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MyPTJobs: Design and Development of a Part-time Job Mobile Application

Er Wang Xing[1], Norfaradilla Wahid[1]*

[1]Faculty of Computer Science and Information Technology,
Universiti Tun Hussein Onn Malaysia, Parit Raja, Batu Pahat, 86400, MALAYSIA

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Abstract: Part-time work is a popular and flexible option for many individuals in Malaysia but finding suitable opportunities can be challenging. Traditional methods such as visiting businesses in person or browsing job postings on social media are time-consuming and may not be reliable. In response to these issues, this project proposes the development of an application that connects job seekers with part-time employment opportunities in Malaysia. Prototyping-based methodology is used as the methodology to execute the project and the application and is developed in Android platform by using Flutter, Java and MySQL. MyPTJobs provides a convenient and efficient way for job seekers to find suitable jobs, while also helping employers to find additional staff on a part-time basis. Based on functional testing, it is shown that all the requirements have been successfully fulfilled and has streamlined the job search process and provide a valuable resource for both job seekers and employers.

Keywords: Part time job, Android, e-Recruitment, Mobile application

1. Introduction

Part-time work is a flexible employment arrangement where workers are paid for a limited number of hours worked. It allows employers to increase staffing during peak periods without hiring full-time employees and can provide income opportunities for individuals looking to supplement their income. However, the Covid-19 pandemic and rising cost of living in Malaysia have led many individuals to seek out part-time work [1]. The traditional method of finding such work, such as checking with various employers or using social networking sites, can be inefficient. Hence MyPTJobs is developed as there are several problems in finding the part time job.

The problem being addressed in this project is the difficulties that both job seekers and employers face in finding and filling part-time job positions in Malaysia. Job seekers may have limited time to search for jobs, and the traditional method of visiting each business to inquire about job openings may not be efficient. In addition, it can be difficult for job seekers to distinguish between genuine and fraudulent job postings on social media. Additionally, the postings on these platforms may not be

*Corresponding author: faradila@uthm.edu.my

updated in a timely manner. This can lead to a lack of suitable job opportunities for job seekers and a shortage of staff for employers.

To address these problems, the project proposes to create an application for job seekers and employers that provides a platform for finding and filling part-time job positions. Three objectives have been outlined to achieve the aim:

1. to design a mobile application for job seekers and employers.
2. to develop application that allow job seekers to find part-time jobs online and employers to post job recruitment online.
3. to test whether the developed application fulfil the system requirement successfully.

The application involves three kinds of users which are job seeker, employer, and administrator. This application has several modules such as user management, job posting, job recruitment and complaint module.

The goal of this project is to develop a mobile application that enhances the job search experience for both job seekers and employers in Malaysia. The application will offer extra opportunities for part-time job and protect the privacy of job seekers, as well as their current employment status. It will also aim to improve the efficiency of the job search process, by addressing issues such as limited time for job search, authenticity of job postings, and timeliness of job opening updates. Additionally, the application is user-friendly, to make it easy for job seekers to find appropriate part-time jobs and for employers to quickly hire staff for their businesses.

This paper is organized into five sections. In Section 1, the background of the project is explained. Section 2 presents a review of related work. The methodology, analysis, and design of the project are described in Section 3 and result and discussion are described in Section 4. The final section, i.e., Section 5 summarizes the limitation and outlines the suggestion for future improvement.

2. Related Work

2.1 Job Recruitment

Job recruitment is a process used by companies to identify and select the best candidate for a job vacancy [2]. It involves both Human Resource (HR) management and job seekers, with HR management posting job openings and job seekers applying for the vacancy. HR management is responsible for reviewing applicants' resumes and potentially conducting interviews in order to find the most suitable candidate for the job. Once the review process is completed, HR management will decide to accept or reject the applicant's application. Overall, the goal of job recruitment is to identify and hire the best candidate for the job vacancy.

