Employed: A Web-Based Business and Employment System

By: Dimple Gabunada

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# Introduction

Technology offers us numerous of solution to make our lives easier and convenient. It doesn’t matter if you’re migrating from an outdated system, or looking to implement from scratch for a new business. Sometimes the main challenge is choosing the right solution from the vast variety.

A lot of people on their designated field of expertise are seeking for a perfect job while companies or recruitment agencies are also looking for potential employees. For the past decades, recruitment takes a lot of effort and most companies settled for traditional way of recruitment. Traditional way of recruitment is very timely and costly. However, using the internet for recruiting can lead to huge budget savings for the human resources department. There is no need to hire extra personnel to accept resumes, meet and greet the applicants, proctor employment pre-tests, and answer questions. There will also be fewer expenditures on printing and copying as well, since submissions will be done online.

Recruitment has come a long way from its traditional methods, namely online recruitment. With all the benefits that online recruitment has to offer, companies and recruitment agencies opt for this recruitment method over the traditional way of recruiting. Online recruitment is not only beneficial for organizations. This can benefit candidates looking for a new career opportunity through online recruitment to find the job that suits their interest.

As recruiters begin to migrate into the digital realm, online recruitment has quickly become the preferred means of [talent scouting](https://www.careeraddict.com/external-recruitment-methods). In this case, the entire team decided to build a system application which makes job recruitment hassle-free. The team will be making a networking platform and will be naming it “Employed” assuming that it can uplift every users desire to get hired. This will create a targeted, easily accessible pool of candidates, allowing recruiters to prescreen potential hires based on the information on their profiles.This system aims to provide an accessible, cost effective, user-friendly and tinder-like interface which features a location-based search engine mobile app and Web application, that allows users to use a swiping motion to accept (swipe right) or decline (swipe left) other users offer, and allows users to communicate if both parties like each other (a “match”).

Most common problem for other existing online recruitment sites is if the hiring process involves filling out an application form, in which most of qualified candidates/employees prefers sending a resume. Some candidates may not want to take the time or may not be confident enough with the security of an online application, especially if they are attempting to complete a lengthy application with a mobile device. There's always the possibility that the application system may operate slowly or lose information during the submission process.

The team has come up to an idea of more efficient and secure system where in users will have to set up everything first on their profiles in order for both the employer and applicant to just review and validate each users’ qualification with the use of the applications swiping motion and other valuable features. The system will provide a security module which will have two level of access such as Administrators and Users. Administrator is fully responsible for monitoring and maintaining the system since they have access on some modules which are hidden on users such as the users requirements needed for the recruitment which are uploaded and kept in a secure database so the system could just retrieve it if neededand confidential transaction between the applicant and the employer. On the other hand, Users of this application are categorized to as “employer” or “applicant” where in both has the ability to log in or sign up for a new account which has their own timeline and profile.

The user that is logged in as “Employer” has the ability to edit its profile to introduce the business or companies’ whereabouts. Along with it is the authorized personnels basic personal information under the organizations human resource management. The Employer is allowed to post vacant job positions and can also search and send request to invite potential employees to apply by selecting the desired category of each job titles. In addition, the employer can also check applicants request under notification section since they will be notified too every time an applicant will send a request for the said job vacancy. The employer can scroll through the request and review the applicants profile and qualifications. To validate whether the applicant is qualified or not, employer will then use the swiping motion to accept (swipe right) or decline (swipe left) the applicants request. To measure job performances of the employees, employer is allowed to evaluate and rate them and can therefore leave comments to provide other employers with metrics regarding the quality of employees' work.

On the other hand, the user that is logged in as “Applicant” has the ability to edit their profile, add a formal picture for Identification purposes and along with it is their basic personal information including the name, age, address, field of expertise and etc. They could also upload documents to support their claims such as certificates and etc. All requirements needed for the recruitment can also be uploaded and kept in a secure database so the system could just retrieve it if needed. Applicants can search for available job offers according to their field of expertise. They can send request to the employer for their profile to get reviewed. They can also check under notifications if an employer accepted or declined their request. Since an employer can also offer job to applicants, the applicants has the option to accept or decline the request.

If request has been accepted both users can communicate via chat or even a video call. This system also provides interview platforms wherein employers can test applicants’ communication and aptitude skills. But it’s the companies’ responsibility to contact the applicant. If an agreement has been made between both sides that’s the end of the systems’ functionality.

