It allows changes to structure of table while server is running.
5. MySQL has a wide user base.
6. It is a very fast thread-based memory allocation system

7.MySQL is available as a separate program for use in a client/server network environment.

8..Programming libraries for C, Python, PHP, Java , Delphi etc. are available to connect to MySQL database.

SYSTEM ANALYSIS

System Analysis: System Analysis is a management technique

which helps us in designing a new system or improving an existing system.

System study is study about the operations of set of connected elements and inter-connections between these elements. One can not ignore any part or element of a system without finding out the effect that element has on the operation of system as whole. System approach shows a set of procedure for solving a particular problem.

Various Elements of System Analysis

- **Output:** first step of system analysis to determine the objective or goal. What is the purpose of our work means what is the main

Aim and thinking behind the system. Determination of aim is very vital in system work. If we do not know where we want to go, we will not know when we have reached there. We shall be unnecessarily wasting out time, energy and resources in the process. Once we are clear in mind about the aim or we know our aim, then we can try to achieve in best possible way. The user department has to define these objective in terms of their needs. These become the outputs which the system analyst keeps into mind.

- **Input:** Once we know the output required then we can easily determine what the input should be. There are some situation where required

information may not be readily available or not in proper form as it is required. This may be because of existing form are not properly designed. If the information is vital to the system, we should make all possible efforts to make it available.

The essential Elements of inputs are:-

1. **Accuracy:**if the data is not accurate, the output will be wrong.
 2. **Timeliness:** if data is not obtained in time, the entire system falls into arrears.
 3. **Proper format:**The inputs must be available in proper format.
 4. **Economy:**The data must be produced at least cost.
- **Files:**Files are used to store data. Sometimes most of the input Necessary for the system may be historical data, or may be possible that these are generated from within the system. Information is stored in files either in form of isolated facts or in large volumes.
 - **Processes:**Here we define the details of how the input and files are converted into output. The processing involves a set of logical steps. These steps are required to be instructed to the computer and this is done by a series of instruction called “programs”.

Analysis Reports

Requirements Definition: A software requirement is an abstract description of the services that the system shall provide and the constraints under which system must operate.

Requirements determination involves studying the current business system to find out how it works and where improvement should be made. System studies result in an evaluation of how current methods are working and whether adjustments are necessary or possible.

A requirement is a feature that must be included in a new system. It may include a way of capturing or processing data, producing information, controlling a business activity, or supporting management. The determination of requirements thus entails studying the existing system and collecting details about it to find out what these requirements. Requirements can either be functional or non functional.

Requirements Analysis: Requirement analysis is a software engineering task that bridges the gaps between the system level requirement engineering and software design. In the proposed project software requirement have been divided into five areas of effort.

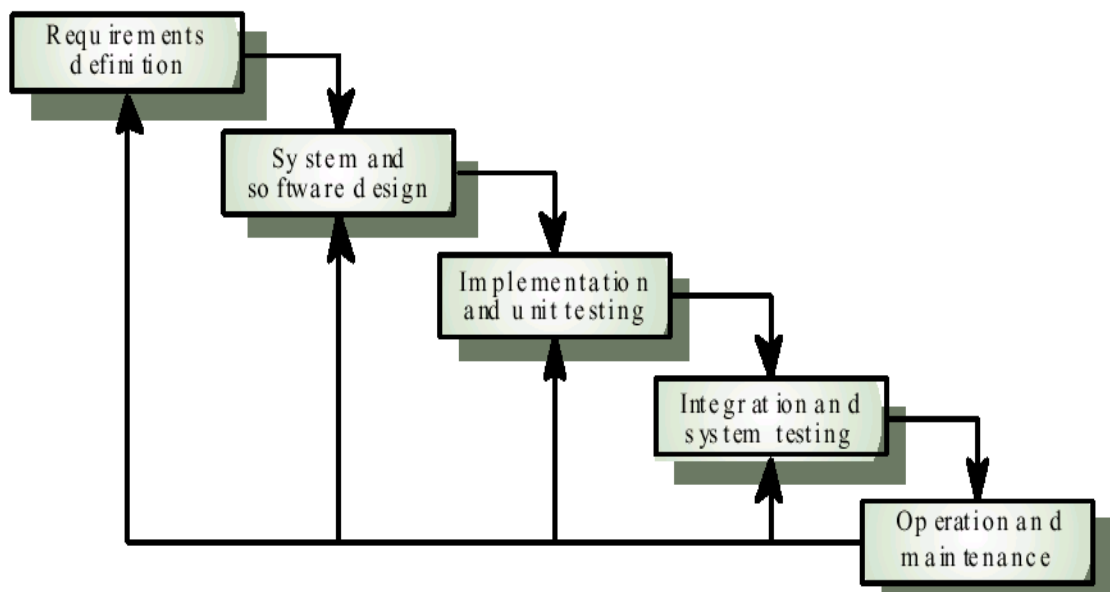
1. Problem recognition
2. Evaluation and Synthesis
3. Modeling
4. Specification
5. Review

Software Engineering paradigm applied:

A. METHODOLOGY. For develop the software the basic thing is what is model will be used. The model will be used is of great importance for development of the software.

In the waterfall model, the sequence of the activities performed in a software development project: requirement analysis, project planning, system design, detailed design, coding, and unit testing, system integration and testing. This is the order the different phases will be apply for develop of the project.

Waterfall model



Linear ordering of the different phases is very vital for the development of the software because by using this model you can follow the phases in the linear order. First the requirement analysis is done then you can proceed to the next phases like:

Designing, This model is used when you know all the phases in advance i.e. you know the exact requirement of the concern client. Because requirement analysis is very vital for the development of the software. For the development of the software there are two parties are involved in the development of the software – a client and a developer or team of developer.

Most often the requirement of the client does not know and the requirement of client will be changed. So before using this model requirement of the client is known in advanced.

To overcome these problems we can use the prototype model.