2.2 E-recruitment

E-recruitment is an employee recruitment process which involved digital technology especially the internet [3]. The traditional hiring procedure is being replaced by an anytime, everywhere e-recruitment. Employers will post job vacancies on the internet while job seekers will find and apply for the job. The entire hiring procedure is conducted online. Both the job seeker and the employer will compare each position to get the desired talent and position.

2.3 Part-time job Recruitment

There are currently two main methods in finding part-time work in Malaysia, i.e., browsing job postings at various businesses or searching for job postings on social media sites. These methods can be inefficient and may not be reliable, as it is difficult for job seekers to determine the authenticity of the job postings. According to Dedi's research, the three most used platforms for job-related purposes are LinkedIn, WhatsApp groups, and Job Street [4]. Once a job seeker finds a job opportunity, they can

apply by submitting a form, which is reviewed by the employer. If the applicant is accepted, they will begin working as agreed, otherwise the recruitment process ends. If the employer needs additional staff, they can review other job applications, otherwise they can cancel the recruitment process. Overall, the current process for finding and applying for part-time work in Malaysia can be challenging and may not be effective for both job seekers and employers.

2.4 Comparison with the Existing Application

A few similar software applications have been chosen to identify their features that can be applied to the developed system. Three existing applications with different features are presented. The result of the comparison has implemented in the development of MyPTJobs. The three existing applications to be compared are Job Street, Jora Jobs and FastJobs [5][6][7]. A comparison of similar applications is carried out and the result shown in Table 1.

According to Table 1, all of the applications have user management module, job application module, and set favourite job module. The user management module includes features such as login, registration, password change, and profile updates. This module allowing job seekers to update their personal information and enabling employers to update their company profile. Job Street and Jora Jobs offer advanced search options for job seekers with filters for job type, location, and distance. FastJobs includes salary as a search filter, while MyPTJobs has additional filters for area, distance, date, and time. In terms of verification processes, only Job Street requires employers to provide documents, while only FastJobs requires job seekers to provide a phone number. MyPTJobs has both Know Your Customer (KYC) and Know Your Business (KYB) verification for both job seekers and employers. KYC and KYB verification is a process of identifying and verifying the authenticity of the client or the business by using several basic authentication factors including identity cards in Malaysia, biometric information, or personal information to avoid money laundering or other crime incidents [8]. The job setting module is available in FastJobs and MyPTJobs, but MyPTJobs is the only application with a recommendation feature for job seekers. All applications except Job Street have a complaint module, and MyPTJobs is the only one with a rating module for users to leave feedback for job seekers and employers. All applications allow job seekers to mark their favourite jobs. In terms of technology and platform, MyPTJobs is developed using Flutter, Java, and MySQL and is available on the Android platform. The other three apps are web-based and available on Android and iOS.

Table 1: Comparison Between Existing Applications with the Proposed Application

Feature / Application	Job Street [5]	Jora Jobs [6]	FastJobs [7]	MyPTJobs
User Management Module	Yes	Yes	Yes	Yes
KYC and KYB Verification	Only the employer needs to provide the necessary documents for verification	No	Only job seekers need to provide a phone number for verification	Have both for KYC and KYB Verification
Job Search for Job Seekers	Advanced Search with job type, location, and distance	Advanced search with job type, location, and distance	Advanced search with job type, location, and salary	Advanced search with job type, location, area, distance, date, and time

Table 1: (cont)

Feature / Application	Job Street [5]	Jora Jobs [6]	FastJobs [7]	MyPTJobs
Job Setting Module for Job Seekers	No	No	Yes	Yes
Job Application Module	Yes	Yes	Yes	Yes
Recommendation of Job Seeker	No	No	No	Yes
Complaint Module	No	Yes	Yes	Yes
Rating Module	No	No	No	Yes
Set Favourite Job	Yes	Yes	Yes	Yes
Technology	Unknown	Unknown	Unknown	Flutter, Java & MySQL
Platform	Web-based Android IOS	Web-based Android IOS	Web-based Android IOS	Android

3. Methodology

3.1 Prototype Model

The prototype model is a specific methodology that involves creating a limited version of the final system in order to test and gather feedback to improve the design and functionality [9]. The prototype model is iterative, meaning that new prototypes are created based on the previous ones. The goal of using the prototype model is to quickly create a working version of the final system and gather feedback to refine and improve it. Based on Figure 1, it consists of five main phases: planning, analysis, design, development and testing, and implementation. The analysis, design, and development and testing phases may be repeated until the prototype meets the requirements and needs of the users. The process of iteration allows for continuous improvement and refinement of the prototype until it is ready for implementation and deployment.

