

An Effective Context Driven Web-Based Application for Professional Recruiters and Job Seekers

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Abstract: The idea of a Web-Based App for Professional Recruitments Club is based on three main elements: a job seeker, a company with a vacancy, and training courses for job seekers. As for the first element, a job seeker is looking for a job by entering the club by opening an account and then searching for a job that fits his specialty. In addition, if the profile of the job seeker is complete and a job that suits his specialization is available, the employment system will send an e-mail to the job seeker regarding that job. As for the second element, a company that has a vacant job, first it must open an account on the Web-based Professional Recruitments Club, and then put up its vacancies for job seekers to apply for it. As for the third component, training courses for job seekers enable job seekers to develop skills and gain new knowledge about their specialties.

The methodology used in the proposed system is a Rapid Application Development (RAD) model. RADs are incremental models where several processes occur at the same time.

Keywords: Web-Based, Recruitments Club, Job seeker, Vacancies, Rapid Application Development

INTRODUCTION

Technology has completely changed the traditional human resource (HR) functions. The most affected functions is employee recruitment and training. Organizations today extensively use web-based application to invite Job seekers in a cost and time efficient manner for searching and hiring talented individuals. Talent attraction is one of the major challenges for HR managers. With the rise of web-based recruitment channels, the number of Job seekers increased substantially. In addition, the time taken in finding the right talent from the huge pool of web-based applications has increased significantly, adding up to the recruitment process cycle. [1]

oriented social networking Web sites (SNWs), such as LinkedIn and Facebook, has become widespread.[2] They offer extensive means of communication and personal networking providing job seekers with in-creased opportunities to network. Moreover, they appear to be an increasingly useful tool for human resource management professionals to advertise job openings and seek information about job seekers in an efficient and cost-effective way. [3]

In this research, authors aim to build a Web-Based App for Professional Recruitments Club where recruiters and interested companies will be where the graduate students exist. Moreover, recruiters will be using recruitment club proposals to provide information about prospective employers, promote campus info sessions, connect with student groups, stay in touch with interns, and even perform due diligence on prospective applicants. Our recruitment club will also offer training courses in several fields for graduate students to benefit from to develop their professional skills and facilitate their employment.

Many universities have a large number of graduates annually and they start to search for job opportunities through job finding sites ads and social networks, some of them find jobs through someone they know and accept job offers from people they trust. Annually, the number of job seekers is increasing, and this increase makes getting a job very difficult.

In addition, finding the right candidate with desired qualifications from the huge pool of applications to fill their current job openings is an important and challenging task for the recruiters of any organization. There is a need for a platform that facilitates the recruitment process for both parties, in addition to encouraging graduates to develop their skills through the training courses provided on the club.

The use of professionally and non-professionally

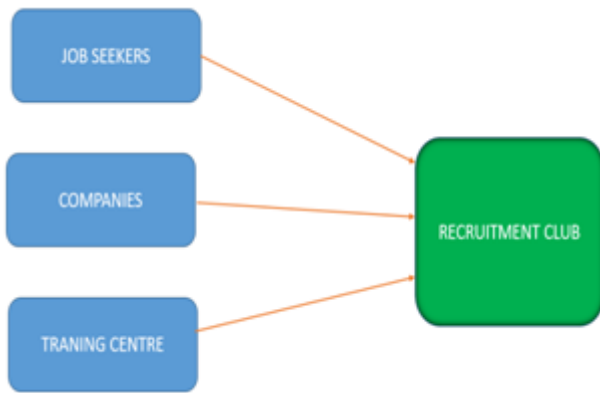


Fig. 1. The main Modules in the Professional Recruitment Club

On the system, exist four types of modules:

- Administrator: To manage the website data and transactions.
- Members: Members are job seekers.
- Companies: Companies are job providers.
- Training center: to add courses and manage and introducing it.