All of the recruitment process will be conducted online. This system will help job application less hassle and makes hiring process easier and more convenient for both the employer and the applicant.

# Objectives of the Study

The main objective of the study is to develop a business and employment platform designed to provide an accessible, cost effective, user-friendly and tinder-like interface which features a location-based search engine mobile app and Web application that caters both applicant and employer.

Precisely, the purpose of this study seeks:

* To develop a system that is secured and goes along on today's trending tinder-like swiping motion feature, thus making it a lot easier and convenient for users;
* To design a system that is organize, synchronize and user-friendly for users;
* To develop an online recruitment platform for efficient hiring and job seeking;
* To implement a system that enable users to provide remarks, feedbacks and critiques and;
* To generate a system that notifies users regarding the status of each users' activity .

# Scope and Limitations of the Study

This study focuses on business and employment services mainly for employers and employees that are computer literate which jobs are inclined to information technology. Specifically the freelancers and fresh graduates within Visayan Region who are looking for potential employee and/or employer. This system is a web-based application which can be accessed through mobile devices. The system will provide a security module which will have two level of access such as Administrators and Users. Administrator is fully responsible for monitoring and maintaining the system since they have access on some modules whichare hidden on users such as the users requirements needed for the recruitment which are uploaded and kept in a secure database so the system could just retrieve it if neededand confidential transaction between the applicant and the employer. On the other hand, Users of this application are categorized to as “employer” or “applicant” where in both has the ability to log in or sign up for a new account which has their own timeline and profile.

# Significance of the Study

The proposed study will be significant endeavor in promoting suitable jobs from things or courses they are good at through on-line, not only beneficial to the researchers but also as follows:

**Employer**: They are the instruments of the study since they can post job offers online which applicants can look upon furthermore, the employer can look-up and search potential employees.

**Employee**: In this study the employee will identify the importance of the use of online job hunt application and web based from a certain companies.

**The Researcher**: The researcher can also gain significance in this study. They would improve their skills, strategy and knowledge through FAQ’s and other feedbacks.

**Future Researchers**: The future researchers also can gain significance in this study. It may serve this as their guidance to gather information and it may serve them as a building blocks to have bigger study.

## Development Plan

## Table of Activities

In order to achieve the desired outcome for this project successfully, imperative tasks are

followed with the given time frame.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Task Name | Task # | Description | Duration(# of days) | Predecessors |
| A | 1 | Problem | 3 weeks |  |
| B | 2 | Data Gathering | 4 weeks | A |
| C | 3 | Requirements Analysis | 4 weeks | B |
| D | 4 | Formulation of Diagrams  (FDD, ERD, Use case, UI) | 7 weeks | C |
| E | 5 | Research proposal | 5 weeks | D |

## Gannt Chart

 The table below shows the list of activities, schedule as well as their respective duration

**Legend:** Estimated Time Duration

Actual Time Duration

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | **June**  **2019** | | **July**  **2019** | | | | **August**  **2019** | | | | **September**  **2019** | | | | |
| Task ID | **Task Name** | 17-23 | 24-31 | 1-06 | 07-13 | 14-20 | 21-30 | 1-10 | 11-17 | 18-24 | 25-31 | 1-08 | 9-15 | 16-22 | 23-30 |
| 1.1 | Community Observation |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1.2 | Problem Selection |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1.3 | Identification of Stakeholders |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.1 | Brainstorming |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3.1 | workplan |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3.2 | workflow |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | **October**  **2019** | | | | **November**  **2019** | | | | **December**  **2019** | | | |
| Task ID | **Task Name** | 1 – 7 | 8 - 14 | 15-23 | 24-31 | 1-06 | 07-13 | 14-20 | 21-30 | 1-10 | 11-17 | 18-24 | 25-31 |
| 4.1 | Functional Decomposition Diagram |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| 4.2 | Use Case |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| 4.3 | Entity-Relationship Diagram |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| 4.3 | Illustration of UI |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| 5.1 | Rationale of the study |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| 5.2 | Objectives of the Study |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| 5.3 | Scope and limitation |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| 5.4 | Significance of the study |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| 5.5 | Development Plan |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| 5.6 | Requirements Definition report |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| 5.7 | Data Dictionary |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | January  2020 | | | February  2020 | | | | March  2020 | | | |
| Task ID | Task Name | 12-19 | 20-26 | 27-31 | 1-7 | 8-14 | 15-21 | 22-29 | 1-7 | 8-14 | 15-21 | 22-31 |
| 5.8 | Final Revision |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| 6.1 | Division of modules to the team |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| 6.2 | Establish needed software requirements |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| 6.3 | Implementation of modules |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| 6.4 | Finalization the system |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| 6.5 | Testing |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| 7.1 | User guide |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| 8.1 | Completion of Requirements |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |