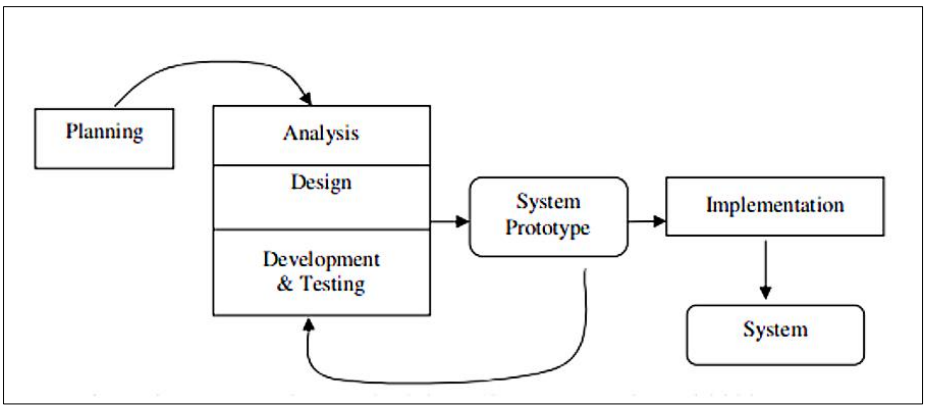

Figure 1: Prototype Model [10]

In the planning phase, it is important to clearly define the problem being addressed, the goals and objectives of the project, and the scope of the work in order to successfully develop the MyPTJobs project. An observation approach has been used to identify the problem statement, objectives, scope, expected results, and significance of the project. This will help to ensure that the final product meets the needs of the target audience and achieves the expected results. After the identification completed, a Gantt chart has been produced to ensure that the project can be finished before the deadline.

In the analysis phase, the requirements of the developed application are gathered and analysed. A questionnaire is developed and distributed using Google Form. The questionnaire received 35 responses, which were used as reference to analyse the functional requirements of the application. The technical analysis is conducted using Object-Oriented Analysis and Design (OOAD) to ensure that the developed application could satisfy both functional and non-functional requirements. The collected data is then classified and represented using Unified Modelling Language (UML) diagrams, including use case diagrams, sequence diagrams, and class diagrams, which were created using Draw.io.

In the design phase of the prototype model, the user interface and database design are developed. Wireframes for the user interface are created using Figma, and the database design is visualized using an Entity Relationship Diagram (ERD) and a data dictionary. The purpose of these design efforts is to ensure that the system has the necessary features and is efficient and effective for users. An organized and structured database can improve data integrity and reduce the time needed to manage the data.

In the development and testing phase, the development of MyPTJobs proceed based on what is completed in the previous phase. MyPTJobs is developed using a combination of Visual Studio Code and IntelliJ IDEA Community Edition. Visual Studio Code aids in front-end development, leveraging Dart language, while IntelliJ IDEA supports back-end development with the Spring Boot framework in Java programming language. MySQL is used as a relational database to store and retrieve data. To ensuring the system work properly, the unit testing is performed to review each prototype application. This provides job seekers and employers with the opportunity to interact with the application and provide feedback. Feedback from these tests is used to improve the prototype iteratively until the final product is effective and meets the needs of the target audience. This approach helps to ensure that the final application is user-friendly. Functional requirement and non-functional requirements including user acceptance testing is conducted after the completed prototype is ready. This involves checking whether the application meets functional and non-functional requirements or not.