LITERATURE

In the present era, the consumption of the Internet has grown drastically due to the provisions of enabling access to professional and personal needs of its users. Job searching is one of the crucial accessibilities provided on the Internet for jobseekers by the employers. There are exclusively job recruitment applications have been developed for different platforms, e.g., web-based and mobile applications. Generally, these applications considered as E-recruitment applications [4] that facilitate job seekers and employers in achieving their objectives. Noticeably, these applications are the vital means for job seekers across any field of life. Such applications are significant for job seekers during their journey of achieving jobs. At the other side, such applications are very effective for employers in context to obtaining potential candidates' data, filtering candidates, help making decisions, less time and importantly available with the minimum cost [5].

E-recruitment systems have great potentials for job seekers and employers in the fields of all walks of life. These systems very useful for job recruiters on every instance of recruitments, i.e., recruiters no need to develop or redesign the systems when they go for new recruitments over the years. Recruiters use these systems for collecting CVs from job aspirants and stored the candidates' data on the system's repository. The collected particulars of the job aspirants are further scrutinized by the HR department in an organizational environment. Furthermore, the scrutinized data is a very useful information for decision making authority while taking decisions on final selection [6].

For job seekers, such systems help those searching desired jobs, uploading their CVs against the posted job on the system or for the future job openings. In either case, these systems enable several opportunities for job seekers and job providers [4] [5] [6]. Despites of these advantages, job seekers find several issues, suitability requirements of jobs posted, appropriate skills required against the advertised jobs, and ambiguities around the posted jobs, such as potential skills, role and responsibilities, selection criteria, training required, to name a few. The current study attempts to overcome such limitations and provide an efficient platform for both the parties.

This study develops an efficient website considering the core aspects of job seekers and job providers. The website's one of the modules is designed only for university graduates. This module facilitates potential job seekers with the required training against the advertised jobs and potential future jobs. Noticeably, this website allows job seekers to market their competencies and create their profiles. The created profiles by the job seekers are accessible by the job providers and both have provisions to proceed further in mutual concerns.

METHODOLOGY

To develop a web-based professional recruitment club system and cover the needs of the end user, the development process goes through three main stages based on the RAD methodology[7]. Can explained as follows:

1 Requirements planning

During this stage, solutions are developed for many of the problems in the business environment, and the focus is on achieving the business goals pre-determined in the strategic plan. Also during this stage of the development process, the development team conducts an exploration to determine the requirements of the end user and stakeholders.

2 User Design

This phase is very significant for designing the proposed web-based application. The system stakeholders participate and contribute for developing the prototype model of the proposed application which primarily includes the potential entities, such as input, process and outputs. During this phase, tools such as JAD and CASE were used to develop working models based on the user requirements. Additionally, this phase involves user continuous interactive process to determine the user requirements and the potential functionalities of the proposed application.

3 Construction

It is the next important phase after the user design phase. It focuses on the application development method and the associated tasks. Here, rapid application development (RAD) has considered over the system development life cycle (SDLC).

Since RAD enables platform where users can participate by improvement suggestions, precisely for interfaces and reports.

a. Cutover

The cutover phase is another crucial phase in the design hierarchy which resembles to the implementation phase of SDLC. It includes the important activities, such as data conversion, different types of testing, user training and adoption to the new system. These activities are contrary to traditional methods where all the activities of the process is compressed [8]. Noticeably, the current application has been build following the functional requirements of the designed methodology.

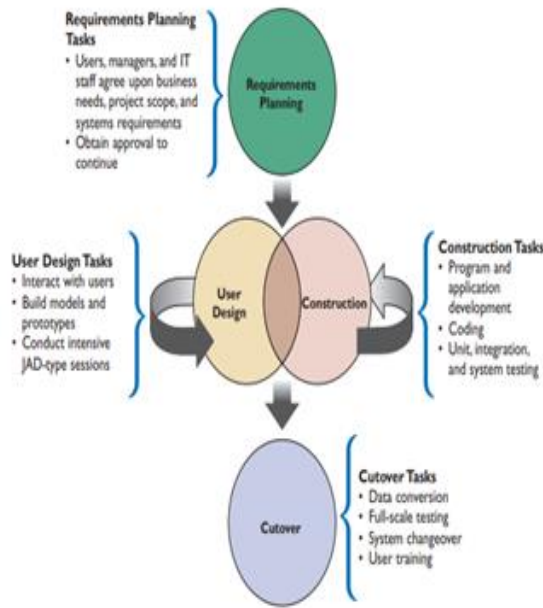


Fig. 2. The four phases of the RAD model

The following methodology used adopted to arrange job seekers when applying for a specific job that was offered by a specific company:[9]

