

# SECP2613(01) – SYSTEM ANALYSIS AND DESIGN

### **SEMESTER 1 2021/2022**

#### **PROPOSAL**

### SYSTEM <<*E-RECRUITMENT>>*

**Group Name:** TECH CREW

### **Members:**

- 1. NUR SYAMALIA FAIQAH BINTI MOHD KAMAL (LEADER)
- 2. ADRINA ASYIQIN MD ADHA
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- 4. NUR IRDINA ALIAH BINTI ABDUL WAHAB

Stakeholder: Venture Technocom System Sdn Bhd

Representative Name	Date Interviewed
Marian Tan	15th November 2021 (Tuesday)
	2.30 pm - 3.30 pm

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## **Overview of Project**

The project we are assigned to do for Work Based Learning(WBL) is an e-recruitment system. Our client has decided to digitize their recruitment system by having this e-recruitment system. This online recruitment system proposes attracting, assessing, selecting and recruiting candidates of job applicants. Since a lot of people find jobs through the Internet, it is easier for companies to gather informations of the job applicant. This system ensures companies to gain the most ideal type of job applicant through their applicant tracking system. This project requires students to apply the information and knowledge gained from the lecture classes to create a smooth system where silence is satisfied. This project also gives the opportunity to students to get hands-on experience with industry.

The assigned client from Venture Technocom System Sdn Bhd, located at Kawasan Perindustrian Tebrau 1, Plo 5, Jalan Firma 1, Johor Bahru, is a global electronics services provider that specialises in network, hardware, software, and manufacturing. The company does research and development, product industrialisation, advanced manufacturing, supply chain management, and product lifecycle management. The representative from Venture Technocom System Sdn Bhd is Miss Marion Tan Mei Roo who is working as a Human Resource in the company. In this task, students are supposed to digitalise all information inside the current manual employment to create the e-recruitment system.

The methods used in this proposal are interviews, case studies, questionnaires and observational trials. For the interview method, we had our first meeting with our client, Miss Marion Tan Mei Roo through webex platform. We also had to check some websites on the Internet to build a better understanding of managing a recruitment process. Our group, Tech Crew, made questionnaires sessions with Ms Marion Tan Mei Roo through email for further clarification. A trello application is used for good and manageable tracking planning.

#### **Problem Statement**

The current e-recruitment system is done manually by sending and filling all the forms by hand and having to submit and forward the filled in forms through email. Also, panels and Human resources (HR) need to discuss the salary proposal and approval from Human Resource Manager (HRM) which is currently held by external methods such as Whatsapp, email or personal meetings. By doing this, it consumes too much time and man-force only for manual administration. This method is wasteful and executes too many complications.

### **Proposed Solutions**

Tech Crew will develop a flexible yet effective system that job seekers, human resource managers, and administrators may utilise without difficulty. This system will be broken down into five modules: login/sign up, candidates, interviews, staff, and salary, with three key actors which are job applicants, hiring personnel, and the hiring panel. The system will be automated and less manual work where the database will store the data instead of storing candidates' data in physical files.

The shortlisted candidates will be notified to register their information in the system once they have been shortlisted and HR has inserted their name, email address and phone number into the system. Before entering the available interview date and time into the system, HR will contact the recruiting panel through the system to confirm their availability. The system will then send notice to selected applicants informing them of their upcoming interviews.

The shortlisted names will be screened by the admins utilising the system with reference to the hiring panel after the job seekers have had their interview with the hiring panel. The admin would then review salary recommendations with the HR Manager within the system before distributing to the shortlisted applicants. This will save energy because administrators will not have to physically discuss proposals with the management. Admins will utilise the system to communicate job offers to applicants once they have been confirmed. The admins will save a lot of time by using this approach since they won't have to type and print each letter manually, and they would not have to go to the post office to mail the letters to the applicants' homes.

If some applicants decline the offer, they will be removed from the system automatically. If they accept the offer, the accepted responses will be submitted back to the admins, who will prepare numerous job letters, which will then be emailed to the applicants. They might just scan

the letter and transmit it to the administrators later. Applicants must also accept the compensation suggestion and sign the employment offer letter within seven days, otherwise their application will be rejected. The system does, however, have limits. Until the admin keeps the record of acceptance, the system simply offers automatic and well-organized data. This technique has drawbacks since, in the end, admin must manually enter fresh data into the system based on hardcopies provided by new employees.

### **Objectives**

The main goals of this system is to:

- 1. To create a system where all Human Resources (HR), panel and job applicants can use.
- 2. To reduce man force and man hours in manual recruitment.
- 3. To have man-force invest their time and effort in other more valuable tasks.
- 4. To analyse the efficiency of recruitment teams.

### Scope

There are a total of 5 modules in this project and 3 main users which are job applicants, Hiring Panels and Hiring personnel.

