

Title of the Project

ONLINE JOB PORTAL

(www.jobsearch.com)



Introduction & Objective

INTRODUCTION

Online job portal is a web application built in PHP. It provides the candidates, ability to register to this application and search for jobs, manage their accounts. Each candidate will have an account with their own home page. On the other hand, Employers those are willing to publish the jobs for their company to candidates, can register to the job portal and get their own account created and can post jobs to portal's database. Registered Employers can add or remove jobs and these jobs can be seen by various candidates and they can contact the concern person for the job. Main aim of this web application is to make a user friendly platform where, applicant can search jobs easily and is accessible to everyone who is interested. The Purpose of the application is to provide Job portal for Job Seekers, to submit their CV and apply for job, where Employer can select best Employees from available candidate people.

This project is aimed at developing an online search Portal for the Placement Details for job seekers. The system is an online application that can be accessed throughout the organization and outside as well with proper login provided. This system can be used as an Online Job Portal for job seekers. Job Seekers logging should be able to upload their information in the form of a CV. Visitors/Company representatives logging in may also access/search any information put up by Job aspirants. The importance of placement system is increasing day by day. Thousands of applicants are depending placement cell. But the applicants are facing so many problems. This project is an attempt to minimize the problems of an applicant to find a correct job. If we can make it an online computerized and a mobile alert process it will be so fast and convenient for the applicants. Far from upsetting matters, however, new technologies have predominantly made life better and considerably easier for most 0people, and so it must be concluded that they should be welcomed.

- ✓ This project is online job-portal. This portal can handle data of Recruits (Several Companies) who are looking for suitable candidates for their vacancies.
- ✓ This portal will be most useful for Consultants for searching of matching job with jobseekers etc.
- ✓ A registration form is provided through which user can enter details of company like location of company/type of job/status of job/Qualification of jobseekers.

SYSTEM OF THE PROJECT:

✦ Designing and Implementing Job Seekers & Job Providers:

The aim of this module is to collect data from the user; he may a job seeker or a job provider. Both of them are potential clients to our Resume Art. A user should be registered regardless of whether he is a job seeker or a provider. In this module we register the user and grab as many details as possible about the user.

✦ Designing and implementing Resume Database, job database:

The aim of the module is to create a resume for all his job seekers asking the details about the experience, education, skills, affiliations and references for the project.

✦ Designing a Recruitment System :

The aim of the module is to design a dynamic search engine for the Resume art data base which can provide data for the job seekers and job providers.

‡ OBJECTIVE

This project is aimed at developing a web-based and central online job portal for the HR Group for a company. Some features of this system will be creating vacancies, storing Applicants data, Interview process initiation, Scheduling Interviews, Storing Interview results for the applicant and finally Hiring of the applicant. Reports may be required to be generated for the use of HR group. This system automates the manual recruitment process. We believe that once the organization chooses to use this system, it will eventually recognize the value and necessity of this system and understand the problems involved in the manual process. This document provides details about the entire software requirements specification for the online job portal. The project Online Job portal is aimed at developing web-based and central Recruitment Process System for the HR Group of a company.

This project is aimed at developing an online search Job Portal. The system is an online application that can be accessed throughout the organization and outside as well with proper login provided. Students logging should be able to upload their information in the form of a CV. Visitors/Company representatives logging in may also access/search any information put up by Students. The project has been planned to be having the view of distributed architecture, with centralized storage of the database. The application for the storage of the data has been planned.

Using the constructs of MY-SQL Server and all the user interfaces has been designed using the PHP technologies. The database connectivity is planned using the “MYSQL Connection” methodology. The standards of security and data protective mechanism have been given a big choice for proper usage. The application takes care of different modules and their associated reports, which are produced as per the applicable strategies and standards that are put forwarded by the administrative staff. The entire project has been developed keeping in view of the distributed client server computing technology, in mind. The user interfaces are browser specific to give distributed accessibility for the overall system. The internal database has been selected as MY-SQL server.

PURPOSE:

- ✦ We have developed the job-portal. This portal can handle data of Recruits (Several Companies) who are looking for suitable candidates for their vacancies.
- ✦ This portal will be most useful for Consultants for searching of matching job with jobseekers etc.
- ✦ The classic Functionality of this Application focuses on data storage. However, the means to retrieve and analyze data, to extract, transform and load data, and to manage the data dictionary.
- ✦ An administrator is provided through which can enter Recruiter’s record /type of jobs/jobseeker’s description. A registration form is provided through which user can enter details of company like location of company/type of job/status of job/Qualification of jobseekers. This data once entered can be edited/deleted as required when there will be vast entries of data user can scroll the data.

RDBMS (RELATIONAL DATABASE MANAGEMENT SYSTEM)

Relational Database Management System is a type of Database Management System that stores data in the form of related tables. Relational databases are powerful because they require few assumptions about how data is related or how it will be extracted from the database. An important feature of relational systems is that a single database can be spread across several tables.

System Analysis

OVERVIEW:

System analysis is the process of gathering and interpreting facts, diagnosing problem and using the information to recommend improvement to the system. In brief, we can say that analysis specifies what the system should do. In terms of any software development life cycle, the analysis phase is the first phase covered. It is the phase that is based on the following principles:

- ✦ The information domain of a problem must be represented and understood. The functions that the software is to perform must be defined.
- ✦ The behavior of the software (as a consequence of external events) must be represented.
- ✦ The models that depict information function and behavior must be portioned in a manner that uncovers detail in layered (or hierarchical) fashion.
- ✦ The analysis process should move from essential information toward implementation detail.

• **PROPOSED SYSTEM**

In the proposed system we propose to computerize the above-mentioned activities. In the Existing system, all data processing is done manually. When there are a lot of issues such as retrieval and storage of the information and keeping track of them becomes a tedious task. By implementing a computerized system, the limitation in the present system will be reduced. Manpower can be reduced to a great extent and efficiency and accuracy can be increased to manifold. More over consumption of time can be reduced to far greater extend by the implementation of the proposed system. The proposed computer based information system is aimed at eliminating the limitations of the existing system via increasing speed of information retrieval, by increasing processing speed, data security and hence give accurate reports. The proposed system fully satisfies user needs. All most all the limitations of the existing system are reduced in a great manner. Details are stored in various files from which data can be accessed and manipulated easily.

In the proposed system there are two sections one is administration part in which the following processes are carried out.

MERITS OF PROPOSED SYSTEM

- ✦ A lot of manual work which is time consuming and tedious can be reduced.
- ✦ Eliminates wrong entries and hence give accurate report.
- ✦ Reduce paper work and extra cost.
- ✦ Data redundancy can be avoided.
- ✦ Data security.
- ✦ Information retrieval is faster.
- ✦ User friendliness.

- ✦ Flexibility.
- ✦ The number of registers can be reduced.
- ✦ The new system provides data consistency and integrity so that data at any time represent the current status.
- ✦ The system should provide better security and control over data.

• **PRELIMINARY INVESTIGATION:**

Preliminary investigation examine project feasibility, the likelihood the system will be useful to the organization. The main objective of the feasibility study is to test the Technical, Operational and Economical feasibility for adding new modules and debugging old running system. All system is feasible if they are unlimited resources and infinite time. There are aspects in the feasibility study portion of the preliminary investigation:

- ✦ Technical Feasibility
- ✦ Operation Feasibility
- ✦ Economical Feasibility

✓ **Technical Feasibility**

The technical issue usually raised during the feasibility stage of the investigation includes the following:

- Does the necessary technology exist to do what is suggested?
- Do the proposed equipments have the technical capacity to hold the data required to use the new system?
- Will the proposed system provide adequate response to inquiries, regardless of the number or location of users?
- Can the system be upgraded if developed?
- Are there technical guarantees of accuracy, reliability, ease of access and data security?

Earlier no system existed to cater to the needs of 'Secure Infrastructure Implementation System'. The current system developed is technically feasible. It is a web based user interface for audit workflow at NIC-CSD. Thus it provides an easy access to the users. The database's purpose is to create, establish and maintain a workflow among various entities in order to facilitate all concerned users in their various capacities or roles. Permission to the users would be granted based on the roles specified. Therefore, it provides the technical guarantee of accuracy, reliability and security. The software and hard requirements for the development of this project are not many and are already available in-house at NIC or are available as free as open source. The work for the project is done with the current equipment and existing software technology. Necessary bandwidth exists for providing a fast feedback to the users irrespective of the number of users using the system.

✓ **Operational Feasibility**

Proposed projects are beneficial only if they can be turned out into information system. That will meet the organization's operating requirements. Operational feasibility aspects of the project are

to be taken as an important part of the project implementation. Some of the important issues raised are to test the operational feasibility of a project includes the following: -

- Is there sufficient support for the management from the users?
- Will the system be used and work properly if it is being developed and implemented?
- Will there be any resistance from the user that will undermine the possible application benefits?

This system is targeted to be in accordance with the above-mentioned issues. Beforehand, the management issues and user requirements have been taken into consideration. So there is no question of resistance from the users that can undermine the possible application benefits.

The well-planned design would ensure the optimal utilization of the computer resources and would help in the improvement of performance status.

✓ **Economic Feasibility**

A system can be developed technically and that will be used if installed must still be a good investment for the organization. In the economical feasibility, the development cost in creating the system is evaluated against the ultimate benefit derived from the new systems. Financial benefits must equal or exceed the costs.

The system is economically feasible. It does not require any addition hardware or software. Since the interface for this system is developed using the existing resources and technologies available at NIC, There is nominal expenditure and economical feasibility for certain.

PROJECT PLANNING

The tasks involved in the Project are:

Preliminary Investigation and Feasibility Study:

Software demand must be clarified properly before considering the Systems analysis and the Project should be checked properly that it is completely technically, economically and operationally feasible system or not.