The basic idea for using this is that the requirement has not known initially. In this model a prototype is build to understand the requirement. This prototype is developed based on the currently known requirements. The prototype means to develop the formal model of the software which meats the current requirements. By using this prototype, the client can get an actual feeling of the system because of the interaction with the prototype can enable the client by better understand the requirements of the proposed system. By using this model there is no work manually. By using this model we can create a prototype, which

meets the primary requirements of the agency. In the waterfall model the requirement had been known in advanced. To solve this problem we can use the prototype model.

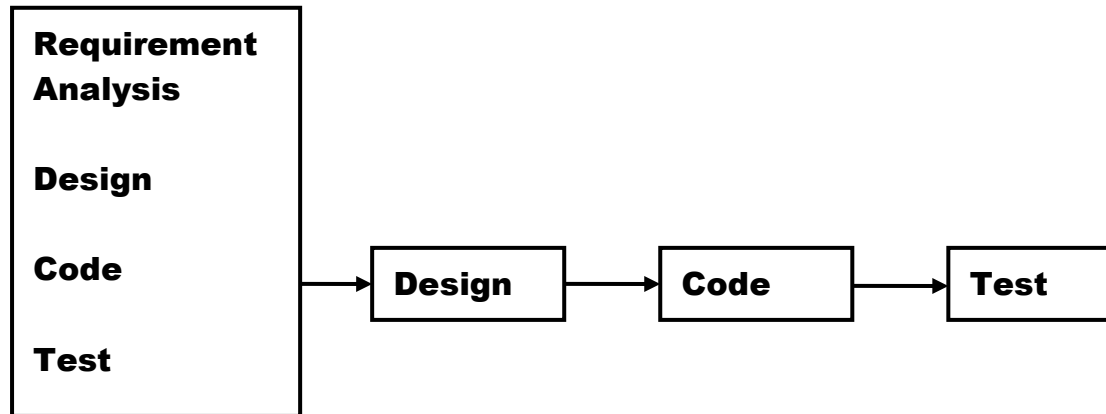
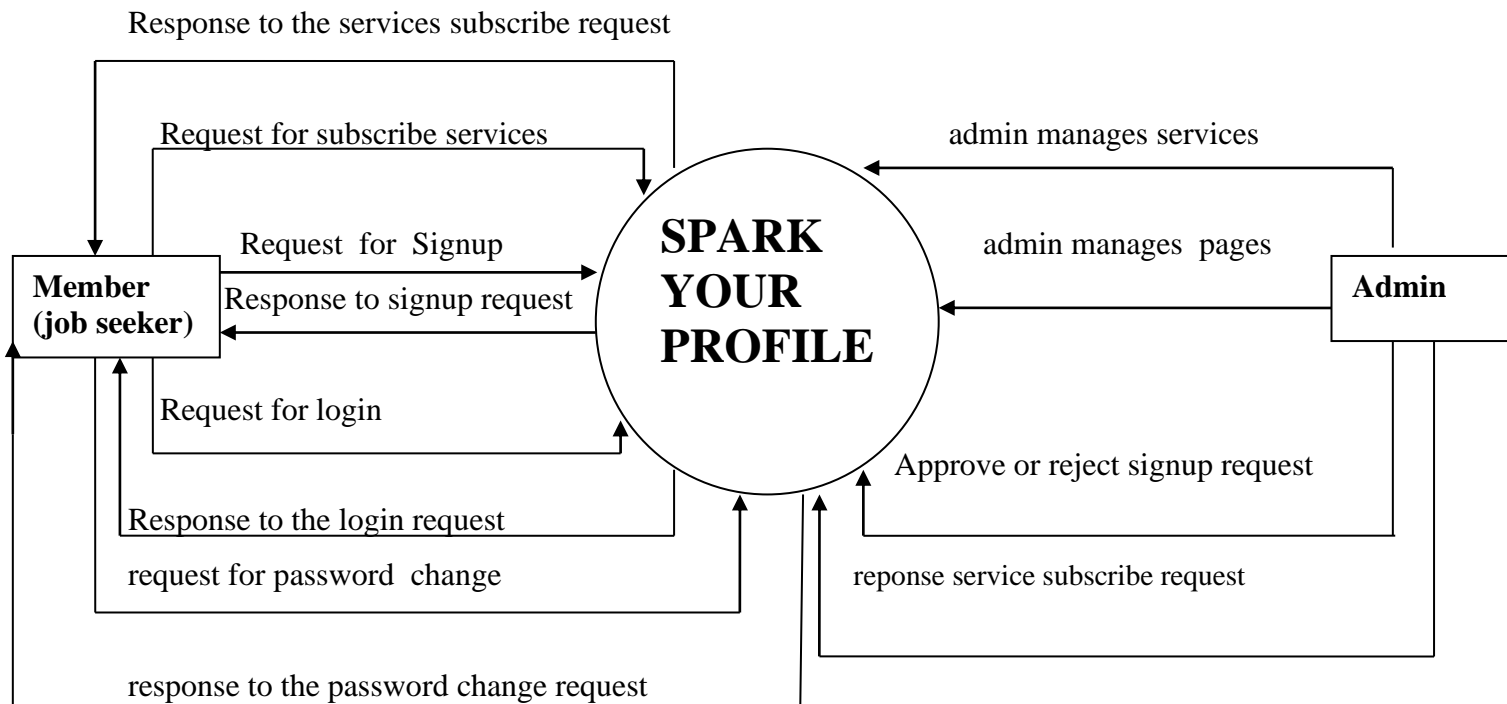


