



# Project Report

IMSE2113 Information Systems

Prepared by: Siddhant Bagri 3035551785

May 13, 2020

Topic: E-Recruitment System (#2)

URL: <http://imse2113.imse.hku.hk/3035551785/>

---

# EXECUTIVE SUMMARY

The purpose of this report is to describe in detail “Jobplicity”, an E-Recruitment System system developed to bring together job seekers and recruiters on one common platform and facilitate easy recruitment. Current manual processes to get jobs of writing multiple emails to apply, schedule interviews and discuss offer details can be enhanced by using a one-stop system with optimised functionality. This reduces the employee requirement for an enterprise in the hiring process and makes finding new talent streamlined, democratic and efficient.

## INTRODUCTION

### PURPOSE

Jobplicity is created with the purpose of allowing job seekers to apply for jobs from a variety of job listings posted by recruiters of different companies. These applications are stored in the system for recruiters to view and shortlist applicants. The system may also store interview and offer details for shortlisted applicants. Overall, such a system allows more efficient and transparent recruitment management and also allows a large talent pool to be considered for a job listing.

### SCOPE

#### Users

Jobplicity handles different kinds of users (JobSeeker, Recruiter, Admin) with different accessibility rights to the system features and data. When a new user is registered, the system requires the user to enter their name, email, password, account type they would like and an optional image. Additionally, when a new user is created, there is an entry automatically created in the corresponding jobseeker or recruiter table.

#### Job Listings

The job listings posted to the system by different recruiters are available to view by all registered users. To post a job listing, a recruiter must provide details of the job position, location, salary and how many vacancies there are for this particular job.

#### Applications

A job seeker may apply to any of the jobs posted to the system by filling the application form on the system which includes their name, an essay and a CV upload. The status of this application is used to indicate the latest stage of the recruitment process for the application. An interview can also be scheduled for each application.

## ASSUMPTIONS

---

## **Administration**

It is assumed that there is only one admin account to maintain the system. Only a current administrator can give admin privilege to another user. The admin has access to all the functions on the system.

## **Flow of Control**

The system assumes a particular flow of control for both recruiters and jobseekers. The user begins by registering on the system and then by interacting with the job listings. Control then moves to applications where shortlisting can occur, interviews can be scheduled by recruiters, and offers can be sent. The process ends with a job seeker either accepting or declining the offer. The status column in the applications table reflects the current stage of the application in this flow of control.

# **SYSTEM PLANNING**

## **BACKGROUND STUDY**

The system aims to fulfill 2 major pain points that have been identified in the current job application and recruitment process:

1. Large manpower cost in manually recruiting without a centralised platform.

Recruiters have to advertise their job vacancies at an extra cost to find potential talents. Moreover, communicating with them individually (for example, via email or post), requires a large number of people for the recruiting company to be involved in the recruitment process. Without a centralised location for all of the application and job seeker data, it is also difficult to manage and compare a large number of applicants and protect their data.

2. Lack of a streamlined platform to find and apply for jobs.

Job seekers usually find vacancies through company websites, personal networks or advertisements. There is no one-stop shop to explore various job listings, apply for them easily and also get interview and offer information without the need for multiple emails, calls or letters. This lack of streamlined service is a hurdle for talented individuals finding their dream job.

## **BENEFIT TO USERS**

Overall, through all its features, Jobplify aims to bring together recruiting companies and talents seeking jobs through a streamlined platform which is convenient to use. The benefits of the system can be classified user-wise:

1. Benefit to Job Seekers

---

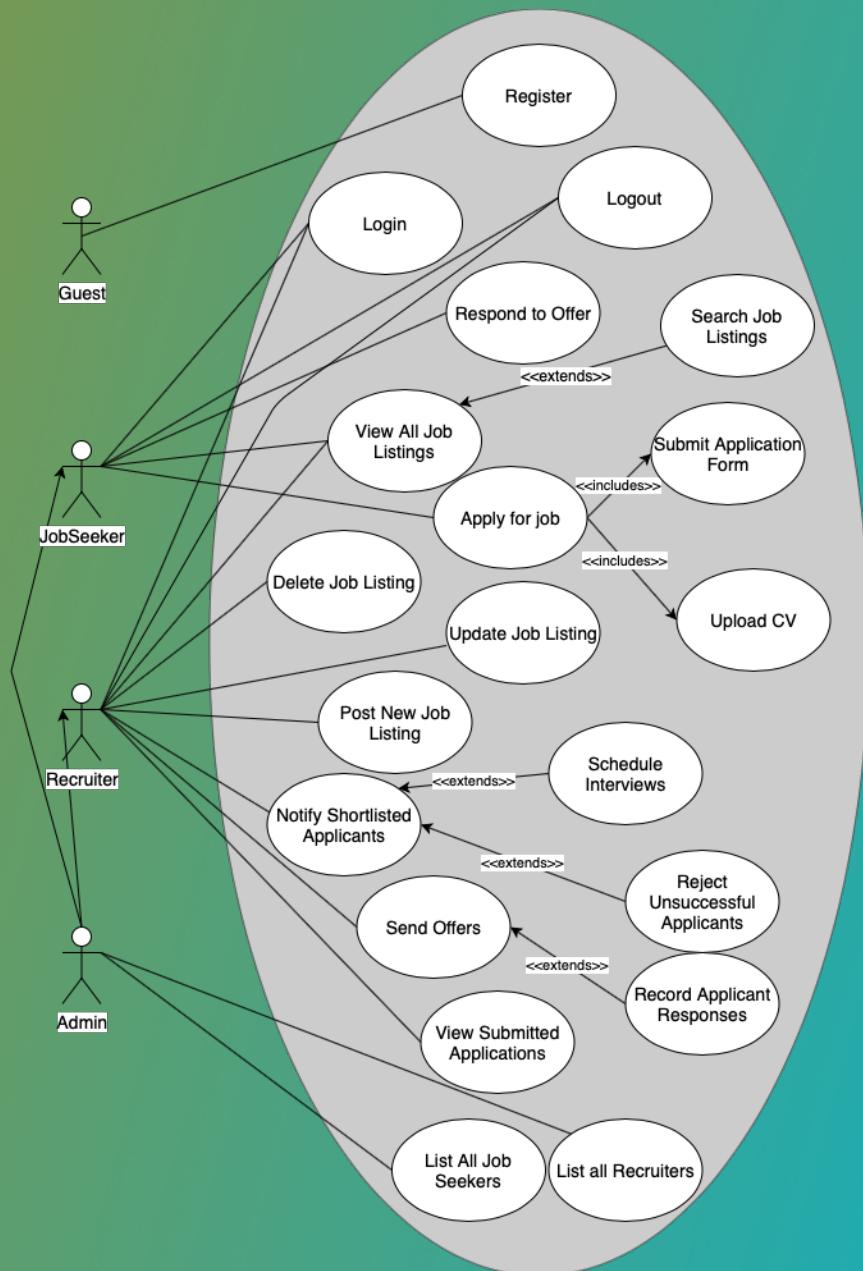
Job Seekers can view and explore the latest job vacancies in the market and can get in contact with high profile recruiters. Job Seekers can also apply for jobs directly and conveniently on the site and also send their CVs to the recruiter through the system. Moreover, they can also respond to offers and make updates to their profile and the system can automatically update the data for recruiters to view.

## 2. Benefit to Recruiters

Recruiters benefit from the large talent pool that the system provides and thus makes it easier to find a perfect candidate for the job by having greater outreach. The system also automates a lot of manual work in the recruitment process. This not only reduces the cost of employees for recruitment but also makes the process more efficient and hassle free. Recruiters can post new Job Listings to the system and manage those positions. The system also provides functionalities to shortlist applicants, schedule interviews, send offers of employment or reject unsuccessful applicants. The system can also record and reflect the response to offers by Job Seekers.