System Analysis:

Software demand is accepted; its cost, precedence, completion time, and personnel requirement are estimated. Some tools are used in analysis like Data Flow Diagram (DFD), on-site examination and questionnaires.

System Design:

In this stage how the problem will be solved technically is decided. Number of modules, hardware, software, algorithms etc. is decided in this phase.

Coding and Unit Testing:

In this phase the actual complete project code is developed. With the written code segment the comments and description corresponding to code also should be given. During the coding phase each modules is tested individually.

Integration and System Testing:

As the unit testing is completed the unit tested module is further tested under integrated testing. All the modules that have been developed before and tested individually are integrated in this phase. Final Software is then tested under System Testing.

Implementation & Documentations:

Once the System passes all the test during System testing the system is delivered to the Customer where it has to be implemented successfully. Maintenance phase includes addition of modules, modification of the hardware and software.

Project Planning & Scheduling:

PERT Chart:

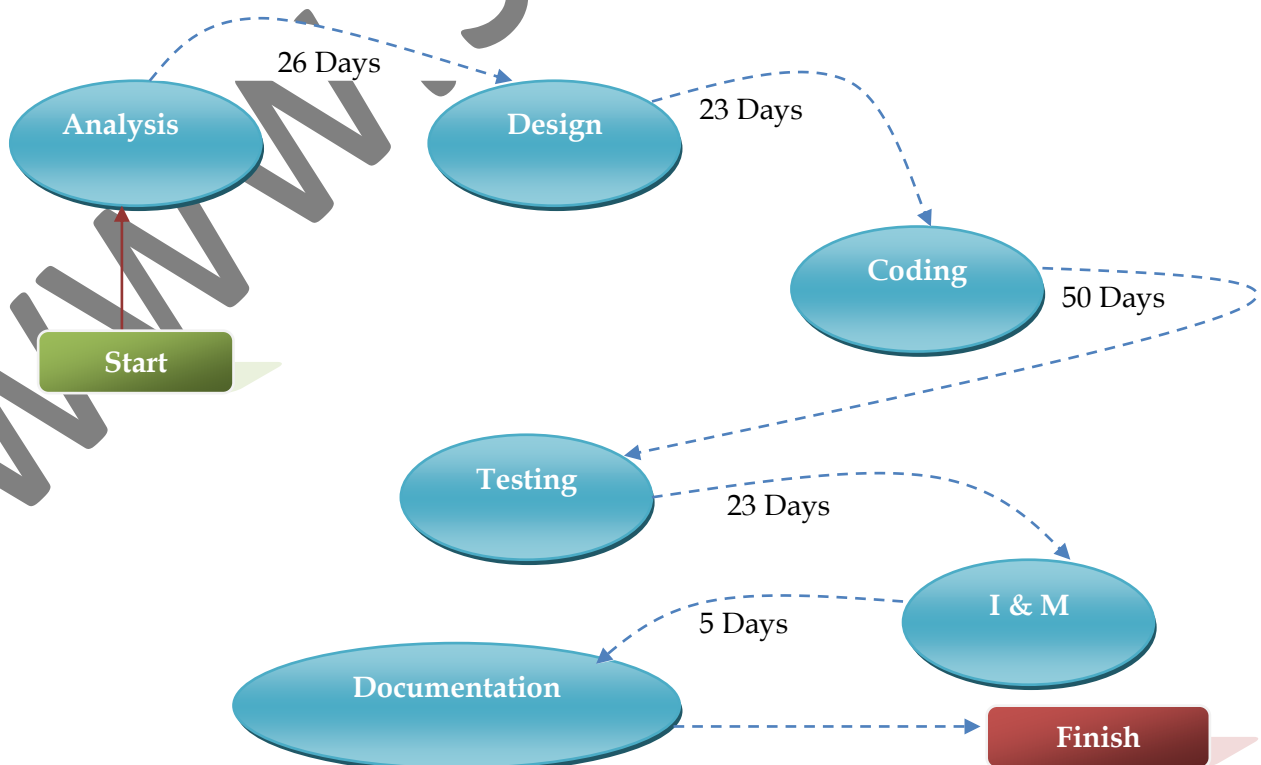
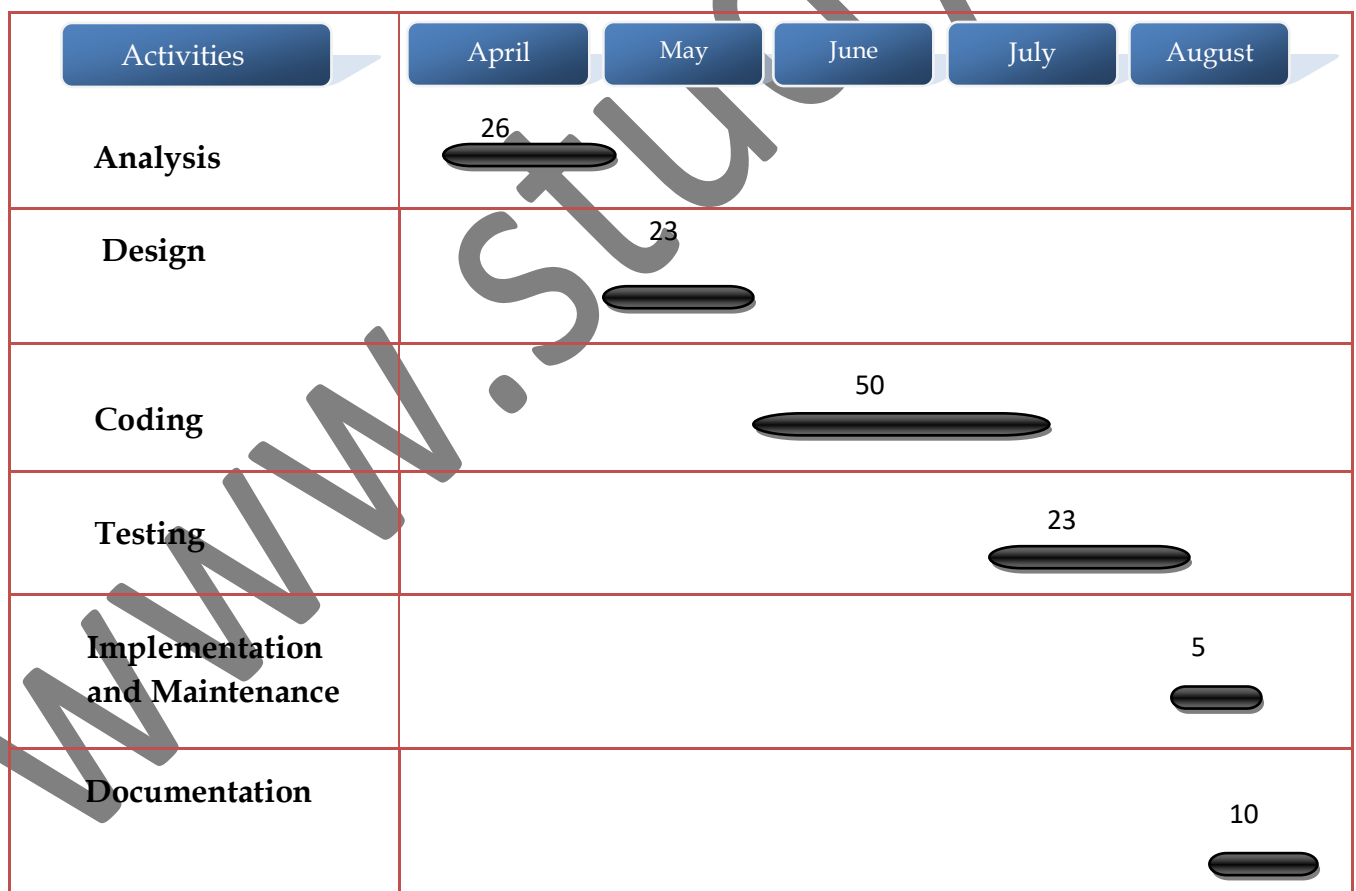


Chart of this project:

| ACTIVITY NAME | START DATE | END DATE | DAYS |
|------------------------------|-------------------------|-------------------------|------|
| Analysis | 5 th April | 30 th April | 26 |
| Design | 2 nd May | 25 th May | 23 |
| Coding | 26 th May | 15 th July | 50 |
| Testing | 10 th July | 2 nd August | 23 |
| Implementation & Maintenance | 5 th August | 10 th August | 5 |
| Documentation | 11 th August | 21 th August | 10 |

Gantt chart:



Time Period in Days

Used Software & Hardware Tools

Tools / Platform, Hardware and Software Technologies

Hardware Configuration

Processor - Pentium IV 2.7 GHz
Mother Board - Intel 815E Chipset
RAM-1 GB DDR
Hard Disk-160 GB
Monitor- 17inches TFT
DVD Writer-52X

Software Configuration

Operating System: Microsoft Windows 7. To provide GUI (Graphical User Interface) support needed by the application. Also provide multitasking support for simultaneous execution of multiple processes.

Front End Tools: PHP is very powerful front end Web Application. It provides a great support for designing interface with networking facilities. It allows application by using mouse click, mouse up etc.

HTML is used as the scripting language to provide hyperlink benefits across the web pages.

Web Server: Internet Information Server (IIS): The Internet Information Server is the local internet server. The IIS will be used for testing the overall application execution.

Web Browser: Google Chrome: The web browser will be used for viewing the generated web pages and determine the correctness of the execution of the overall application.

Back End RDBMS: MYSQL Server provides several benefit such as High Storage Database, Good compatibility with PHP, Data Security is high, Easy to install and configure and Easy to learn. A database is a structured collection of data. Data refers to the characteristics of people, things and events. MYSQL Server stores each data item in its own fields. In MYSQL Server, the fields relating to a particular person, thing or event are bundled together to form a single complete unit of data, called a record (it can also be referred to as row or an occurrence). Each record is made up of a number of fields. No two fields in a record can have the same field name.