Figure: The Prototyping Model

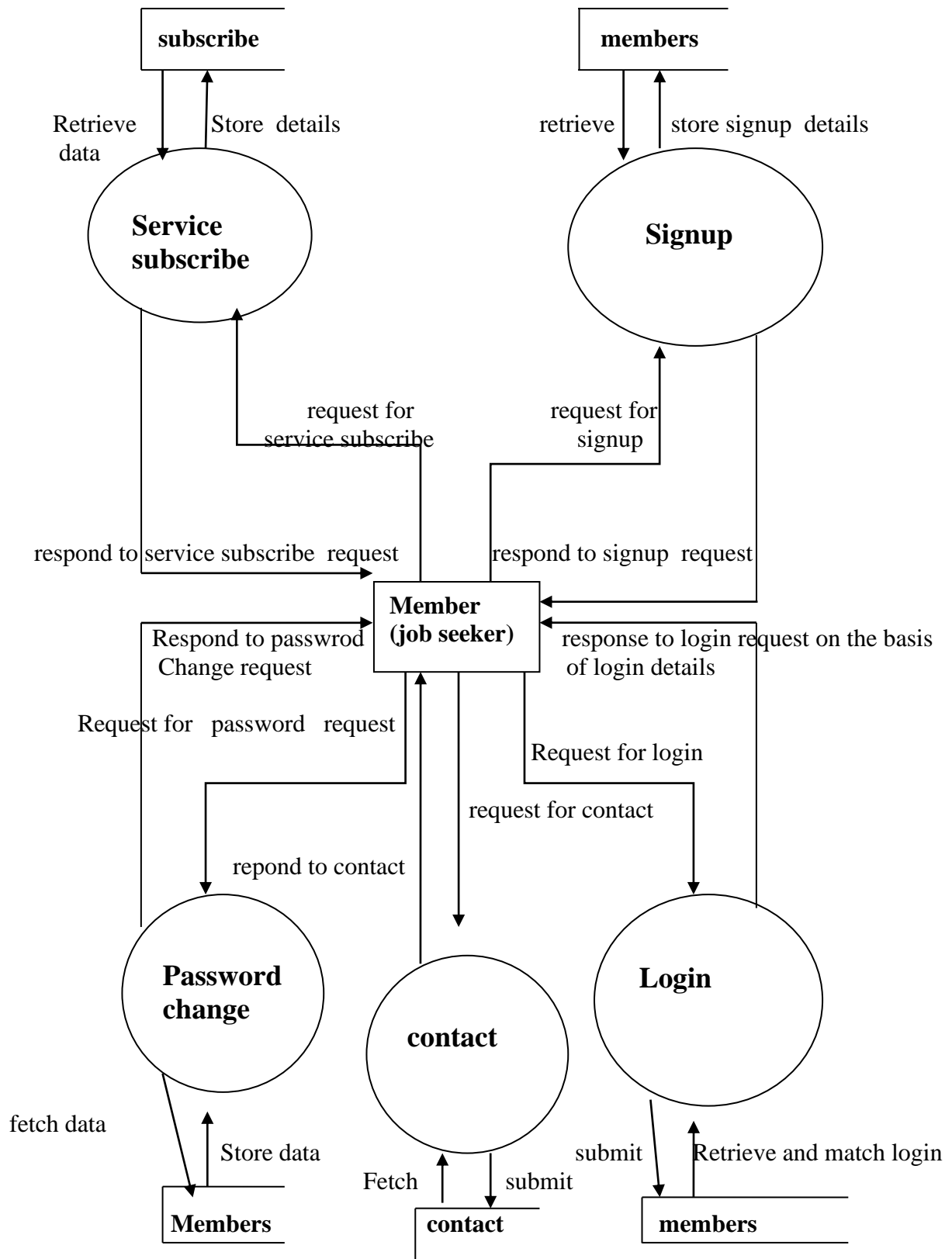
The development of the prototype typically is started when the preliminary version of the requirement specification document has been developed. After developed the prototype, the end user and client are given a chance to use the prototype. Based on the experience, they provide the feedback to the developers regarding the prototype: what is correct, what is need to be Modified, what is missing, what is not required etc. In this software when we give the prototype to the client and them give the feedback like the needed of the login in the software.

DATA FLOW DIAGRAM(DFD)