# Requirements Definition Report

## Functional

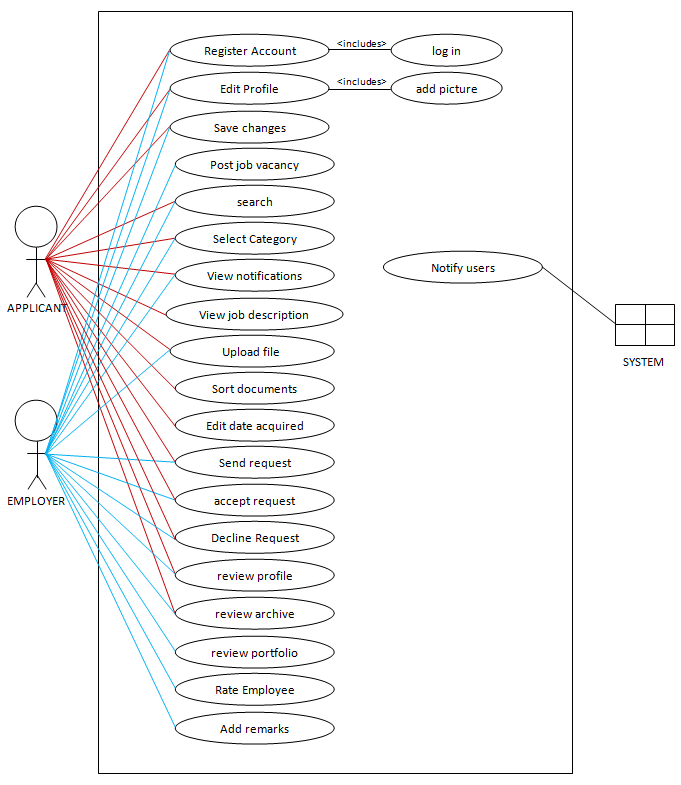
* Manage User Account
* Log in
* Sign up
* Edit Profile
* Add picture
* Save changes on profile
* Manage Job
* Post job vacancy
* Search
* Select category
* View notification
* View job description
* Manage Portfolios
* Upload file
* Sort documents
* Edit date acquired
* Process Recruitment
* Send request
* accept request/offer
* decline request/ offer
* Review profile
* Review archive
* Review portfolio
* Rate employee
* Add remarks

## Non Functional

* The user should be able to navigate the program without confusion
* The system program should react accordingly and transverses quickly as it is expected to handle and navigate without delays.
* Log-in mechanism is required before user access is granted to ensure security.
* The system is expected to be responsive with the corresponding user events and activities.
* Able to handle large amounts of data and organize it accordingly

## Use Case Diagram

This diagram below shows the system interactios between users .



## Database Design/ ERD

The diagram below shows the entity relationship diagram (ERD).

**Applicant profile**

ApplicantID (PK)  
LastName  
FirstName  
ContactNumber  
Email  
Username  
Password  
BirthDate  
Address  
Status  
Specialization

**Employer profile**

EmployerID (PK)  
ContactPerson  
ContactNumber  
Address  
Email  
Username  
Password

MetadataEmployer profile

**Job Specialization**

JobVacancySpecializationID (PK)  
SpecializationID (FK)  
JobVacancyID (FK)

**Specialization**

SpecializationID (PK)  
SpecializationTitle

**Applicant Specialization**

ApplicantSpecializationID (PK)  
Specialization (FK)  
ApplicantID (FK)

**Applicant Portfolio**

ApplicantPortfolioID (PK)  
DocumentName  
DateAcquired

**Applicant Details**

Applicant Details ID (PK)  
Job Category (FK)  
Specialization (FK)  
BIO

**Job Details**

JobDetailsID (PK)  
JobSchedule  
JobSalary  
Requirements

**Job**

JobVacancyID (PK)  
JobTitle  
JobDescription  
JobCategory

|  |  |  |  |
| --- | --- | --- | --- |
| Field Name | Data Type | Size | Description |
| EmployerID | INT | 6 | Primary Key, unique record identifier,  auto-generated |
| ContactPerson | NVCHAR | 32 | Company’s representative |
| ContactNumber | INT | 11 | Company’s contact number |
| Address | NVCHAR | 32 | Company’s address |
| Email | NVCHAR | 32 | Company’s email |
| Username | NVCHAR | 32 | Company’s username |
| Password | NVCHAR | 16 | Company’s password |