MYSQL SERVER TABLES: MYSQL Server stores records relating to each other in a table. Different tables are created for the various groups of information. Related tables are grouped together to form a database.

PRIMARY KEY: Every table in MYSQL Server has a field or a combination of fields that uniquely identifies each record in the table. The Unique identifier is called the Primary Key, or simply the Key. The primary key provides the means to distinguish one record from all other in a table. It allows the user and the database system to identify, locate and refer to one particular record in the database.

RELATIONAL DATABASE: Sometimes all the information of interest to a business operation can be stored in one table. MYSQL Server makes it very easy to link the data in multiple tables. Matching an employee to the department in which they work is one example. This is what makes MYSQL Server a relational database management system, or RDBMS. It stores data in two or more tables and enables you to define relationships between the tables and enables you to define relationships between the tables.

FOREIGN KEY: When a field in one table matches the primary key of another field is referred to as a foreign key. A foreign key is a field or a group of fields in one table whose values match those of the primary key of another table.

HARDWARE

| Content | Description |
|----------------|--------------------------------|
| HDD | 20 GB Min 40 GB Recommended |
| RAM | 512 GB Min 1 GB Recommended |
| Monitor | Any type of display screen |

SOFTWARE

| Content | Description |
|----------------|--|
| OS | Windows XP with SP2 or Windows Vista or Windows 7,8,10 |
| Database | MY-SQL |
| Technologies | PHP |
| IDE | Dreamweaver CS3 |
| Browser | Google Chrome |

SOFTWARE ENGINEERING PARADIGM APPLIED:

The linearity of Waterfall Model is based on the assumption that software development may proceed linearly from analysis down to coding. But, in this project feedback loops are applied to the immediately preceding stages. The reason being that the project is developed and implemented sequentially based on the documents collected via analysis. Based on the system

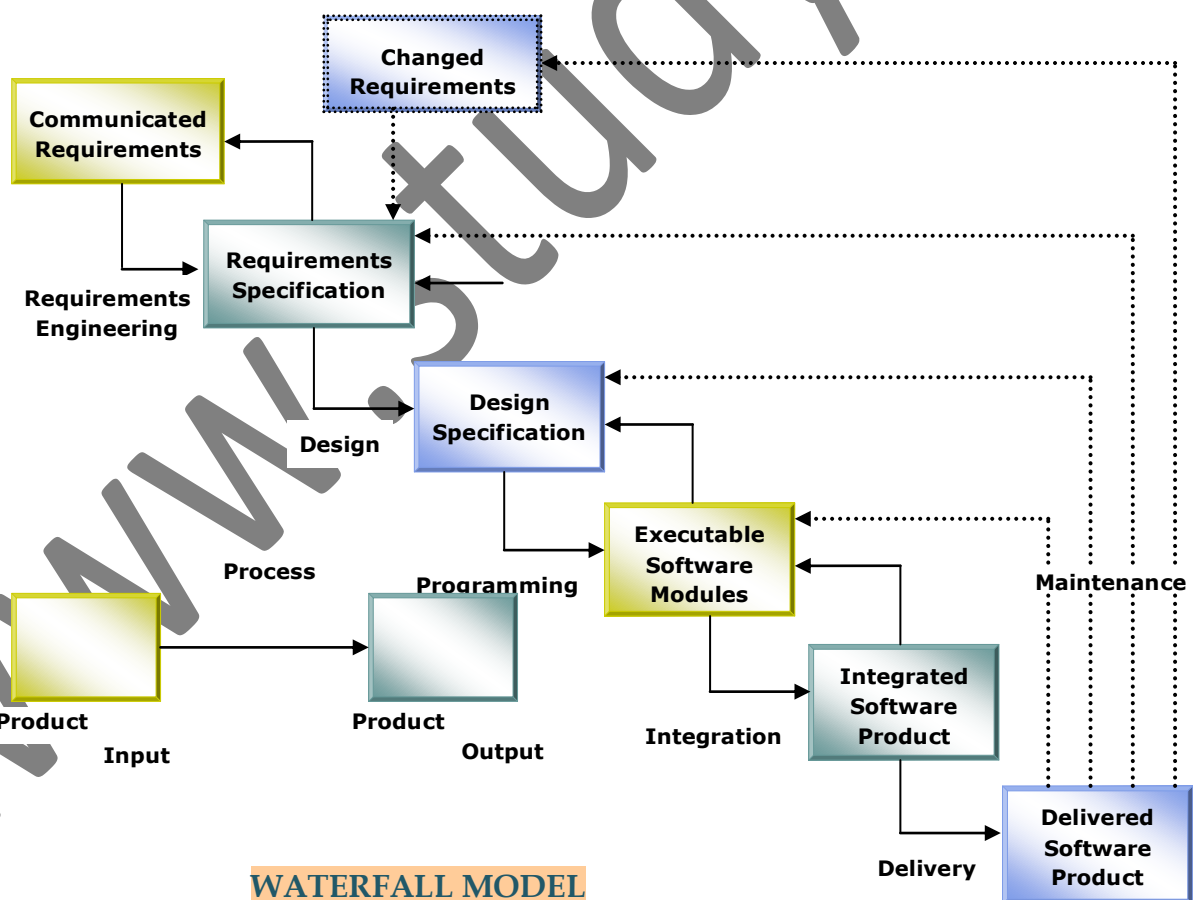
analysis the system design was performed and based on the system design were performed the coding and the testing. On successful testing the system was implemented. Waterfall Model is the first explicit model of the software development process. It offered a means of making the development process more visible. Because of the cascade from phase to another, this model is known as the “Waterfall Model”.

✓ **Requirements Definition:** The System’s Services, constraints and goals are established by consultation with system users.

✓ **System and Software Design:** The System Design Process partitions the requirements to either hardware or software systems. It establishes overall system architecture. Software design involves representing the software system functions in a form that may be transformed into one or more transformable programs.

✓ **Implementation and Unit Testing:** During this stage, the software design is realized as a set of programs or program units. Unit testing involves verifying that each unit meets its specification.

✓ **Integration and System Testing:** The individual program units or programs are integrated and tested as a complete system to ensure that the software requirements have been met. After testing, the software system is delivered to the customer.



REQUIREMENT AND ANALYSIS

An SRS is basically an organization's understanding (in writing) of a customer or potential client's system requirements and dependencies *at a particular point in time* (usually) prior to any actual design or development work. It's a two-way insurance policy that assures that both the client and the organization understand the other's requirements from that perspective at a given point in time. The SRS document itself states in precise and explicit language those functions and capabilities a software system (i.e., a software application, an ecommerce Web site, and so on) must provide, as well as states any required constraints by which the system must abide. The SRS also functions as a blueprint for completing a project with as little cost growth as possible. The SRS is often referred to as the "parent" document because all subsequent project management documents, such as design specifications, statements of work, software architecture specifications, testing and validation plans, and documentation plans, are related to it. **Requirements analysis** in systems engineering and software engineering, encompasses those tasks that determines the needs or conditions to meet for a new or altered product, taking account of the possibly conflicting requirements of the various stakeholders, such as beneficiaries or users. Requirements analysis is critical to the success of a development project. Requirements must be documented, actionable, measurable, testable, related to identified business needs or opportunities, and defined to a level of detail sufficient for system design. Requirements can be architectural, structural, behavioral, functional, and non-functional.

A well-designed, well-written SRS accomplishes four major goals:

- ✚ It provides feedback to the customer. An SRS is the customer's assurance that the development organization understands the issues or problems to be solved and the software behavior necessary to address those problems. Therefore, the SRS should be written in natural language (versus a formal language, explained later in this article), in an unambiguous manner that may also include charts, tables, data flow diagrams, decision tables, and so on.
- ✚ It decomposes the problem into component parts. The simple act of writing down software requirements in a well-designed format organizes information, places

borders around the problem, solidifies ideas, and helps break down the problem into its component parts in an orderly fashion.

- ✦ It serves as an input to the design specification. As mentioned previously, the SRS serves as the parent document to subsequent documents, such as the software design specification and statement of work. Therefore, the SRS must contain sufficient detail in the functional system requirements so that a design solution can be devised.
- ✦ It serves as a product validation check. The SRS also serves as the parent document for testing and validation strategies that will be applied to the requirements for verification.
- ✦ SRSs are typically developed during the first stages of "Requirements Development," which is the initial product development phase in which information is gathered about what requirements are needed--and not. This information-gathering stage can include onsite visits, questionnaires, surveys, interviews, and perhaps a return-on-investment (ROI) analysis or needs analysis of the customer or client's current business environment. The actual specification, then, is written after the requirements have been gathered and analyzed.

TECHNICAL REQUIREMENT

| SL No. | Technical Requirement |
|---|-----------------------|
| 1. | Google Chrome |
| 2. | PHP |
| 3. | Ms Office 2007 |
| 4. | MYSQL Server |
| Google Chrome: Used to display a webpage by downloading its prototype from its web server. | |
| PHP: PHP which will be used to develop this website as the front end. | |
| MYSQL Server: Provides the backend RDBMS support. | |
| Ms Office 2007: Used for creating the necessary documentation for this project. | |

USED TOOLS AND PLATFORM

| <u>Software Specification</u> | |
|----------------------------------|---------------|
| Front-end Tool | Back-end Tool |
| PHP | MYSQL |
| User friendly | Security |
| Low Cost Solution | Portability |
| GUI feature | Quality |
| Better designing aspects | Security |
| User friendly | Portability |
| <u>Hardware Specification</u> | |
| ⊕ Pentium IV Dual-Core Processor | |
| ⊕ 1 GB RAM | |
| ⊕ 160 GB HDD | |
| ⊕ Intel Motherboard | |
| ⊕ DVD Writer | |
| ⊕ 1.44 MB FDD | |
| ⊕ 15" Color Monitor | |
| ⊕ 104keys Keyboard | |
| ⊕ Optical Mouse | |
| ⊕ Creative Speakers | |

FUNCTIONAL REQUIREMENT :

A functional requirement defines a function of a software system or its component. A function is described as a set of inputs, the behavior, and outputs (see also software). Functional requirements may be calculations, technical details, data manipulation and processing and other specific functionality that define what a system is supposed to accomplish. Behavioral requirements describing all the cases where the system uses the functional requirements are captured in use cases. Functional requirements are supported by non-functional requirements (also known as quality requirements), which impose constraints on the design or implementation (such as performance requirements, security, or reliability). Generally, functional requirements are expressed in the form "system shall do <requirement>", while non-functional requirements are "system shall be <requirement>". The plan for implementing functional requirements is detailed in the system design. The plan for implementing non-functional requirements is detailed in the system architecture.