- Sort job seekers based on qualifications and their suitability for the required job specifications.
- Sort job seekers based on acquired skills
- Screening of applicants based on competencies, represented in (leadership, ethical practice, previously provided consultancy).
- Screening of applicants based on previous work experience
- Screen applicants based on interests

Following the adopted methodology, it is essential for job aspirants to consider the following items that will facilitate job providers in quick decisions:

- Years of professional experience
- Name the specialty of having most experience
- Mention your skills that have more resemblance to the position announced
- Recent achievements in previous organization that achieved significant results
- List professional objectives and career goals
- Mentioned the searched keywords used for the job posting

BUSINESS OBJECTIVES

1. Building a communication channel between jobseekers on the one hand and the labour market on the other hand.
2. Establishing databases for jobseekers and linking them on a unified website.
3. Contribute to providing job opportunities for jobseekers commensurate with their specialization, by advertising these jobs and
4. jobseekers by organizing training and rehabilitation programs that are compatible with the needs of the labour encouraging jobseekers to take advantage of them.
5. Developing the skills of market and help to employ them.
6. Effective communication with the fields of work in order to find job opportunities for jobseekers easily and easily, and to gain community confidence in the educational process outcomes at the universities.
7. Providing studies for preparing university graduates and the percentage of employed and unemployed among them, and providing interested parties with the results of these studies
8. Providing information on graduate trends, innovative and distinguished programs that need to be marketed and available jobs.

RESULT AND DISCUSSION

Functional Requirement

To represent functional requirements, use a use case diagram after interviewing some of the stakeholders, the following model is built to represent these functional requirements in a sequential pattern that shows the needs of the final product. [10]



Fig. 3. Use case diagram to Modelling functional requirements

Database Analysis

To analyze the database and identify the data objects that cover the need for the proposed system and the relationships between all objects, a model was used ER Diagram.[11]