Primary Key: EmployerID

Foreign Key: none

## Applicant Profile

|  |  |  |  |
| --- | --- | --- | --- |
| Field Name | Data Type | Size | Description |
| ApplicantID | INT | 6 | Primary Key, unique record identifier,  auto-generated |
| Lastname | NVCHAR | 16 | Applicant’s last name |
| Firstname | NVCHAR | 16 | Applicant’s first name |
| ContactNumber | INT | 11 | Applicant’s contact number |
| Email | NVCHAR | 32 | Applicant’s email |
| Username | NVCHAR | 32 | Applicant’s username |
| Password | NVCHAR | 16 | Applicant’s password |
| Birthdate | NVCHAR | 16 | Applicant’s date of birth |
| Address | NVCHAR | 32 | Applicant’s address |
| Status | NVCHAR | 16 | The status of the Applicant |
| Specialization | NVCHAR | 32 | Applicant's Specialization |

Primary Key: ApplicantID

Foreign Key: none

## Job Vacancy

|  |  |  |  |
| --- | --- | --- | --- |
| Field Name | Data Type | Size | Description |
| JobVacancyID | INT | 6 | Primary Key, unique record identifier,  auto-generated |
| JobTitle | NVCHAR | 32 | Type of Job |
| JobDescription | NVCHAR | 255 | Description of Job |
| JobCategory | NVCHAR | 32 | Name of category |

Primary key: JobVacancyID

Foreign Key: none

## Job Details

|  |  |  |  |
| --- | --- | --- | --- |
| Field Name | Data Type | Size | Description |
| JobDetailsID | INT | 6 | Primary key, unique record identifier,  auto-generated |
| JobSchedule | NVCHAR | 255 | Time Schedule |
| JobSalary | NVCHAR | 32 | Salary of specific job task |
| Requirements | NVCHAR | 225 | Recruitment Requirements, Documents, Certificates |

Primary Key: JobVacancyID

Foreign Key: none

## Applicant Details

|  |  |  |  |
| --- | --- | --- | --- |
| Field Name | Data Type | Size | Description |
| ApplicantDetailsID | INT | 6 | Primary key, unique record identifier,  auto-generated |
| JobCategory | NVCHAR | 32 | Category of Job Specialization |
| Specialization | NVCHAR | 32 | Type of Profession |
| BIO | NVCHAR | 255 | Applicant'S Personal Information, Achivements |

Primary Key: ApplicantDetailsID

Foreign Key: JobCategory, Specialization

## Applicant Portfolio

|  |  |  |  |
| --- | --- | --- | --- |
| Field Name | Data Type | Size | Description |
| ApplicantPortfolioID | INT | 6 | Primary key, unique record identifier,  auto-generated |
| DocumentName | NVCHAR | 32 | Document Title |
| DateAcquired | NVCHAR | 16 | Date when the documents were acquired |

Primary Key: ApplicantPortfolioID

Foreign Key: none

## Applicant Specialization

|  |  |  |  |
| --- | --- | --- | --- |
| Field Name | Data Type | Size | Description |
| ApplicantSpecializationID | INT | 6 | Primary key, unique record identifier,  auto-generated |
| Specialization | NVCHAR | 32 | Type of Profession |
| ApplicantID | INT | 6 | unique record identifier, auto-generated |

Primary Key: ApplicantSpecializationID

Foreign Key: Specialization, ApplicantID  
  
  
Specialization

|  |  |  |  |
| --- | --- | --- | --- |
| Field Name | Data Type | Size | Description |
| SpecializationID | INT | 6 | Primary key, unique record identifier,  auto-generated |
| SpecializationTitle | NVCHAR | 32 | Type of Profession |

Primary Key: SpecializationID

Foreign Key: none

## Job Vacancy Specialization

|  |  |  |  |
| --- | --- | --- | --- |
| Field Name | Data Type | Size | Description |
| JobVacancySpecializationID | INT | 6 | Primary key, unique record identifier,  auto-generated |
| SpecializationID | INT | 6 | unique record identifier, auto-generated |
| JobVacancyID | INT | 6 | unique record identifier, auto-generated |

Primary Key: JobVacancySpecializationID

Foreign Key: SpecializationID, JobVacancyID