In the implementation phase of the prototype model, the files for the application are uploaded to a cloud server to make the application live and accessible to users from any location with an internet connection.

The system development workflow is the process of organizing the development of a system in each phase and serves as the basis for testing, verifying, and ensuring conformance with specified standards [11]. Table 2 shows the workflow of the development of MyPTJobs.

Table 2: Workflow of the Development of MyPTJobs

Phases	Activity	Deliverables
Planning	1. Identify problem statements, objectives, scope, expected result and project significance 2. Design a work plan 3. Study the article and online resources related to the title 4. Study the features and functionality of the existing applications	1. Project Proposal 2. Gantt Chart 3. Literature Review 4. Comparison between the existing applications and the proposed application

Table 2: (cont.)

Phases	Activity	Deliverables
Analysis	1. Design questionnaire 2. The questionnaire distributed publicly on social media 3. Analyse the hardware and software requirements 4. Identify the functional and non-functional requirements 1. Identify the relationship among each actor	1. Questionnaire 2. Hardware and software requirements 3. Functional and non-functional requirements 1. Use case diagram, sequence diagram, activity diagram and class diagram
Design	2. Design the wireframe 3. Design the database	2. Wireframe 3. Database Design
Development and Testing	1. Develop the system module 2. Connect with the database 3. Develop a prototype 4. Perform system testing 5. Perform user acceptance testing	1. Prototype application 2. Fix and improve the bugs 3. Fix and ready to release the new application
Implementation	1. Release the latest developed application	1. Proposed application is released

3.2 System Analysis and Design

This section covers the various components that are important in the analysis and design phases of the prototype model, including use case diagrams, sequence diagram and class diagram.

A use case diagram is a behaviour diagram that shows all the functions of a system and the users involved. It illustrates the functions that belong to each user, the relationships between the different functions, and the interactions between users and these functions. In the developed application, job seekers and employers are the primary actors and administrators are the secondary actors. Thirty-six use cases were identified in total. Please refer to Figure 2 for the use case diagram of MyPTJobs.

In the use case diagram, there are three types of users which are job seeker, employer and administrator. Job seeker and employer are the primary user of the application while administrator is the secondary user of the application.

Following the use case diagram, we need understand further on the dynamic interaction on each of the use cases. Therefore, a set of sequence diagrams are created. A sequence diagram is a model that shows the interactions between objects within a specific use case. It demonstrates how different system components work together to perform a specific function. The objects in the sequence diagram are arranged in the order of their interactions and the timing of those interactions. Figure 3 and Figure 4 are two of the important sequence diagrams for the project that show sequence diagram of applying job for job seekers and sequence diagram of process the job application for employer respectively. From a pool of thirty-six sequence diagrams, only these diagrams managed to be included because of the space constraint.

In Figure 3 and Figure 4, there are three classes involved in the sequence diagram: the Job Seeker class, the Employer class, and the Job Applicant class. When a Job Seeker applies for a job, two functions are involved: applySelectedJob() and saveJobApplicant(). When an Employer processes a Job

Applicant, three functions are involved: processJobApplicant(), checkApplicant(), and updateJobApplicant().