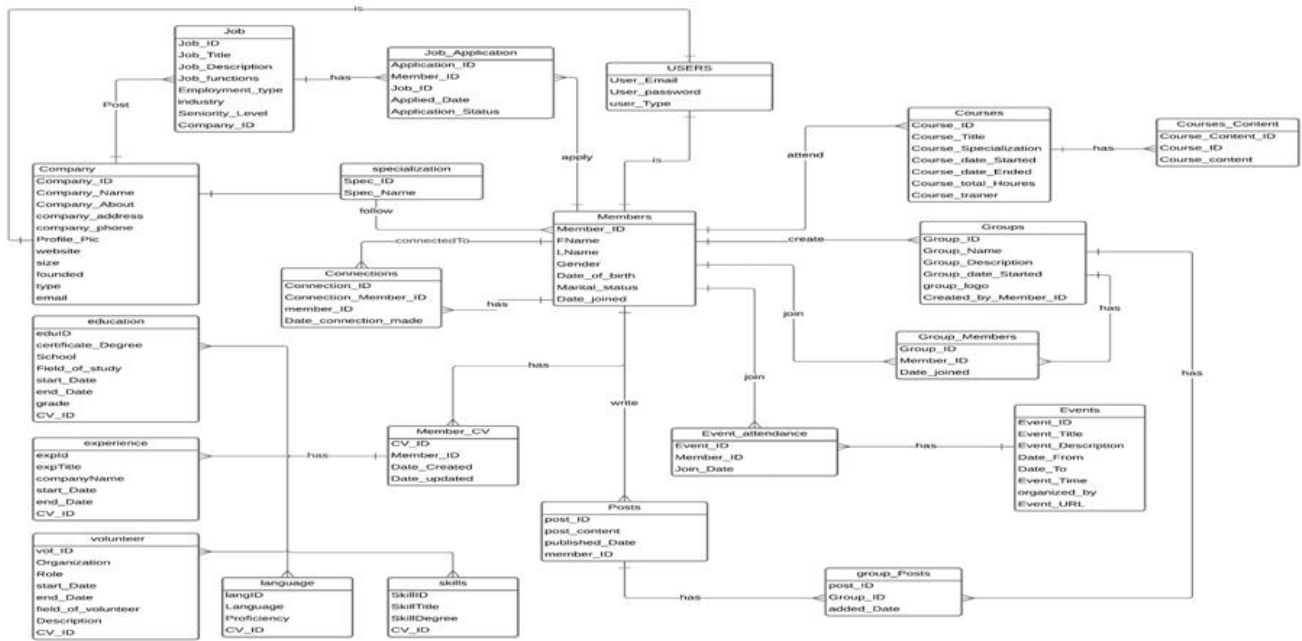


Fig.4.Database Analysis by using ERD

Database Design and Modelling Operations:

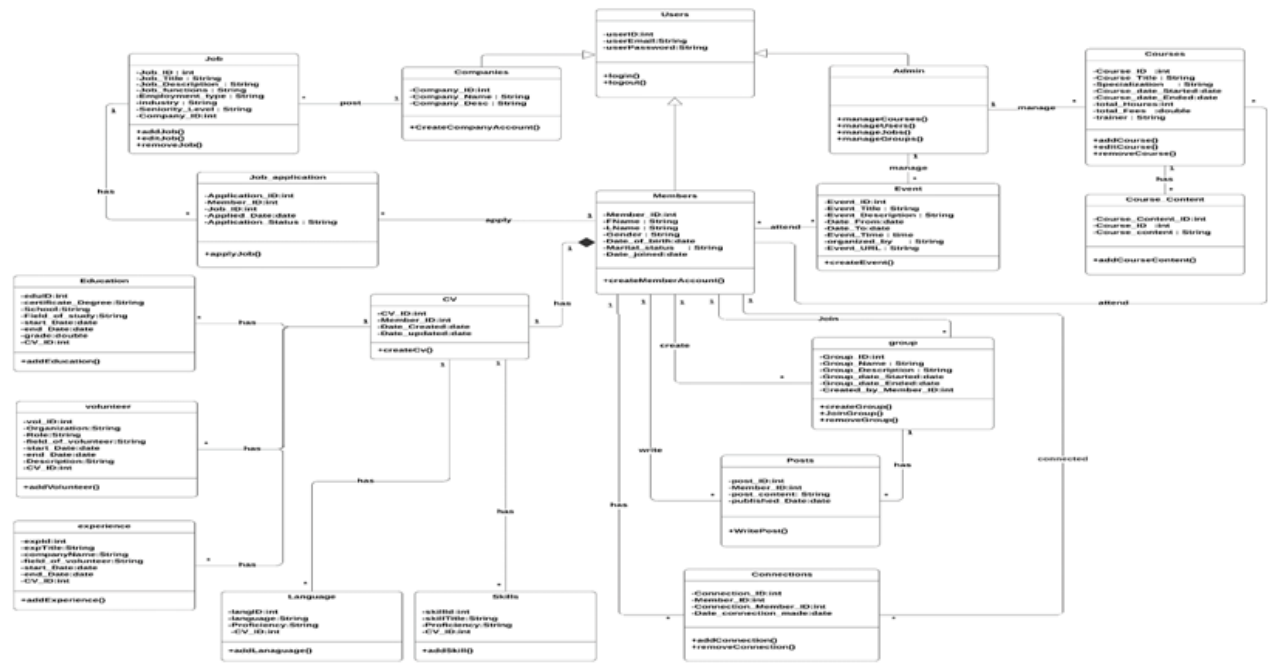


Fig. 5. Class Diagram

Data Flow and Work Flow:

Activity diagram is a flowchart to represent the flow from one activity to another activity, which is a graphical representation of workflows of stepwise activities and actions with support for choice, iteration and concurrency