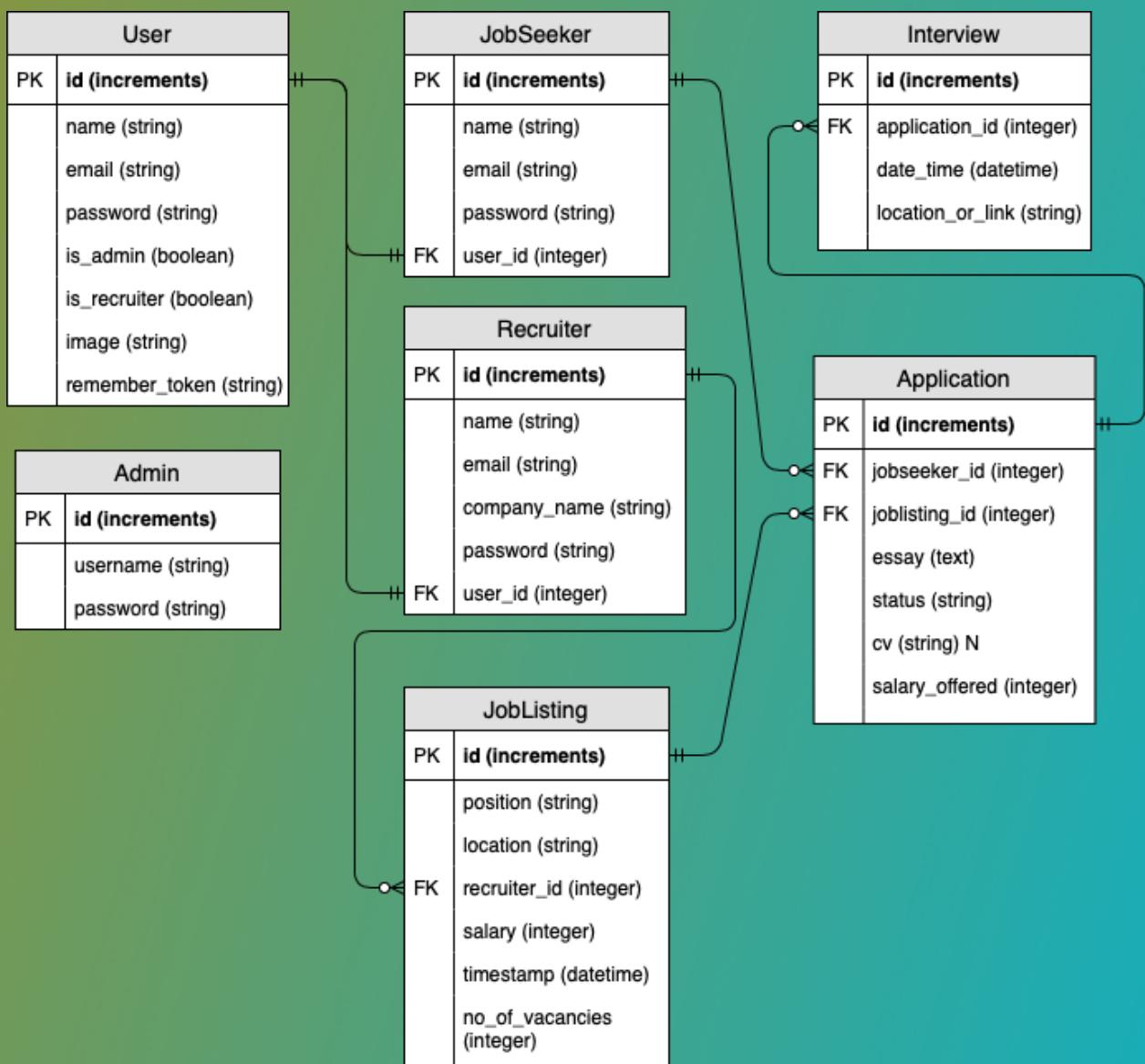
# SYSTEM DESIGN

## FUNCTIONAL REQUIREMENTS



The system Use Case diagram above describes the use cases of the system and the functionality it provides. The user types are Guest, JobSeeker, Recruiter and Admin. JobSeekers and Recruiters have access to various functions of the system and admin has access to all of them in addition to additional administrative functions.

## DATA REQUIREMENTS



The Database design above is represented as an ERD. There are 2 primary kinds of users: JobSeeker and Recruiter, each with a name, email and password. In addition, each Job Listing includes details of the job and recruiter. The application form includes attributes for status, date, questions/essays and salary, if offered. There is also an Admin entity whose entries maintain the system.

---

# SYSTEM EVALUATION

## SHORTCOMINGS

### Send Offers

The send offers option is available only on the applications page for the recruiter. Some recruiters may like it to be on the interviews page so they can decide their response based on a candidate's interview. However, such a shortcoming is because all other options for a recruiter are available on the "Manage Applications" page.

### Interview Date Time

The system takes user input for date and time of the interview as a string and not a dateTime object. There is no validation for the user input and the date could be invalid and still be accepted into the interviews table by the system. This can create many problems.

### Home Page

The home page should ideally show details of latest job listings or status of applications or upcoming interviews, etc. However, it currently only shows more static data rather than user specific data.

### Filter Data on User Search Field (Data Sorting)

The various pages on the system which fetch values from the database do not have a feature to filter the data based on the user's choice. For example, if a recruiter wants to see applications for only a particular job listing, the system must change the search field to provide filtered data. For a system with a database such as Jobplify, sorting data based on the user's needs is an essential part of the software USP.

## POSSIBLE REFINEMENTS

### "Manage Applications" Functionalities in Offers Page

Providing functionalities like send offer, reject applicant, or schedule interview in the Offers page would be useful to recruiters who would like to control the applications from the offers page once they have sent an offer.

### Date Time Picker and Input Validation

It is imperative that the system is able to validate user inputs. Using a Date Time picker on the create interviews page is important for a better UI and UX. This input must then be validated to be a valid date by a certain number of days in the future.

### Personalised Home Page

---

The home page should be able to dynamically display data based on latest job listings posted to the system or application updates for the user. There are a few UI improvements possible as well, for example, using a dropdown in the navigation bar instead of many links in a row.

### **Search and Filter Features**

For the pages that display user specific information like applications, interviews or offers, the system must implement a filter based on creation date, applicant/recruiter id, job listing id, or application status. There can also be a search bar to search for a specific applicant, joblisting or interview.

## **ACKNOWLEDGEMENT**

First and foremost, I would like to extend my sincere gratitude to Professor Bill KP Chan who introduced me to the idea of an E-Recruitment System in the form of a course project. Without his constant support, guidance and inputs towards every step of this project, it would have been incomplete and far from what it is today.

I would also like to thank my parents for their emotional support throughout the testing times created by the COVID-19 pandemic. Their support ensured I could stay focused on my work and develop a vast system within the stipulated time.

## **CONCLUSION**

Jobplify satisfies the requirements for the required project and therefore a basic E-Recruitment System. The current development status of the website allows the website to be deployed for beta testing to users to get feedback and make further bug fixes and enhancements. The scalability of the system is evident and large with the potential to become a product or social tool with more sophisticated development in the future. Overall, Jobplify is a viable and practical recruitment solution for many recruiters.

## **REFERENCES**

1. Image used on Welcome page of system and beginning of this report: <https://resources.workable.com/stories-and-insights/good-recruiter>
2. JS Library used in Website: [MailToUI](#)