Module Description

MODULE OF SYSTEM :

■ Jobseeker Section

Registration Module:

- User enter account details, contact details, and resume summary, education details, upload resume information to become a member.
- Free resume posting during the registration.
- User can easily select the job mail alert and news letter alert during the registration itself.
- Activation emails send it to the user after registration.

Login Module

- User easily login with their username and password.

Forget Password Module

- User receive mail for forget password

Home Page Module

- Home town search - user search the job in his / her home town
- Search agent - user can create the agent and search job by any one search agent
- User can block and unblock the companies which one company he / she want to block or unblock Set profile visibility of his / her profile.
- User can set their resume either active or inactive.
- Change password - user change new password into new password.
- User can preview, edit, delete and print their resume.
- User can update the profile

Search job Module

- Quick job search - Enter any keyword to search jobs.
- Advance job search - Enter keyword or experience or location or functional area to search jobs.
- Jobs search by role - Selecting the category or subcategory to search jobs.
- Job search by industry - Choose any one industry to search jobs.
- My Saved Jobs - User can view their saved jobs.

■ Employer Section

Registration Module

- User enters their account information, company details, and primary contact details.
- User can easily select the job mail alert and news letter alert during the registration itself.
- Activation emails send it to the user after registration

Profile

- Profile view

Find Candidate

- Find the job seekers who are apply for the posting jobs.
- View their responses.
- Recruiter can send email to the job seekers.
- Recruiters create the common mail message before sending the email.
- Recruiter can download the job seekers resume that are all apply for the job.
- Resume access

Recruiters are searching the application of the user.

- Enter the detail about job position, functional area, industry type, keyword, experience, qualification, location, country, and order by date.
- If the employer or recruiter was not order any package it shows the buy package link
- After the employers or recruiters are buying the package then only they can search the job seeker resumes.

Post job

- Post the job for recruitment.
- For posting the job the employer should order the package.
- If the user was not buying the pack they can't post any single job.

■ Admin Section:

Manage site:

- Administrator
- Maintain the administrator username and password.
- Add username and password.
- Edit and delete password. Functional Area
- Add functional area
- Edit functional area

- Remove functional area Industry Type
- Add industry type
- Edit industry type
- Remove industry type Home Page Ads
- Add home page ads.
- Edit ads
- Remove ads
- Maintain active and inactive ads

Information will update.

- Edit Copyright
- Edit the copy right information.
- Admin can edit this information and in user view these
- Information will update.

Job Postings

- Add product.
- Edit product.
- Remove product.
- Maintains the product name, days allowed, number jobs, price amount.
The admin update and delete and add these details.

Featured Employer

- Add product.
- Edit product.
- Remove product.
- Maintains the product name, days allowed, number jobs, price amount.
The admin update and delete and add these details.

Newsletters:

- Job seekers
- Send the news letter about the jobs site to the job seekers.

Recruiters

- Send the news letter about the jobs site to the recruiters.

Database Design

1. LOGIN

| Field name | Data type | Constraint | Description |
|-----------------|--------------------|-------------|-----------------|
| username | varchar(15) | Primary key | Login ID |
| password | varchar(15) | - | Password |
| Role | varchar(15) | - | Admin/HR |

2. CANDIDATE_REGISTRATION

| Field name | Data type | Constraint | Description |
|-----------------------|--------------------|-------------|---------------------------|
| candidate_id | Numeric(10) | Primary key | ID of Candidate |
| username | varchar(15) | - | Username |
| password | varchar(15) | - | Password |
| que_id | number | Foreign key | ID of Question |
| Ans | varchar(15) | - | Answer |
| profile_date | date | - | Date of Profile |
| first_name | varchar(15) | - | First name of user |
| Gender | varchar(15) | - | Gender |
| Dob | date | - | Date of birth |
| address | varchar(15) | - | Address |
| contact_no | Numeric(10) | - | Contact no |
| email_id | varchar(15) | - | Email ID |
| profile_status | varchar(15) | - | Active / Inactive |

3. CANDIDATE_EDUCATION

| Field name | Data type | Constraint | Description |
|---------------------|-------------|-------------|-----------------------------------|
| candidate_id | Numeric(10) | Foreign key | ID of Candidate |
| perc11 | Numeric(10) | - | 10th Percentage |
| perc12 | Numeric(10) | - | 12th Percentage |
| graduation | varchar(15) | - | Graduation |

| | | | |
|----------------------------|-------------|---|--------------------------------|
| institute_grad | varchar(15) | - | Institute of Graduation |
| perc_grad | Numeric(10) | - | Graduation % |
| post_grad | varchar(15) | - | Post-graduation |
| institute_post_grad | varchar(15) | - | Institute of Post-grad |
| perc_post_grad | Numeric(10) | - | Post-graduation % |
| certification | varchar(15) | - | Certification Course |

4. CANDIDATE_PROFESSIONAL

| Field name | Data type | Constraint | Description |
|---------------------|-------------|-------------|----------------------------|
| candidate_id | Numeric(10) | Foreign key | ID of Candidate |
| Expr | varchar(15) | - | How much Experience |
| Salary | Numeric(10) | - | Salary |
| Industry | varchar(15) | - | Work Industry |
| ind_role | varchar(15) | - | Role in industry |
| Skills | varchar(15) | - | Key Skills |

5. COMPANY

| Field name | Data type | Constraint | Description |
|-------------------------|-------------|-------------|----------------------------|
| company_id | Numeric(10) | Primary key | ID of Company |
| company_name | varchar(15) | - | Name of Company |
| contact_person | varchar(15) | - | Contact-person Name |
| company_contact | Numeric(10) | - | Contact number |
| company_email_id | varchar(15) | - | Company email id |
| Com_username | varchar(15) | - | Company Login ID |
| Com_password | varchar(15) | - | Company Password |
| company_details | varchar(15) | - | Details of Company |

6. COMPANY_BRANCH

| Field name | Data type | Constraint | Description |
|------------|-----------|------------|-------------|
|------------|-----------|------------|-------------|

| | | | |
|-----------------------|--------------------|--------------------|----------------------|
| company_id | Numeric(10) | Foreign key | ID of Company |
| branch_id | Numeric(10) | Primary key | ID of Branch |
| branch_address | varchar(15) | - | Local address |
| city_id | Numeric(10) | Foreign key | ID of City |

7. **PACKAGE**

| Field name | Data type | Constraint | Description |
|---------------------|--------------------|-------------------|----------------------------|
| package_id | Numeric(10) | Primary key | ID of Package |
| package_cost | Numeric(10) | - | Total or Per-resume |
| no_jobpost | Numeric(10) | - | No. of Job-postings |

8. **COMPANY_PACKAGE**

| Field name | Data type | Constraint | Description |
|---------------------------|------------------|-------------------|---------------------------|
| company_package_id | Numeric(10) | Primary key | ID-Company package |
| company_id | Numeric(10) | Foreign key | ID of Company |
| package_id | Numeric(10) | Foreign key | ID of Package |
| package_date | Date | - | Date of selection |

9. **JOB_APPLIED**

| Field name | Data type | Constraint | Description |
|---------------------|------------------|-------------------|--------------------------|
| applied_id | Numeric(10) | Primary key | ID of Applied job |
| candidate_id | Numeric(10) | Foreign key | ID of Candidate |
| jobpost_id | Numeric(10) | Foreign key | ID of Vacancy |
| resume_id | Numeric(10) | Foreign key | ID of Resume |
| applied_date | Date | - | Date when applied |

10. **JOB_POST**

| Field name | Data type | Constraint | Description |
|-------------------|------------------|-------------------|---------------------------|
| jobpost_id | Numeric(10) | Primary key | ID-Company package |
| company_id | Numeric(10) | Foreign key | ID of Company |
| job_title | varchar(15) | - | Title of Job |
| branch_id | Numeric(10) | Foreign key | ID of Branch |

| | | | |
|----------------|-------------|-------------|------------------------|
| post_id | Numeric(10) | Foreign key | ID of Post |
| no_vacancy | Numeric(10) | - | Number of vacancy |
| start_date | Date | - | Starting date |
| end_date | Date | - | Ending date |
| expr_req | varchar(15) | - | Experience Requirement |
| skills_req | varchar(15) | - | Skills Requirement |
| edu_req | varchar(15) | - | Education Requirement |
| basic_req | varchar(15) | - | Basic Requirement |
| salary_given | Numeric(10) | - | Salary Given |
| jobpost_status | varchar(15) | - | Active/ Outdate / Full |

11. POST

| Field name | Data type | Constraint | Description |
|------------|-------------|-------------|------------------|
| post_id | Numeric(10) | Primary key | ID of Post |
| post_name | varchar(15) | - | Name of the Post |

12. QUESTION

| Field name | Data type | Constraint | Description |
|------------|-------------|-------------|----------------|
| que_id | Numeric(10) | Primary key | ID of Question |
| Que | varchar(15) | | Full Question |