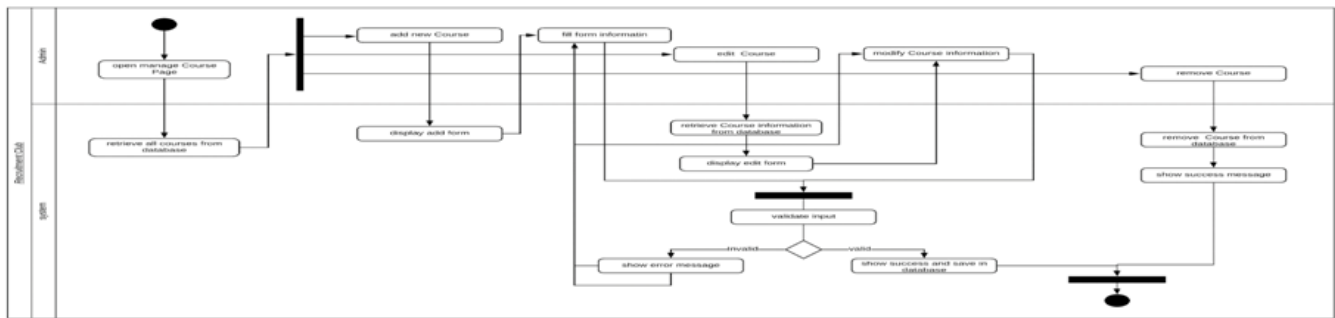


Fig. 6. Activity diagram to add course

This diagram shows activity of Managing Courses by the administrator in the proposed system which start when the admin visit Manage courses page in admin dashboard.

The system will display list of courses offered by the club and provides the admin with three options, to add new courses, to delete courses or to update course information.

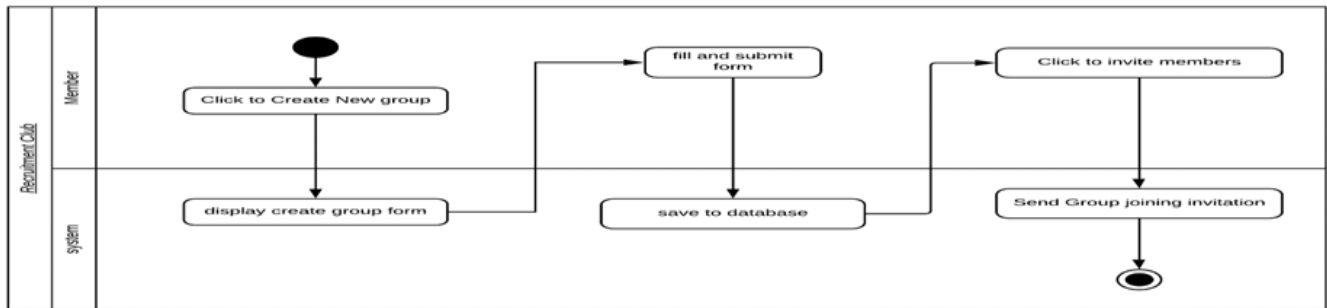


Fig. 7. Activity Diagram to create and manage Group

This diagram show Creating Group Activity by the members in the proposed system, which start when a member wants to create new group of specific Interest. The system will display the create group form and prompt member to enter related group data.

The member will fill and submit the form. Finally, system will save group info into database and publish group to the club members in order to join it.