- Sign up/log in
- is used by 3 users which are job applicants, hiring panel and hiring personnel (HR). Sub use case
- Reconfirm registered email. This part is only covered for shortlisted candidates. We used reconfirmation of email to improvise the security of the system by preventing the third party from accessing it.
- Display login error
- Changing password is a non crucial part of the system as it is an extended sub use case.
- Manage candidate
- Used by job applicant and hiring personnel
  Sub use case
- Check date and time of interview

- E-application form. Application form is going to be created in a system to gain uniform information of job applicants instead of in a PDF Document. It uses the fill in blanks method.
- E- salary proposal form. This proposal also will be created in a system instead of in a PDF Document. Fill in blacks method is used.
- Check status
- Acceptance of e-offer letter. Job applicant will received the e-offer letter through auto generated email or company websites
- Manage interview
- used by hiring panel and hiring personnel (HR)

### Sub case

- Check status
- Hiring feedback/rating. Both of these user will screening to find the ideal job applicant
- E-offer letter. The offer letter will be sent after the applicants are shortlisted to the vacancy.
- Set date, time & attendance will be set for the next interview
- Manage salary
- used by hiring personnel (HR)

## Sub use case

- e-salary proposal, Hiring personnel will screening the e-salary proposal through information stated in resumes
- e-salary proposal feedback status will be notified to the applicants by hiring personnel
- Manage staff
- used by Hiring personnel (HR)

# Sub use case

- staff efficiency. staff will be sorted to the vacancy based on their characteristic, strengthens and weakness
- update employee. System will updates information of employee in the system

- Keeping records of employees. All the record will be kept in a system, and any users such as hiring personnel or hiring panel be able to access it freely based on the username and password given

## **Feasibility Study**

Defining Objectives:

Firstly, one of the objectives in determining the feasibility in this project is traceability and audit trail to ensure compliance. Venture Sdn. Bhd. currently use the manual system to track and audit their data which causes a lot of error and is hard to track. Furthermore, reducing man hours for administration jobs is one of the main objectives. When digitising the application forms and salary proposals, the HR personnels can directly extract the given information to fulfill required criteria of the job applicants. Other than that, the existing man force is then able to invest their time and effort in other more value-added tasks. As a result, they may concentrate more on how to increase the quality of their work and the usefulness of their system. Finally, analyze the recruitment team efficiencies. For example, each HR personnel manages how many sessions per week and its success rate.

### **Determining Resources:**

## 1. Technical feasibility

#### Hardware

**Computer or laptop**: Each member of our team will utilise a computer or laptop to install the necessary software and develop a website for our e-recruitment system.

#### Software

**XAMPP:** Apache Friends developed a free and open-source cross-platform web server solution stack bundle that includes the Apache HTTP Server, MariaDB database, and interpreters for PHP and Perl scripts. The company does not need to install all the mentioned applications as this software provides it in a package.

**Web hosting service**: a service that allows a website or application to store data on a server over the internet. Other computers connected to the internet will be able to access the e-requirement website once it is made available on the internet.

**MySQL**: SQL (Structured Query Language) is a relational database management system. Data warehousing, e-commerce, and logging applications are just a few of the uses for the application. The e-requirement system makes use of a database, which allows data to be updated, accessed, and stored more efficiently than spreadsheets, which can lead to data redundancy and integrity problems.

## 2. Economic feasibility

The expected budget for this project is about RM100.00 for subscribing purposes such as paid web hosting and domain names.

### 3. Operational feasibility

This project will take 9 weeks to complete, beginning on Tuesday, 15 November 2021, and ending in the fifteenth week of the lecture session.

# **Planning (Gantt Chart)**

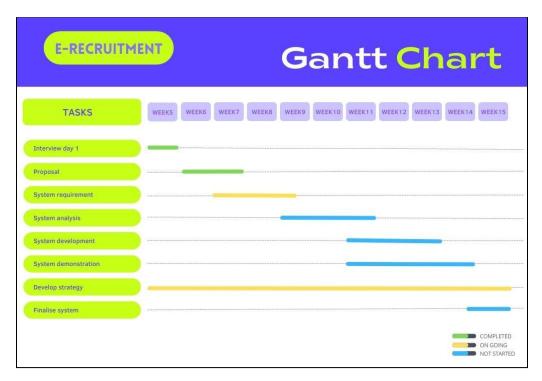


Image 1: Gantt Chart for e-recruitment system

The above diagram shows the Gantt Chart of our development currently where it is divided by tasks given by lecturers. There are eight tasks needed to complete the e-recruitment system, which are Interview Day 1, proposal report, system requirement, system analysis, system development, system demonstration, develop strategy and finalise system. The tasks are then scheduled by week and colour coordinated by the status. There are three statuses for a task, which are not started, ongoing, and completed.

### References

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