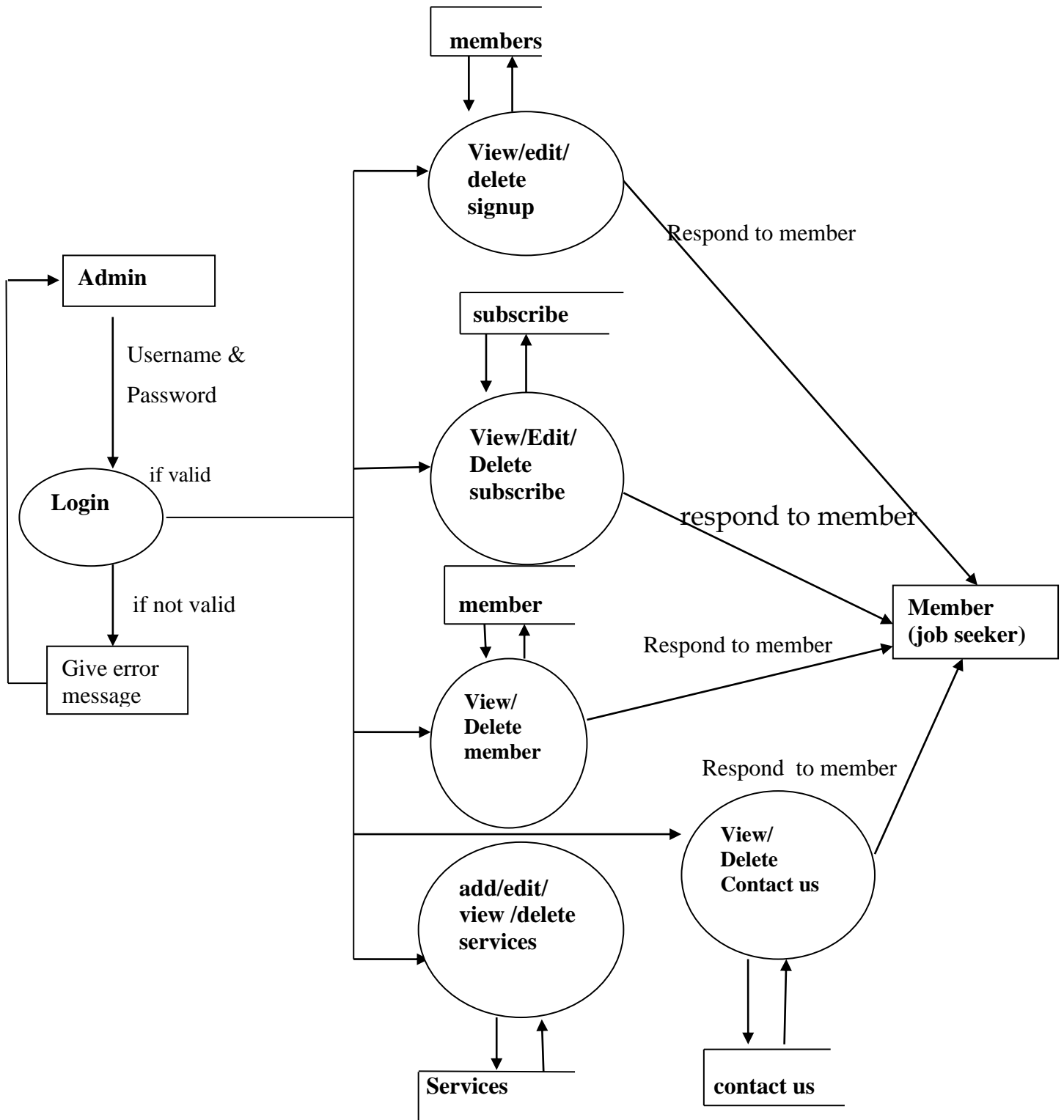
CONTEXT (0) LEVEL DFD



FIRST LEVEL DFD FOR MEMBER(JOB SEEKER)