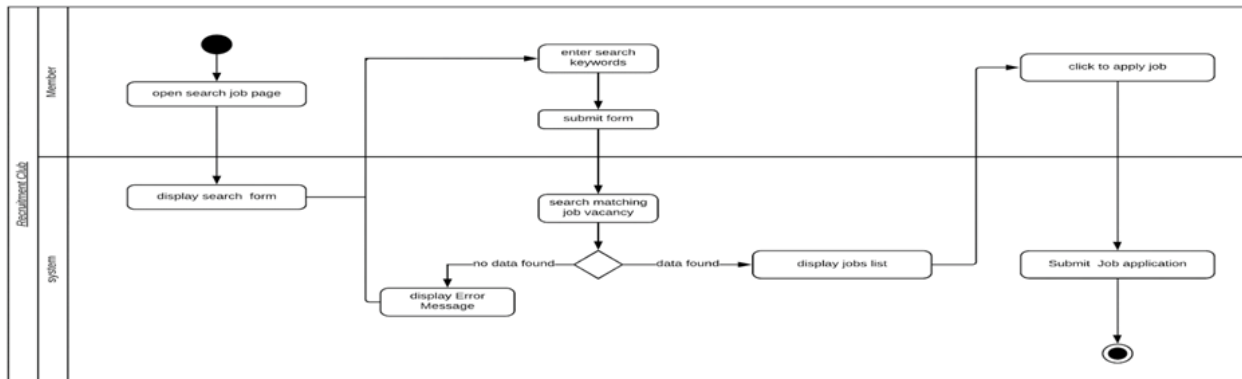


Fig. 8. Activity Diagram to create and manage Group

This diagram show applying for Job Activity by the club members in the proposed system, which start when a student wants to apply to the job vacancy. The system will verify the student is not apply for the job before.

If the case, system will save the member application in database and send application into company employer in order to process it.

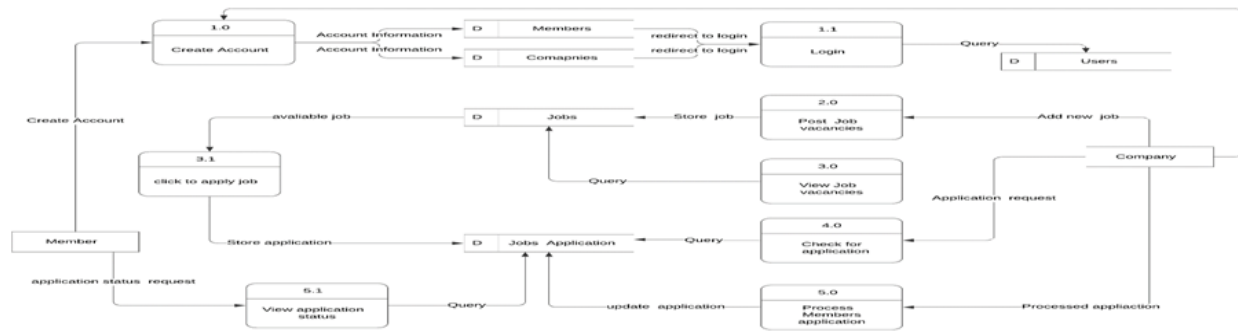


Fig. 9. DFD Explosion Online Job Post and Apply of Recruitment Club

USER INTERFACE DESIGN AND IMPLEMENTATION

The interface represents the main page of the job seekers, and this interface display the posts of recruitment club members and other information like top jobs, suggestions to connect other people on the club and links to other pages. It also, allow member to write and publish new post.



Fig. 10. Screenshot for job seeker home page

The interface that displays list of jobs created and added by employment companies. It allows job seekers to search for specific job and to filter the results based on specific criteria like Job specialization, Job type, seniority level, salary and location of published job vacancy.