13. COUNTRY

| Field name | Data type | Constraint | Description |
|--------------|-------------|-------------|---------------------|
| country_id | Numeric(10) | Primary key | ID of Country |
| country_name | varchar(15) | - | Name of the Country |

14. STATE

| Field name | Data type | Constraint | Description |
|------------|-------------|-------------|-------------------|
| state_id | Numeric(10) | Primary key | ID of State |
| state_name | varchar(15) | - | Name of the State |

| | | | |
|------------|-------------|-------------|-------------------|
| country_id | Numeric(10) | Foreign key | ID of the Country |
|------------|-------------|-------------|-------------------|

15. CITY

| Field name | Data type | Constraint | Description |
|------------|-------------|-------------|------------------|
| city_id | Numeric(10) | Primary key | ID of City |
| city name | varchar(15) | - | Name of the City |
| state_id | Numeric(10) | Foreign key | ID of the State |

16. RESUME

| Field name | Data type | Constraint | Description |
|-----------------|-------------|-------------|--------------------|
| resume_id | Numeric(10) | Primary key | ID of Resume |
| candidate_id | Numeric(10) | Foreign key | ID of Candidate |
| resume headline | varchar(15) | - | Headline of Resume |
| upload resume | varchar(15) | | Attach Resume |
| Date | Datetime | | Resume Upload Date |

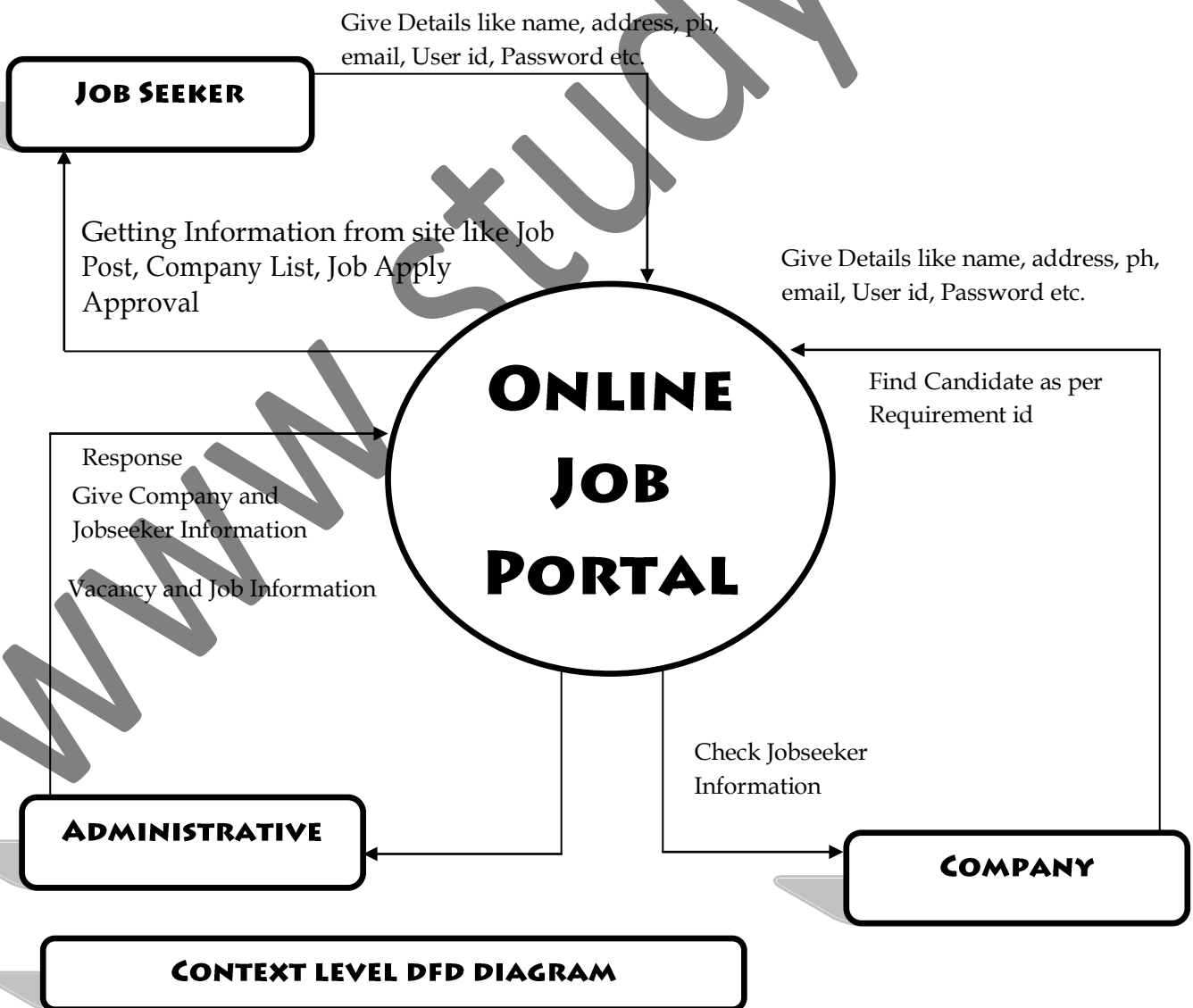
LIST OF REPORT

| REPORT NAME | REPORT DETAILS |
|---------------------------------------|---|
| 1. Candidate Registration List Report | This Report Shows the details of Candidate Registration |
| 2. Candidate Education List Report | This Report Shows the details of Candidate Education |
| 3. Candidate Professional List Report | This Report Shows the details of Candidate Professional |
| 4. Company List Report | This Report Shows the details of Company |
| 5. Package List Report | This Report Shows the details of Package |
| 6. Job Post List Report | This Report Shows the details of Job Post |
| 7. Job Apply List Report | This Report Shows the details of Job Apply |
| 8. Resume List Report | This Report Shows the details of Resume |

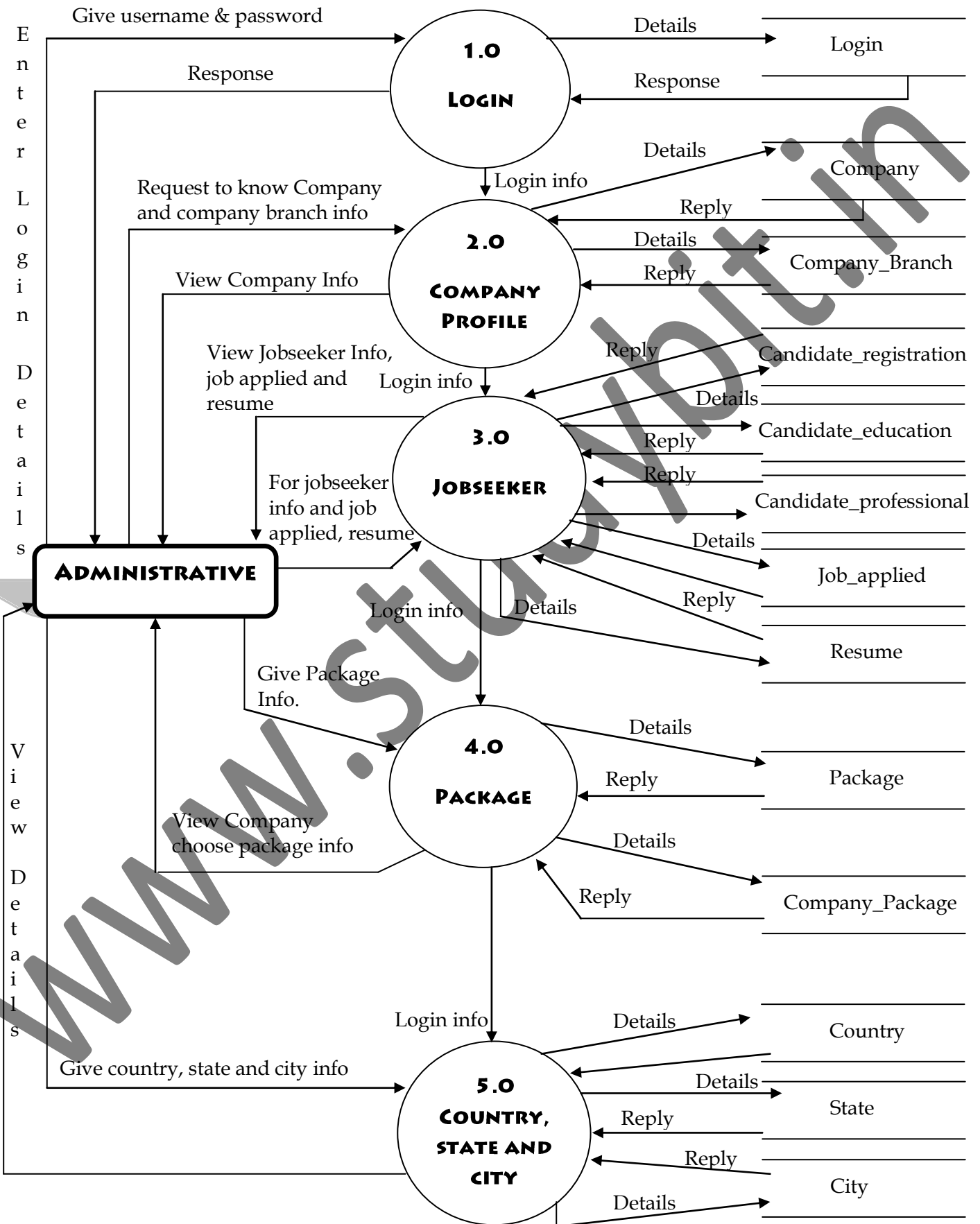
System Design

OVERVIEW:

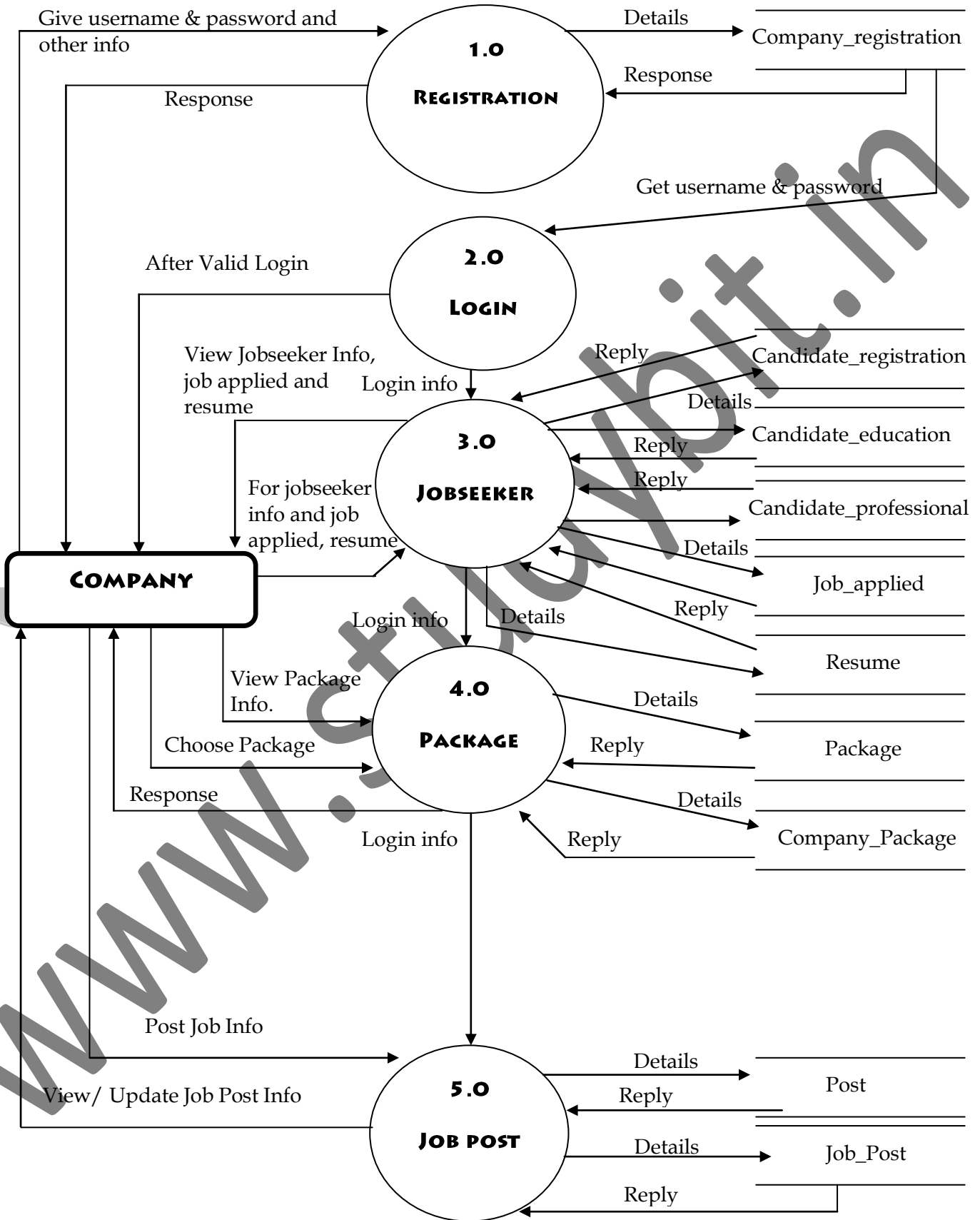
A Data Flow Diagram (DFD) is a graphical representation of the "flow" of data through an Information System. A data flow diagram can also be used for the visualization of Data Processing. It is common practice for a designer to draw a context-level DFD first which shows the interaction between the system and outside entities. This context-level DFD is then "exploded" to show more detail of the system being modeled. A DFD represents flow of data through a system. Data flow diagrams are commonly used during problem analysis. It views a system as a function that transforms the input into desired output. A DFD shows movement of data through the different transformations or processes in the system. Dataflow diagrams can be used to provide the end user with a physical idea of where the data they input ultimately has an effect upon the structure of the whole system from order to dispatch to restock how any system is developed can be determined through a dataflow diagram. The appropriate register saved in database and maintained by appropriate authorities.