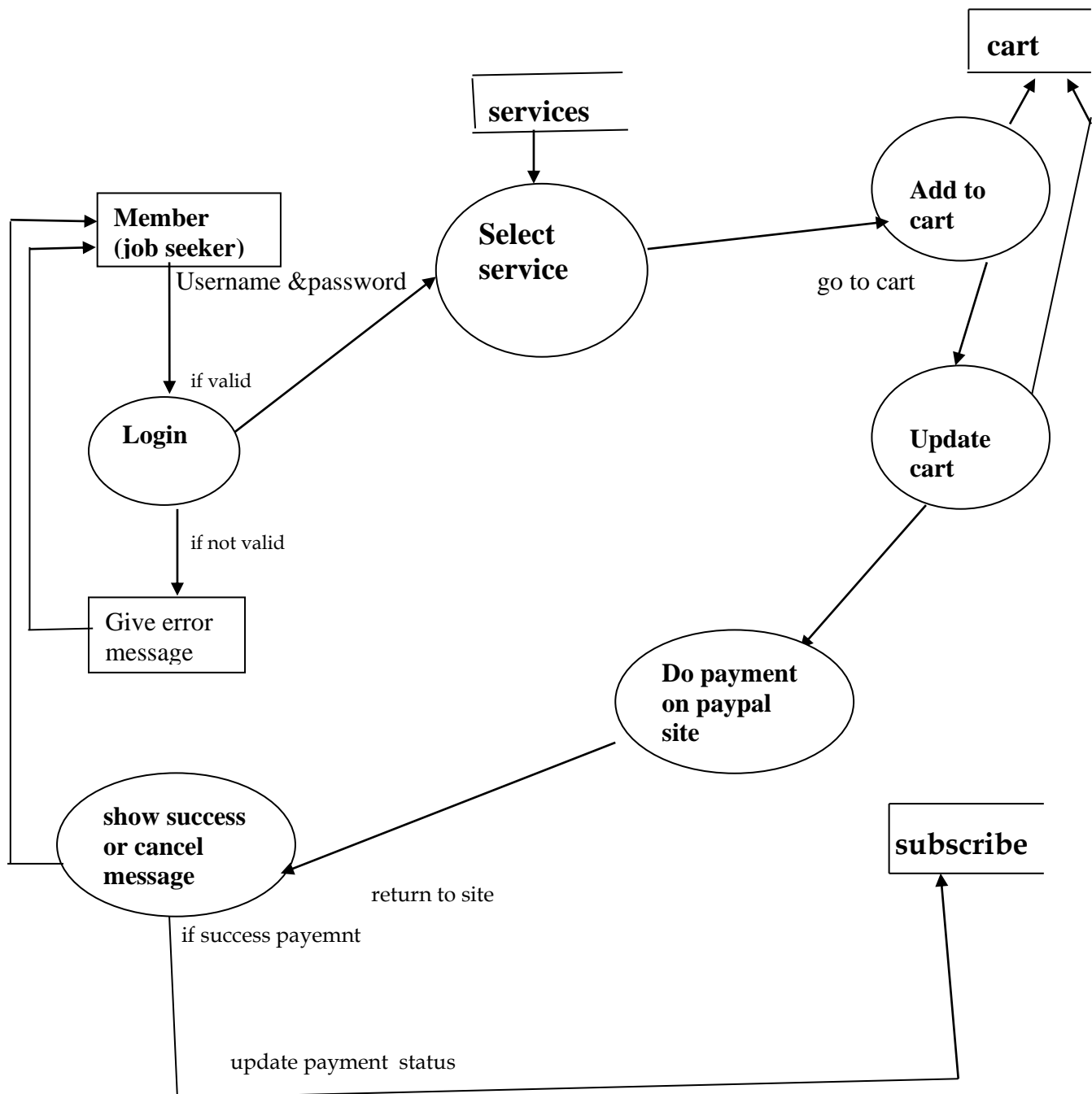


FIRST LEVEL DFD FOR ADMIN

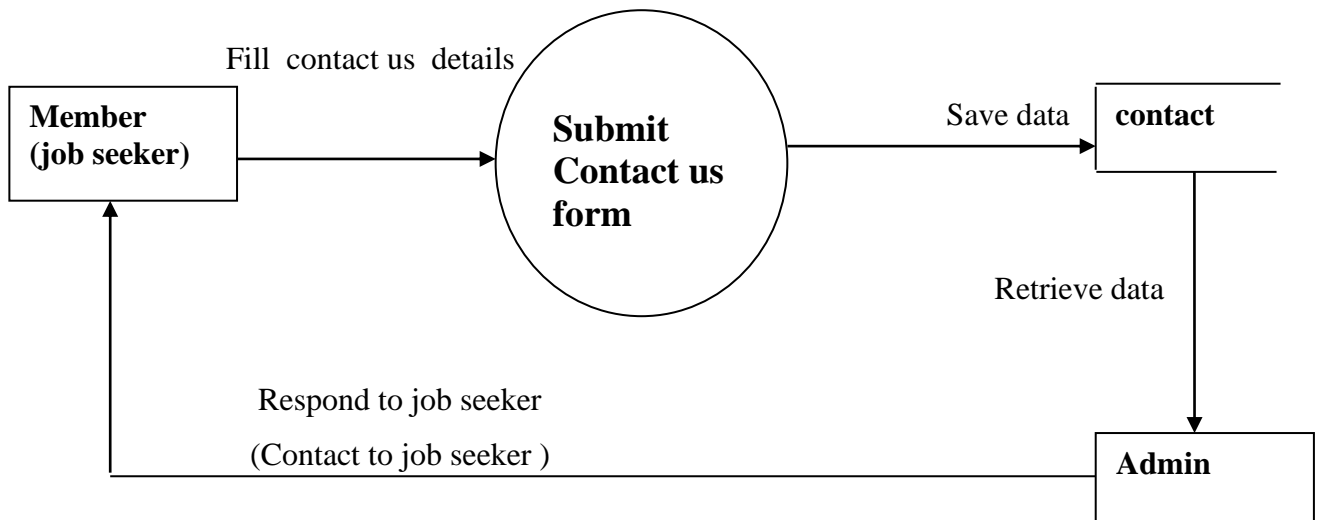


SECOND LEVEL DFD'S

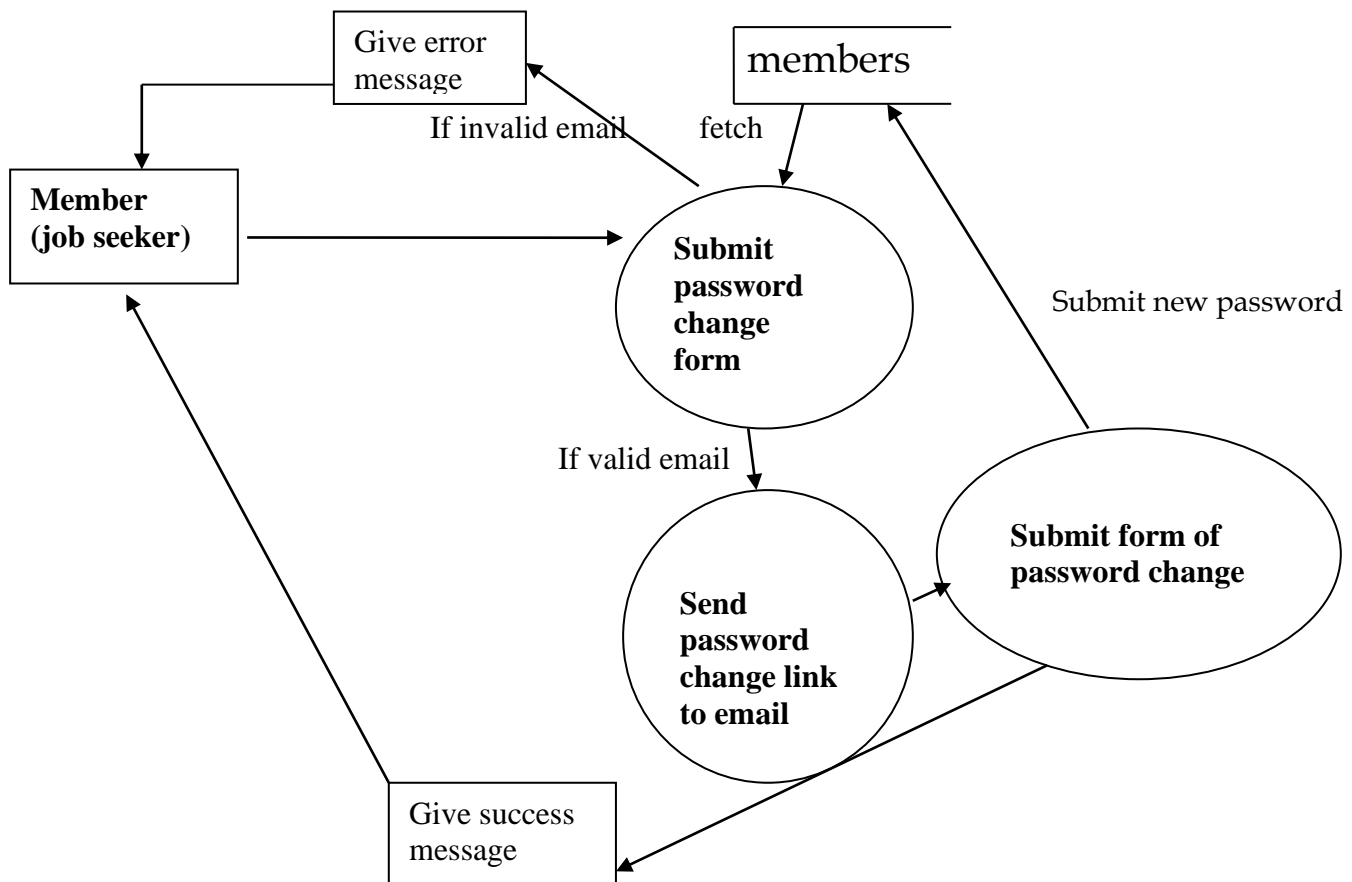
DFD FOR SUBSCRIBE SERVICE



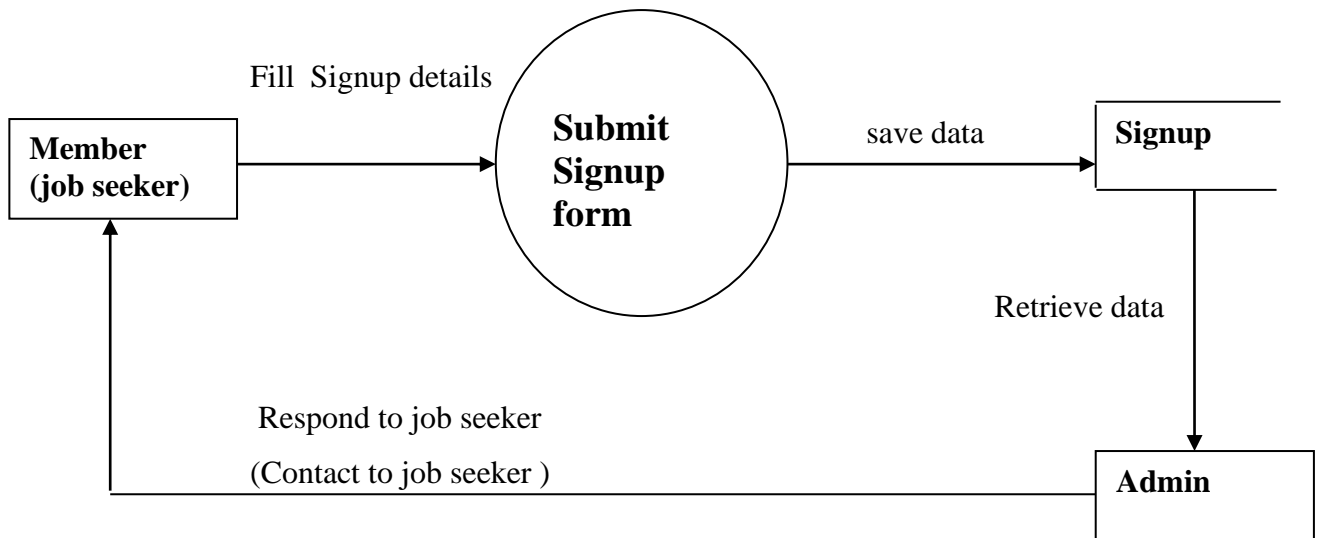
DFD FOR CONTACT US



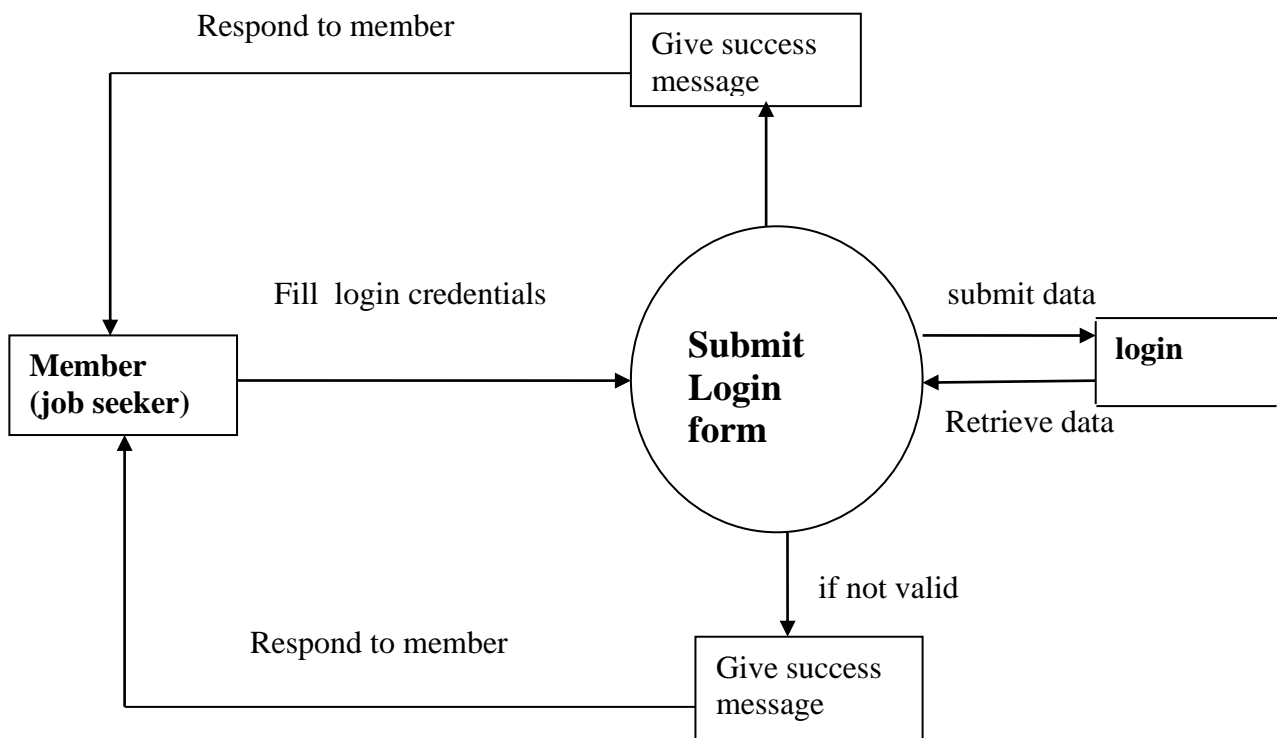
DFD FOR PASSWORD CHANGE



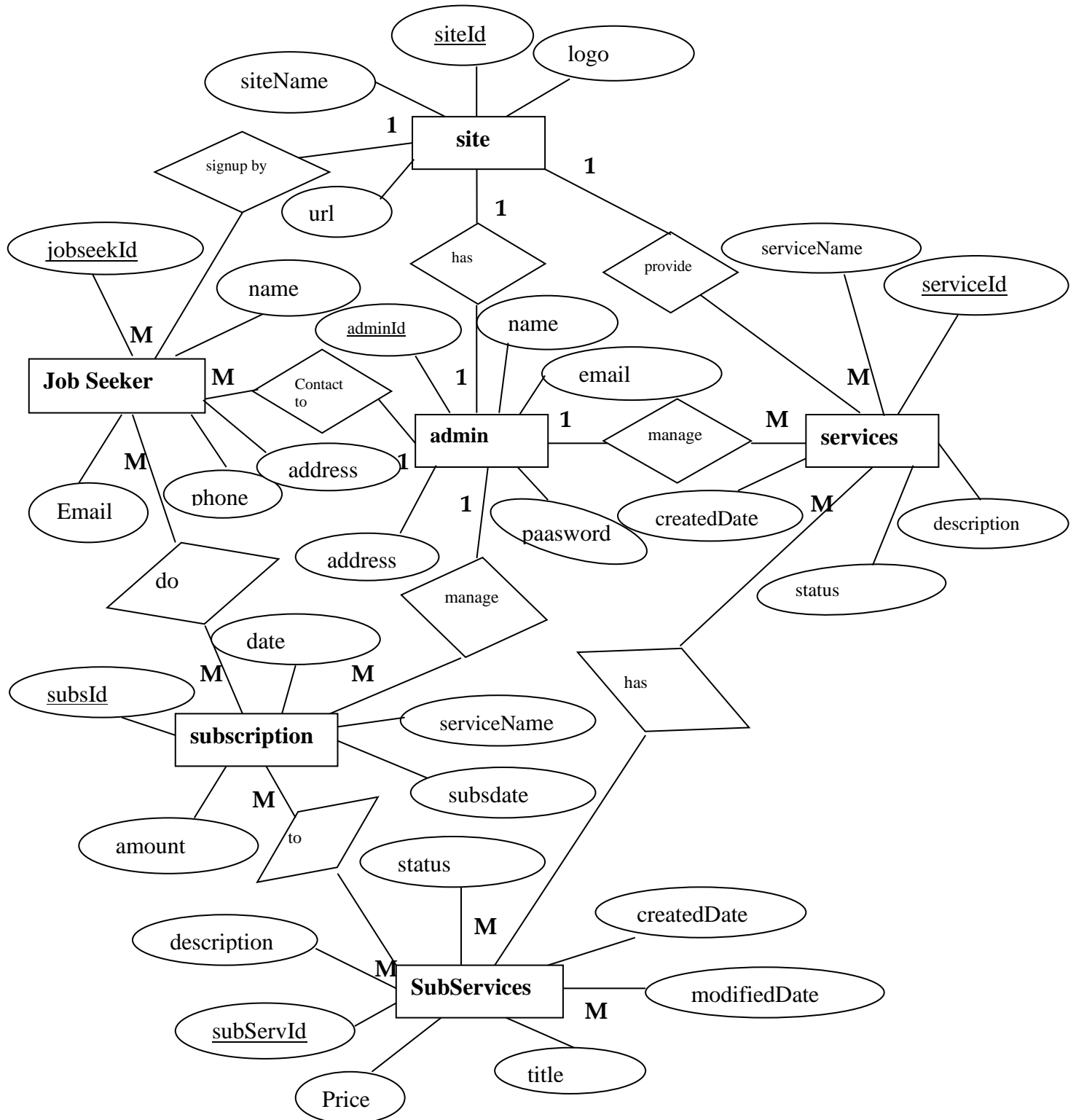
DFD FOR MEMBER SIGNUP



DFD FOR LOGIN



ENTITY-RELATIONSHIP DIAGRAM



SYSTEM DESIGN

VARIOUS MODULES AND THEIR DESCRIPTION

“ SPARK YOUR PROFILE” comprises of the following Core modules. Brief description of each and every module is given below:

➤ **LOGIN MODULE**

This module check the authenticity of user and provide the permissions to the users according to their role. There are 2 main users are in our site, first is Admin, who have complete control over site and he has full permissions, second user is member (job seeker).

➤ **MEMBER SIGNUP MODULE**

This module will serve the purpose of signup of the member (job seeker), this module manage the signup process of our site. Signup module is for members (job seekers) only.

➤ **SERVICE MODULE**

This module will serve the purpose of providing the services to the members . . This module show the different services for the job seekers (members) in the site .

➤ **SUBSCRIBE AND PAYMENT MODULE**

This module will be responsible for handling the subscription and payment process during subscription of services by member . In this module the services

subscribed by the members and the payment is received from the member on paypal .Paypal gateway is implemented in this module for receiving payment from member and the payment status updated after the successful payment.

➤ **CART MODULE**

This module will be responsible for handling the shopping cart process during subscription of services by member and the cart details removed after the payment received made by member. This module shows the services added by member to cart, it shows the total cost of services added to cart.

➤ **ADMIN MODULE**

This module of admin, which is one of the most important module of our project, and it is one of the most vast module, this module handles the complete process of managing services and pages and the members of site. This module is only restricted with the Admin of site, Only the Admin of site can access this module, this module is able to handle the complete site and have complete access to the site.