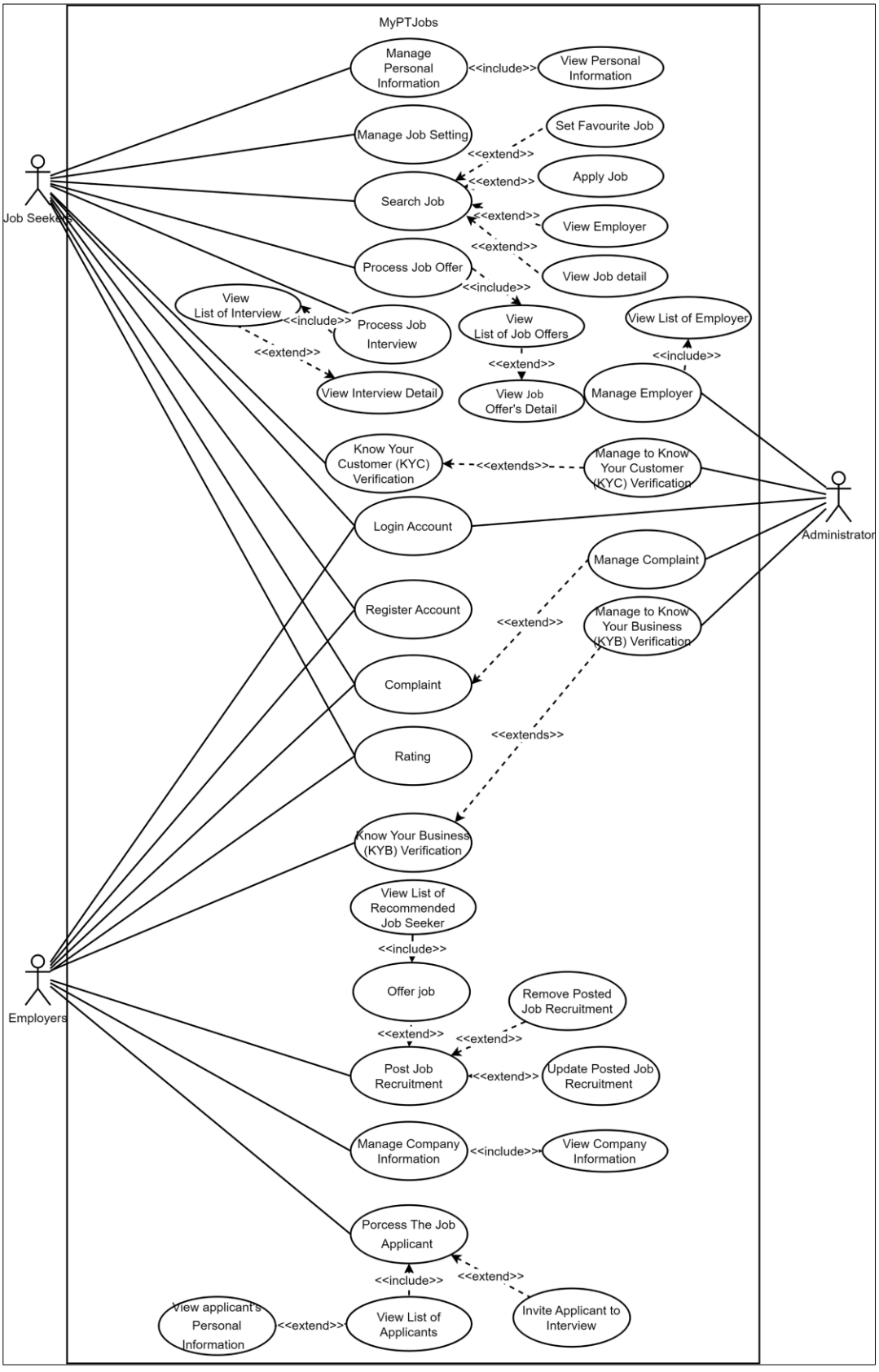

Figure 2: Use Case Diagram of MyPTJobs

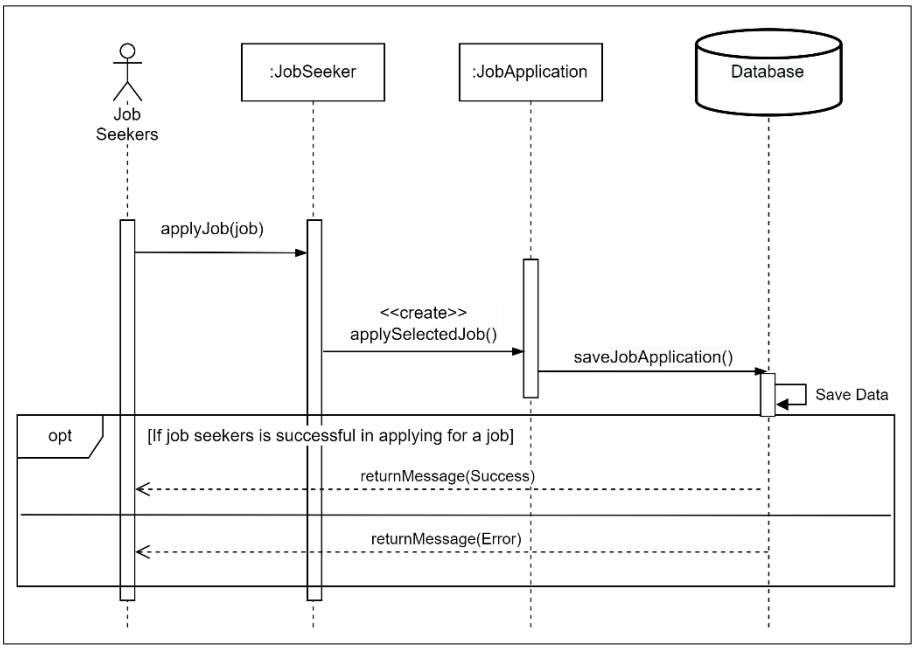

Figure 3: Sequence Diagram of Apply for Job for Job Seeker

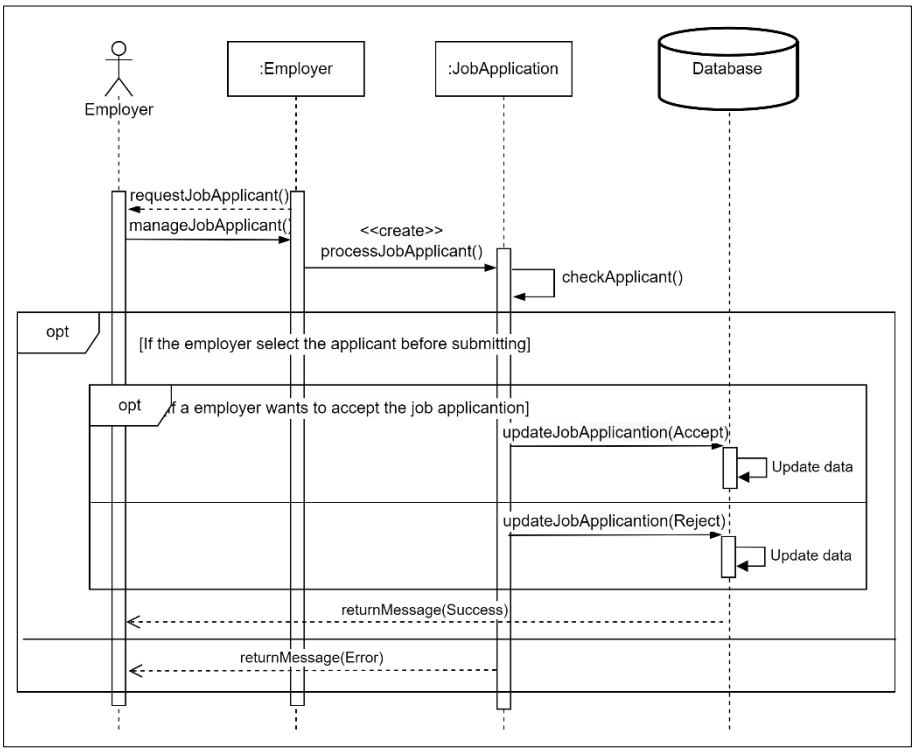

Figure 4: Sequence Diagram of Process the Job Applicant for Job Seeker

A class diagram is a type of diagram that represents the relationships and interactions between classes in a system. It shows the attributes and behaviors of each class, as well as the relationships between them. In the class diagram for MyPTJobs, there are twelve classes that have been included. The diagram in Figure 5 illustrates the class diagram for MyPTJobs.