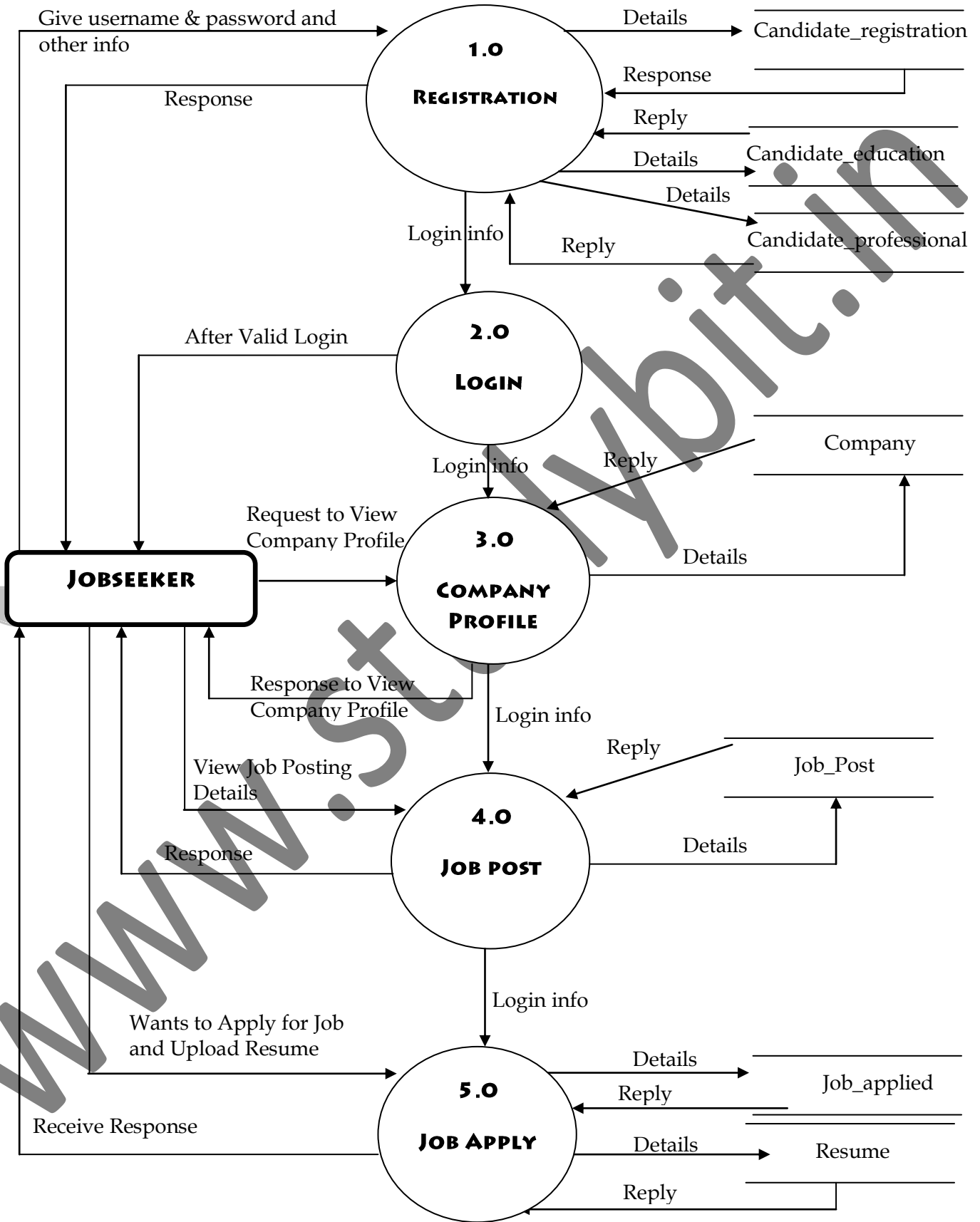
1ST LEVEL DFD DIAGRAM FOR ADMIN



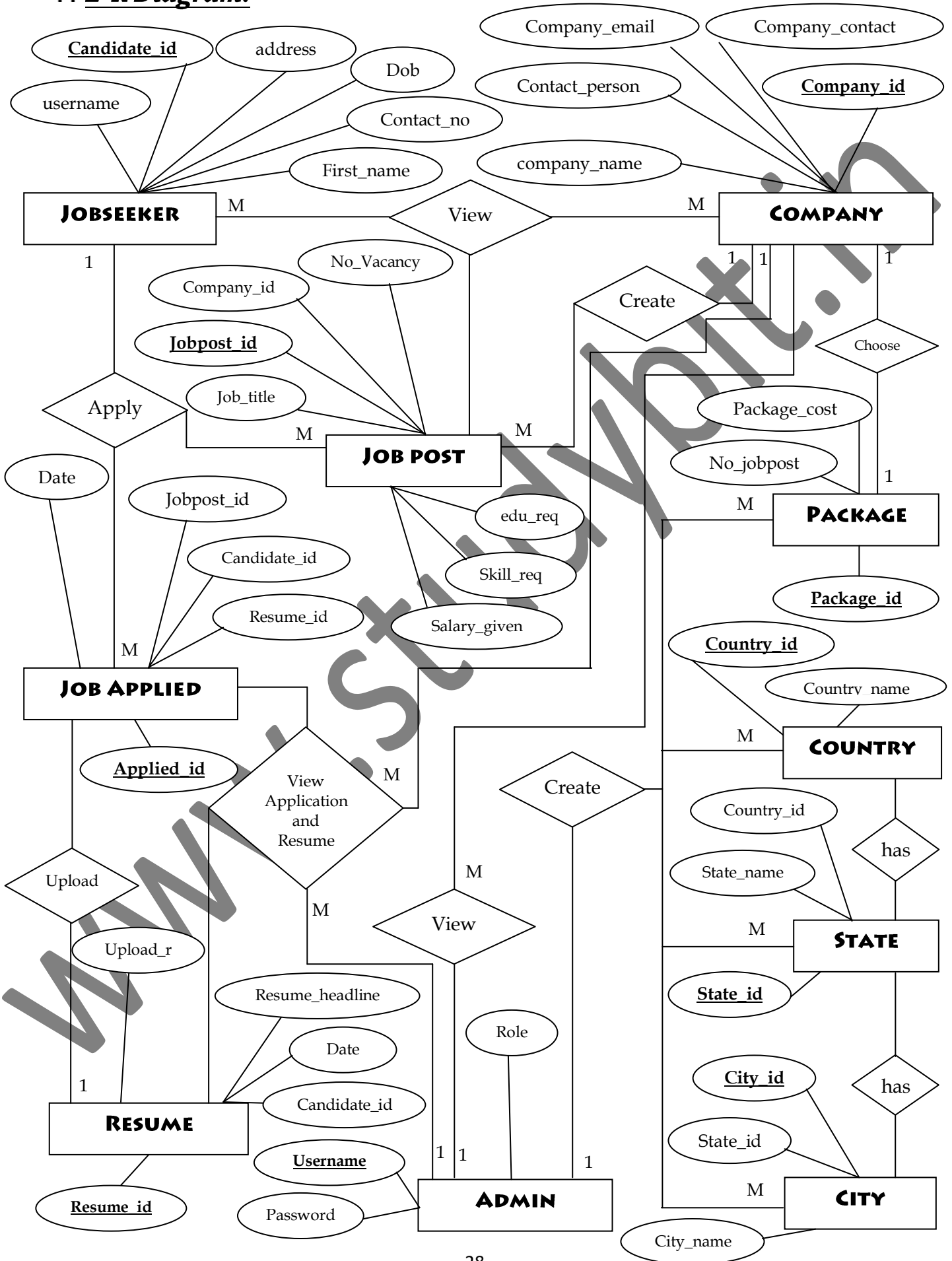
1ST LEVEL DFD DIAGRAM FOR COMPANY



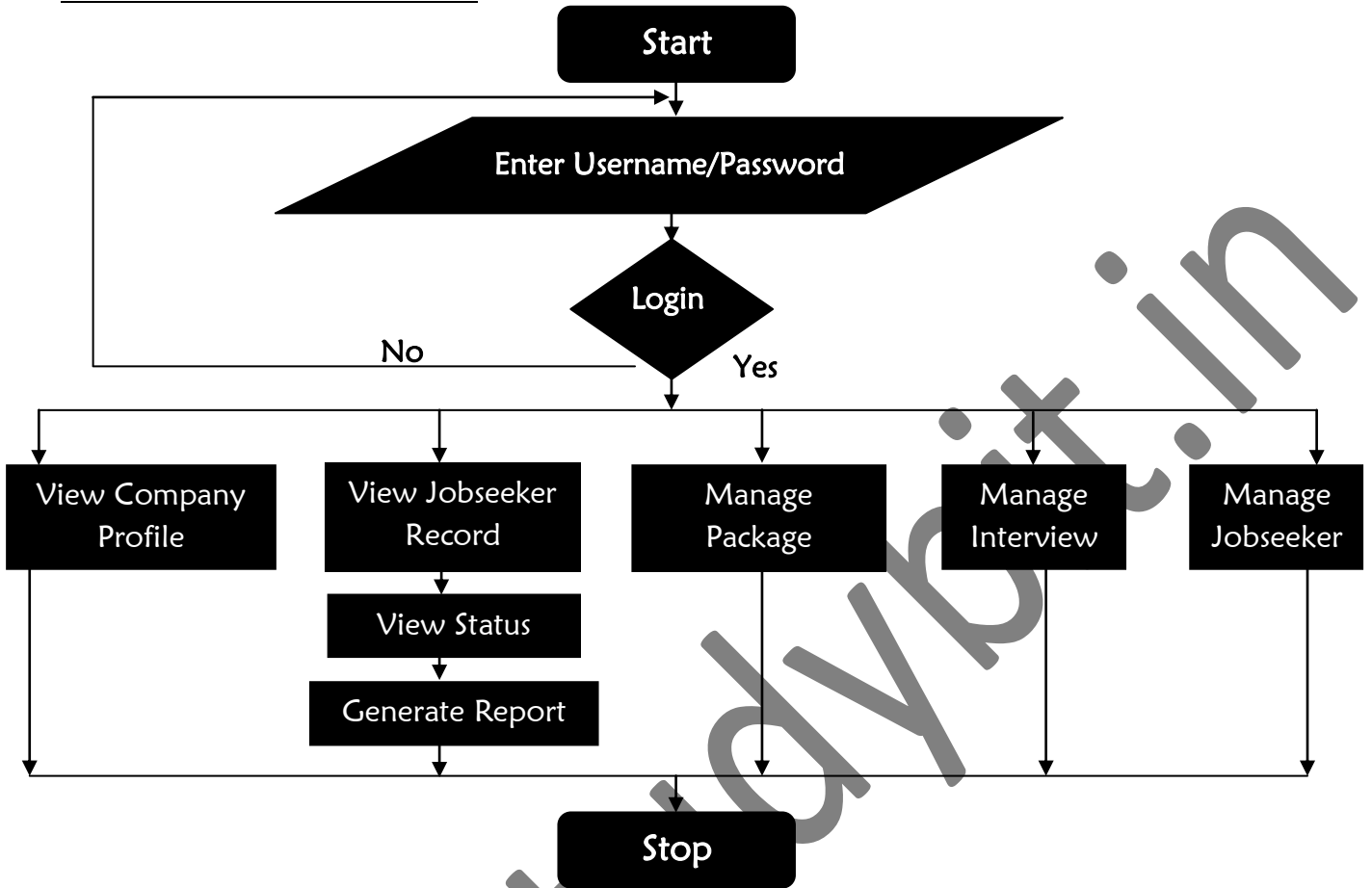
1ST LEVEL DFD DIAGRAM FOR JOBSEEKER



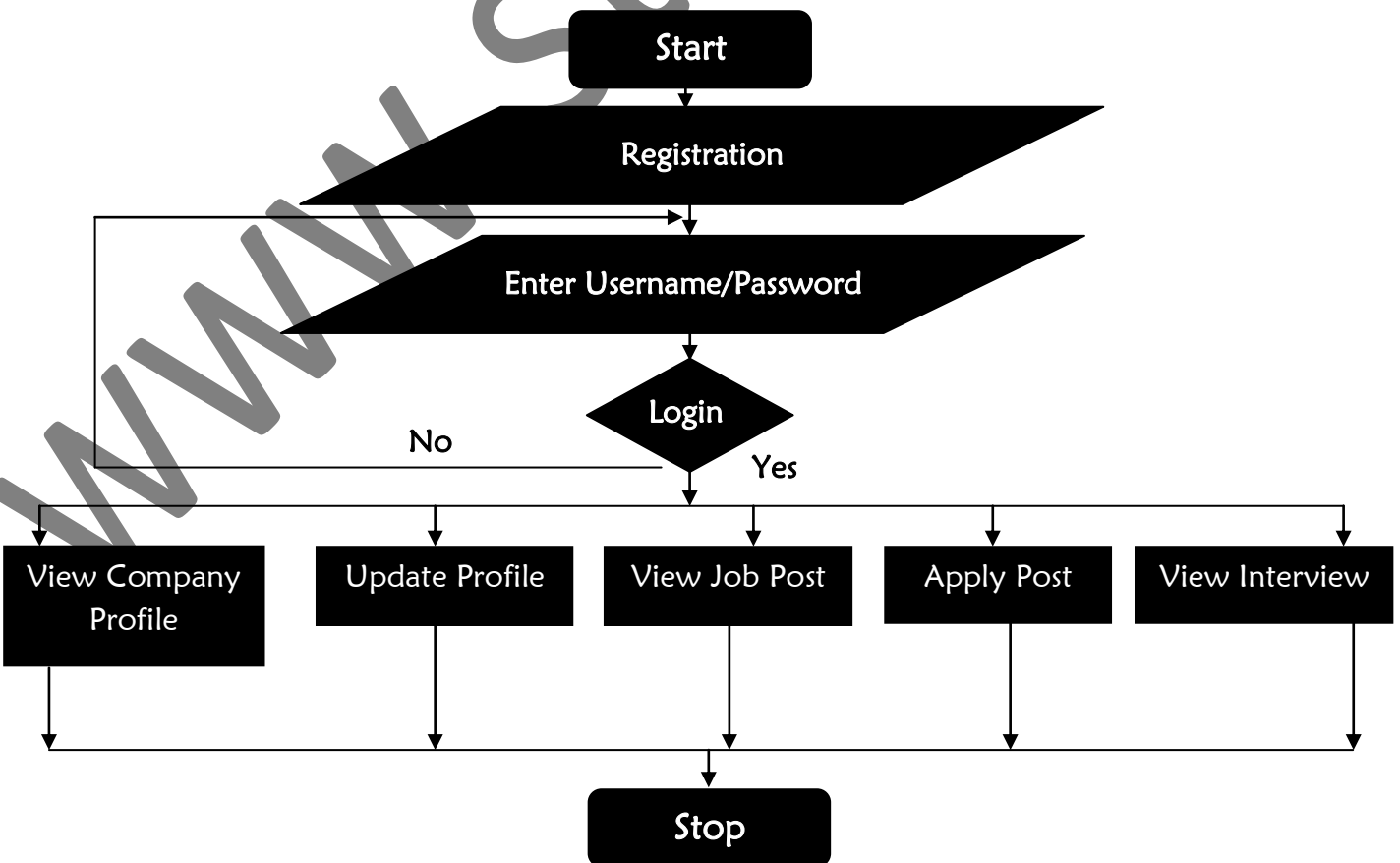
E-R Diagram:



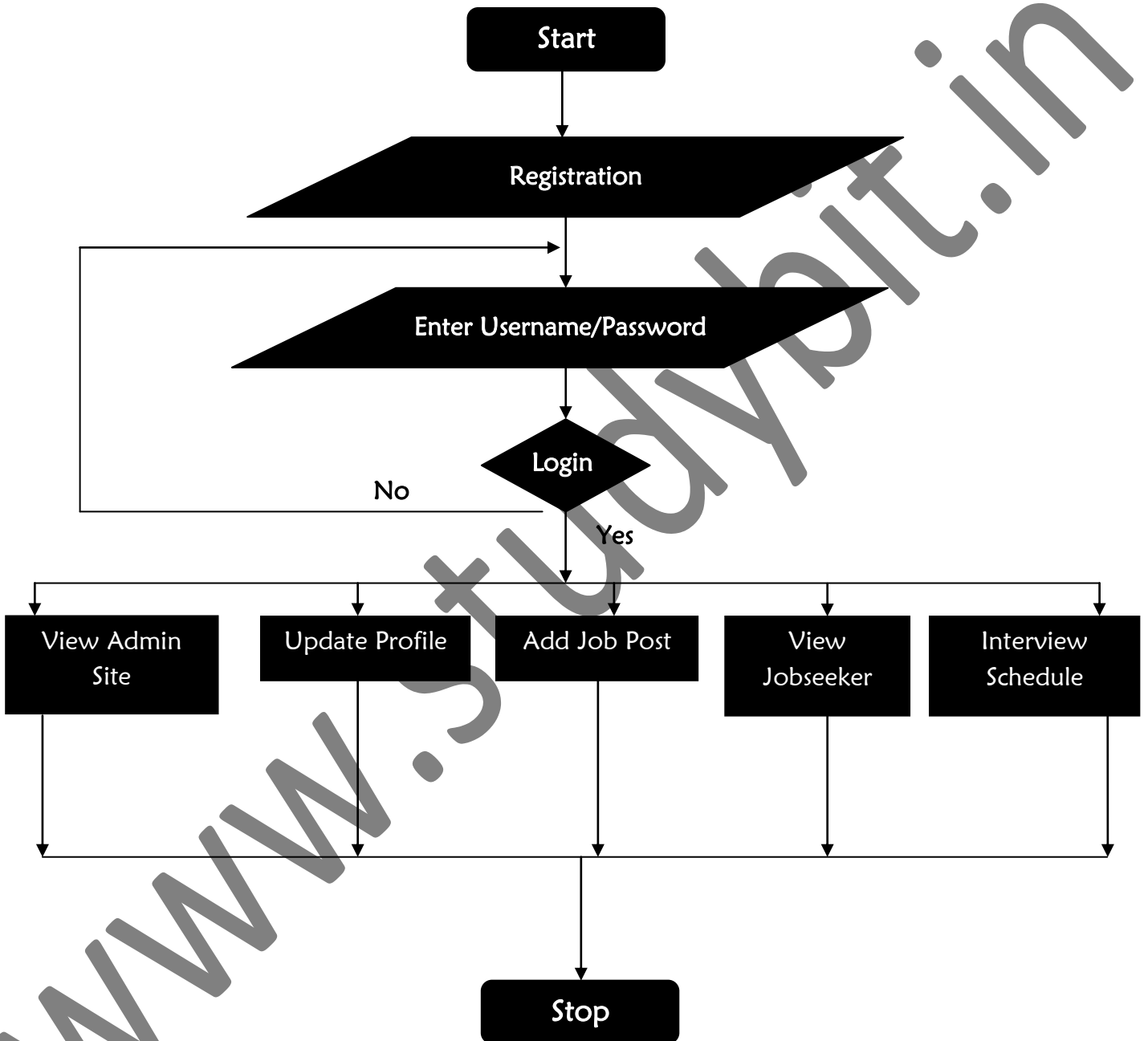
❖ Flowchart For Administrative



❖ Flowchart For Jobseeker



❖ Flowchart For Company



Testing

WHY TESTING IS DONE

- ✓ Testing is the process of running a system with the intention of finding errors.
- ✓ Testing enhances the integrity of a system by detecting deviations in design and errors in the system.
- ✓ Testing aims at detecting error-prone areas. This helps in the prevention of errors in a system.
- ✓ Testing also add value to the product by confirming to the user requirements.

TESTING PRINCIPLES

- ✓ To discover as yet undiscovered errors.
- ✓ All tests should be traceable to customer's requirement.
- ✓ Tests should be planned long before the testing actually begins.
- ✓ Testing should begin "in the small" & progress towards "testing in the large".
- ✓ Exhaustive Testing is not possible.
- ✓ To be most effective training should be conducted by an Independent Third Party

TESTING OBJECTIVES

- ✓ Testing is a process of executing a program with the intent of finding errors.
- ✓ A good test case is one that has a high probability of finding an as yet undiscovered error.
- ✓ A successful test is one that uncovers an as yet undiscovered error.

KINDS OF TESTING

- ❖ **Black Box Testing-** Not based on any knowledge of internal designs or code. Tests are based on requirements and functionality.

❖ **White Box Testing-** Based on the knowledge of the internal logic of an application's code. Tests are based on coverage of code statements, branches, paths and statements.

❖ **Unit Testing-** The most 'micro' scale of testing; to test particular functions and code modules. Typically done by the programmer and not by the testers, as it requires detailed knowledge of the internal program design and code. Not always easily done unless the application has a well-designed architecture with tight code; may require developing test drive modules or test harnesses.

❖ **Integration Testing-** Testing of combined parts of an application to determine if they function together correctly. The 'parts' can be code modules, individual applications, client and server applications on a network, etc. This type of testing is especially relevant to client/server and distributed systems.

❖ **Functional Testing-** Black-box type testing geared to functional requirements of an application; testers should do this type of testing. This doesn't mean that the programmers shouldn't check that their code works before releasing it.

❖ **Regression Testing-** Re-testing after fixes or modifications of the software or its environment. It is difficult to determine how much re testing is needed, especially near the end of the development cycle. Automated testing tools can be especially useful for this type of testing.

❖ **Acceptance Testing-** Final testing based on the specifications of the end user or customer or based on use by end-users/ customers over some limited period of time.

❖ **User Acceptance Testing-** Determining if software is satisfactory to an end user customer.

Conclusion

It has been a great pleasure for me to work on this exciting and challenging project. This project proved good for me as it provided practical knowledge of not only programming in PHP web based application and MYSQL Server, but also about all handling procedure related with "ONLINE JOB PORTAL". It also provides knowledge about the latest technology used in developing web enabled application and client server technology that will be great demand in future. This will provide better opportunities and guidance in future in developing projects independently.

BENEFITS:

The project is identified by the merits of the system offered to the user. The merits of this project are as follows: -

- ✦ It's a web-enabled project.
- ✦ This project offers user to enter the data through simple and interactive forms. This is very helpful for the client to enter the desired information through so much simplicity.
- ✦ The user is mainly more concerned about the validity of the data, whatever he is entering. There are checks on every stages of any new creation, data entry or updating so that the user cannot enter the invalid data, which can create problems at later date.
- ✦ Sometimes the user finds in the later stages of using project that he needs to update some of the information that he entered earlier. There are options for him by which he can update the records. Moreover there is restriction for his that he cannot change the primary data field. This keeps the validity of the data to longer extent.
- ✦ User is provided the option of monitoring the records he entered earlier. He can see the desired records with the variety of options provided by him.
- ✦ From every part of the project the user is provided with the links through framing so that he can go from one option of the project to other as per the requirement. This is bound to be simple and very friendly as per the user is concerned. That is, we can say that the project is user friendly which is one of the primary concerns of any good project.

- ❏ Data storage and retrieval will become faster and easier to maintain because data is stored in a systematic manner and in a single database.
- ❏ Decision making process would be greatly enhanced because of faster processing of information since data collection from information available on computer takes much less time than manual system.
- ❏ Allocating of sample results becomes much faster because at a time the user can see the records of last years.
- ❏ Easier and faster data transfer through latest technology associated with the computer and communication.
- ❏ Through these features it will increase the efficiency, accuracy and transparency,

Limitation & Future Scope

LIMITATIONS:

- ❏ The size of the database increases day-by-day, increasing the load on the database back up and data maintenance activity.
- ❏ Training for simple computer operations is necessary for the users working on the system.

FUTURE IMPROVEMENT:

- ❏ This System being web-based and an undertaking of Cyber Security Division, needs to be thoroughly tested to find out any security gaps.
- ❏ A console for the data centre may be made available to allow the personnel to monitor on the sites which were cleared for hosting during a particular period.
- ❏ Moreover, it is just a beginning; further the system may be utilized in various other types of auditing operation viz. Network auditing or similar process/workflow based applications...

Bibliography

DOCUMENTATION SECTION:-

1. Fundamentals of Software Engineering, Rajib Mall
2. Software Engineering A Practitioner's Approach, Roger S. Pressman

PROGRAMMING SECTION:-

1. php Projects, ABROT Solutions
2. php The Complete Reference, steven holzner
3. Javascript The Complete Reference, Flanagan
4. Internet and World Wide Web, Deitel
5. My SQL The Complete Reference , James R. Groff and Paul N. Weinberg
6. My SQL In a Nutshell, O'Reilly