DATA STRUCTURE OF TABLES

1.Table Name:- members

Field Name	Data Type	Constraints	Description
member_id	Int(11)	Primary Key	member id
firstName	varchar(100)	Not Null	memberfirst name
lastName	varchar(100)	Not Null	memberlast name
password	varchar(100)	Not Null	memberpassword
email	varchar(100)	Not Null	Member email
address	varchar(255)	Not Null	Member address
city	varchar(100)	Not Null	membercity
state	varchar(100)	Not Null	memberstate
pinCode	varchar(20)	Not Null	memberZip
country	varchar(100)	Not Null	Member country
mobileNumber	varchar(20)	Not Null	Member mobile number
resume	varchar(255)	Not Null	Member resume
industrialArea	varchar(100)	Not Null	Industrial area
preferredLocation	varchar(100)	Not Null	Preferred location
experience	varchar(100)	Not Null	Member experience
createdDate	timestamp	Not Null	Created date
modifiedDate	datetime	Not Null	Modified date
status	Int(11)	Not Null	Member status
access_token	varchar(100)	Not Null	Access token

2.Table Name:-admin

Field Name	Data Type	Constraints	Description
user_id	int(11)	Primary Key	User id
user_name	varchar(255)	Not Null	User name
password	varchar(255)	Not Null	User password
email	varchar(255)	Not Null	User email

3.Table Name:-services

Field Name	Data Type	Constraints	Description
Service_id	int(11)	Primary Key	Service Id
Service_title	varchar(255)	Not Null	Service title
amount	Float(10,2)	Not Null	Service charge
Service_short_desc	varchar(255)	Not Null	Service short description
Service_desc	longtext	Not Null	Service description
parent	Int(11)	Foreign key(services)	Parent id
attachment	varchar(255)	Not Null	Attachment
thumbnail	varchar(255)	Not Null	Thumbnail
Created_date	timestamp	Not Null	created date
modified_date	datetime	Not Null	Modified date
status	enum('1','0')	Not Null	Service status

4.Table Name:-cart

Field Name	Data Type	Constraints	Description
cart_id	int(11)	Primary Key	Cart id
service_id	int(11)	Foreign key(services)	Service id
amount	Float(10,2)	Not Null	Service amount
ip	Varchar(20)	Not Null	Ip
date	timestamp	Not Null	Date

5.Table Name:-subscribe

Field Name	Data Type	Constraints	Description
subscribe_id	int(11)	Primary Key	Subscribe Id
Service_id	int(11)	Foreign key(services)	Service id
Member_id	Int(11)	Foreign key(members)	Member id
Amount	Float(10,2)	Not Null	Service charges
subscribe_date	timestamp	Not Null	Subscribe date

Payment_status	enum('0','1')	Not Null	Payment status
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6.Table Name:-pages

Field Name	Data Type	Constraints	Description
page_id	Int(11)	Primary Key	Page id
page_title	varchar(255)	Not Null	Page title
page_short_desc	varchar(255)	Not Null	Page short description
page_description	longtext	Not Null	Page description
attachment	varchar(255)	Not Null	Attachment
thumbnail	varchar(255)	Not Null	Thumbnail
created_date	timestamp	Not Null	created date
modified_date	datetime	Not Null	Modified date
status	enum('1','0')	Not Null	Page Status

7.Table Name:-quickcontact

Field Name	Data Type	Constraints	Description
contact_id	int(11)	Primary Key	Contact id
email	varchar(100)	Not Null	Contact email
name	varchar(100)	Not Null	Contact name
message	longtext	Not Null	Message
date	timestamp	Not Null	Date

TESTING TO BE USED

In order to ensure that the system works perfectly, it has to be rigorously tested. The testing procedure would be used to check all the features developed for the bus service provider system work efficiently, the test procedure would also be used to identify any hidden errors or deficiencies the system may possess.

Test Strategies :

There is a number of testing strategies that can be utilized to conduct adequate testing processes, the black box and white box testing methods are the most popular method to test software developed systems

Black Box Testing:

This testing strategy which is also known as functional testing is used by a tester who has no knowledge of the internal structure of the system. The tester does not test the programming code itself but instead performs the test based on previously. This form of testing is usually conducted by the end user, who would enter an input in to the system and check for an expected output. The advantage of using black box testing is that the test can be done by the users of the system, without them needing to have prior knowledge of the system's code

White Box Testing:

This testing strategy which is also known as glass box or structural testing is used to test the internal logic and structure of the programming code used to develop the system. The tester would need to have unequivocal knowledge of the coding used for developing the system, in order to uncover any malfunctioning code. In order to test system adequately both testing strategies have to be utilized.

Levels of Testing:

Systems are not designed as entire systems nor are they tested as single systems. The analyst must perform both unit and system testing.

Unit Testing:

In unit testing the analyst tests the programs making up a system. For this reason, unit testing is sometimes called program testing. Unit testing gives stress on the modules independently of one another, to find errors. This helps the tester in detecting errors in coding and logic that are contained within that module alone. For each, it provides the ability to enter, modify or retrieve data and respond to different types of inquiries or print reports. The test cases needed for unit testing should exercise each condition and option.

System Testing:

The important and essential part of the system development phase, after designing and developing the software is system testing. We cannot say that every program or system design is perfect and because of lack of communication between the user and the designer, some error is there in the software development. System testing makes a logical assumption that if all the parts of the system are correct, the goal will be successfully activated. Another reason for system testing is its utility as a user-oriented vehicle before implementation.

System testing consists of the following five steps:

- Program testing
- String testing
- System testing
- System documentation
- User acceptance testing

REPORTS

There are two type of reports generated by our system which are as follows:

MEMBERS SIGNUP REPORT - This report displays the information about the members registered in the 'SPARK YOUR PROFILE ' site.

SERVICE SUBSCIBE REPORT - This report displays the information about the services subscribed by the members in the 'SPARK YOUR PROFILE ' site.

SCOPE OF FUTURE APPLICATION

This site has tremendous scope, it will be used by a **JOB CONSULTANCY** using internet to provide the service for increasing the changes to getting job to its customers by providing .If the company wants to add new tasks it could be easily added in the current project.

This project is designed and developed in such a manner that it provides maximum efficiency & speed and has a vast scope of further development. Number of modules can be added without many modifications in the database and with minimum modifications in its code.

This application fits into the current scenario, which is the information age. This application with some modifications can be used by modern **JOB CONSULTANCY** to automate their services, increase their efficiency and to make their presence felt in the present age of e commerce.

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