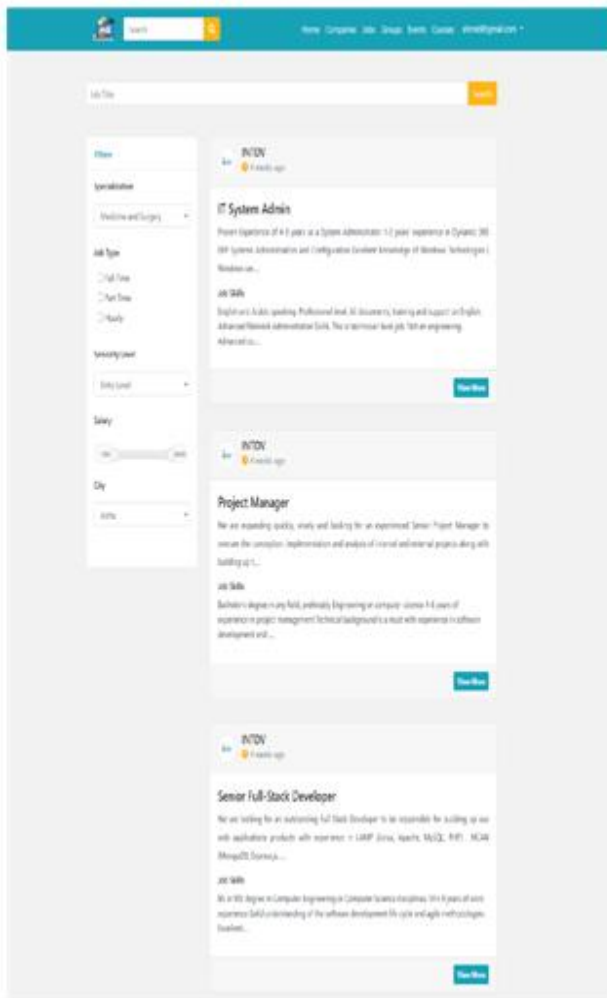


Fig. 11. Screenshot jobs lists interface

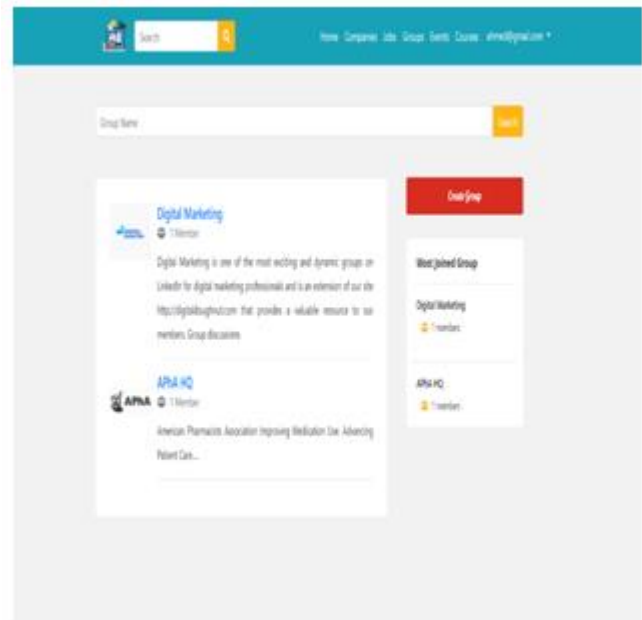


Fig. 12. Screenshot group list interface

The interface that displays list of groups created by recruitment club members. It allows members to search for specific group and join it. In addition, it allows members to create new group.

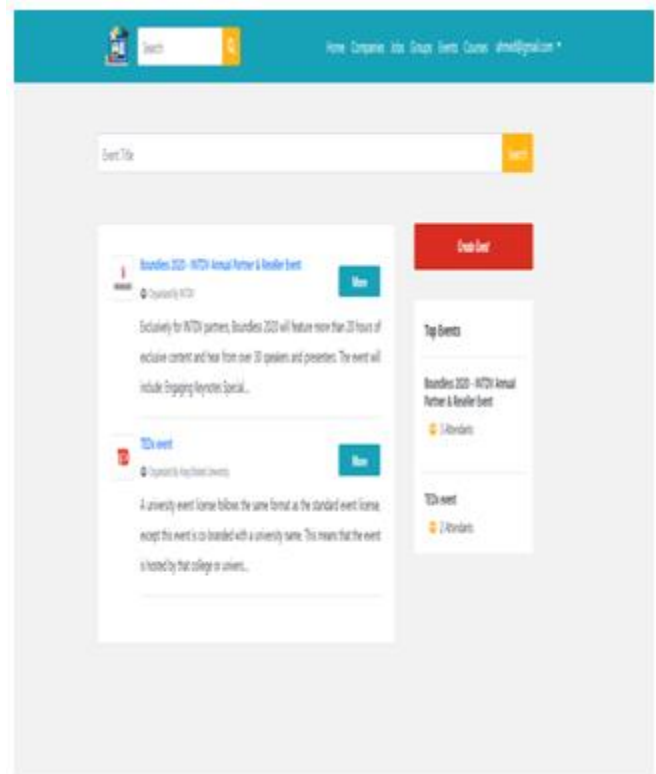


Fig. 13. Screenshot Event list interface

The interface that displays list of events created by recruitment club members. It allows members to search for specific event and click to attend it. In addition, it allows members to create new event.

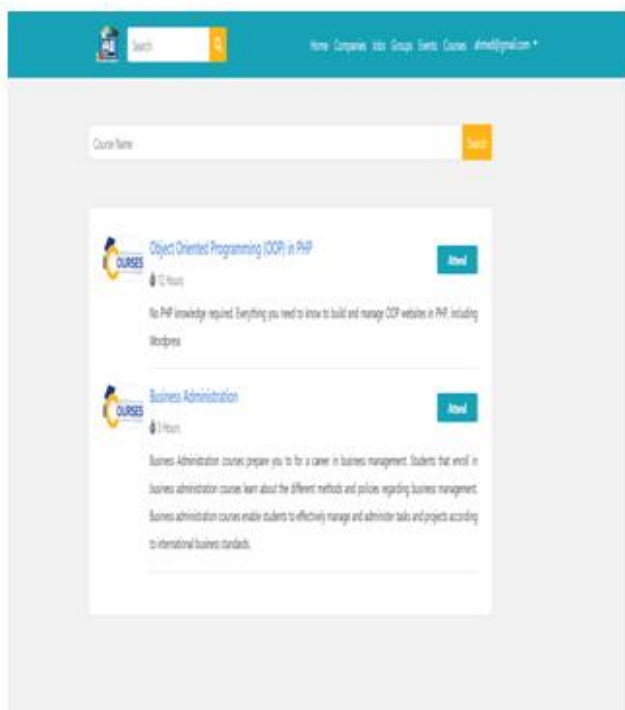


Fig. 14. Training courses list interface

The interface that displays list of courses added by club recruitment members. It allows others members to attend the course contents.

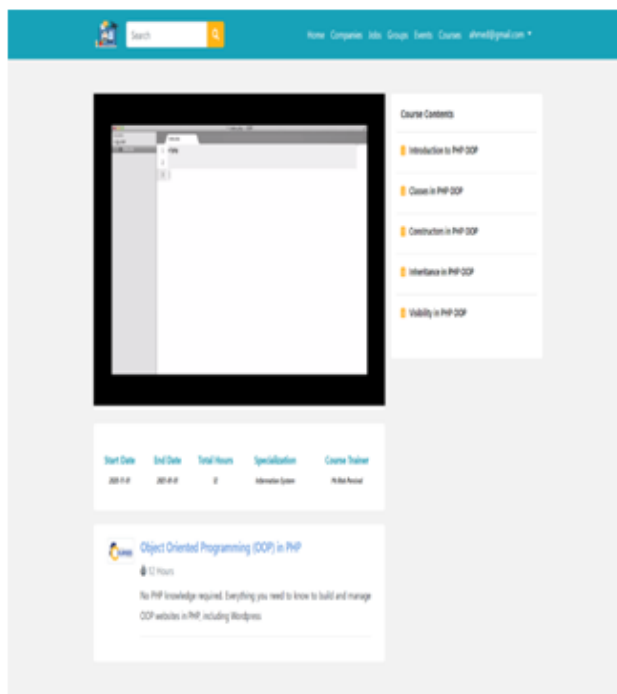


Fig. 15. Courses Content Interface

The interface that displays course content of video lectures and other details related to the course as start date, end date, trainer, total hours and description and specialization of the course.

CONCLUSION

This research for “Web-based Application Development for Professional Recruitment Club” is to develop a web-based e-recruitment application to assist organizations in managing their initial recruitment processes. In addition, it acts as a bridge between job seekers and institutions offering jobs. This web-based application also includes a sub-system to provide training courses for employees to develop their knowledge and adapt to new changes in their field of work. This web-based application is considered one of the systems directed to all institutions and companies wishing to hire and to all job seekers.

A mobile application that includes all the features available on the web-based electronic system will be developed later.

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