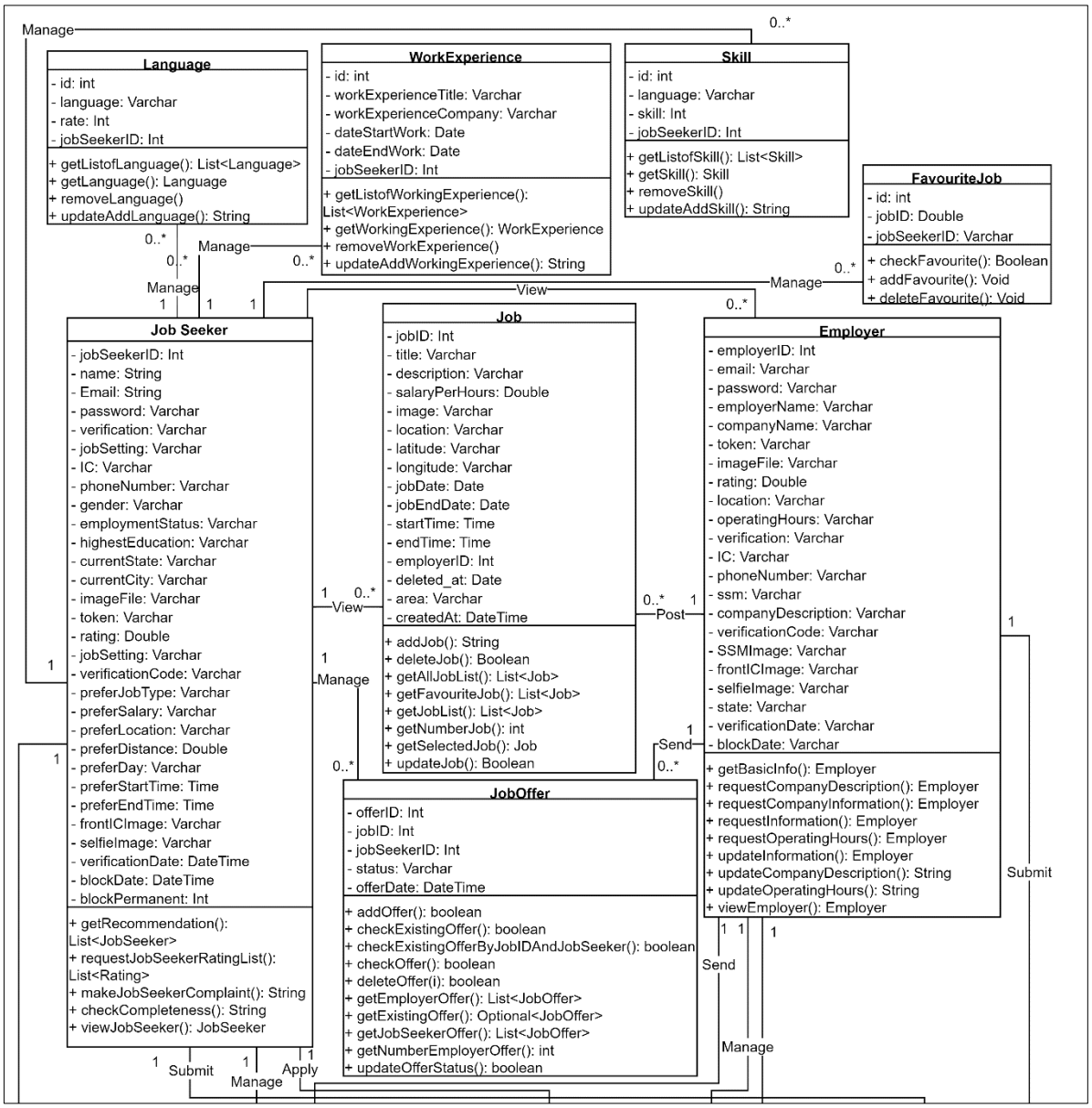

Figure 5: Class Diagram of MyPTJobs

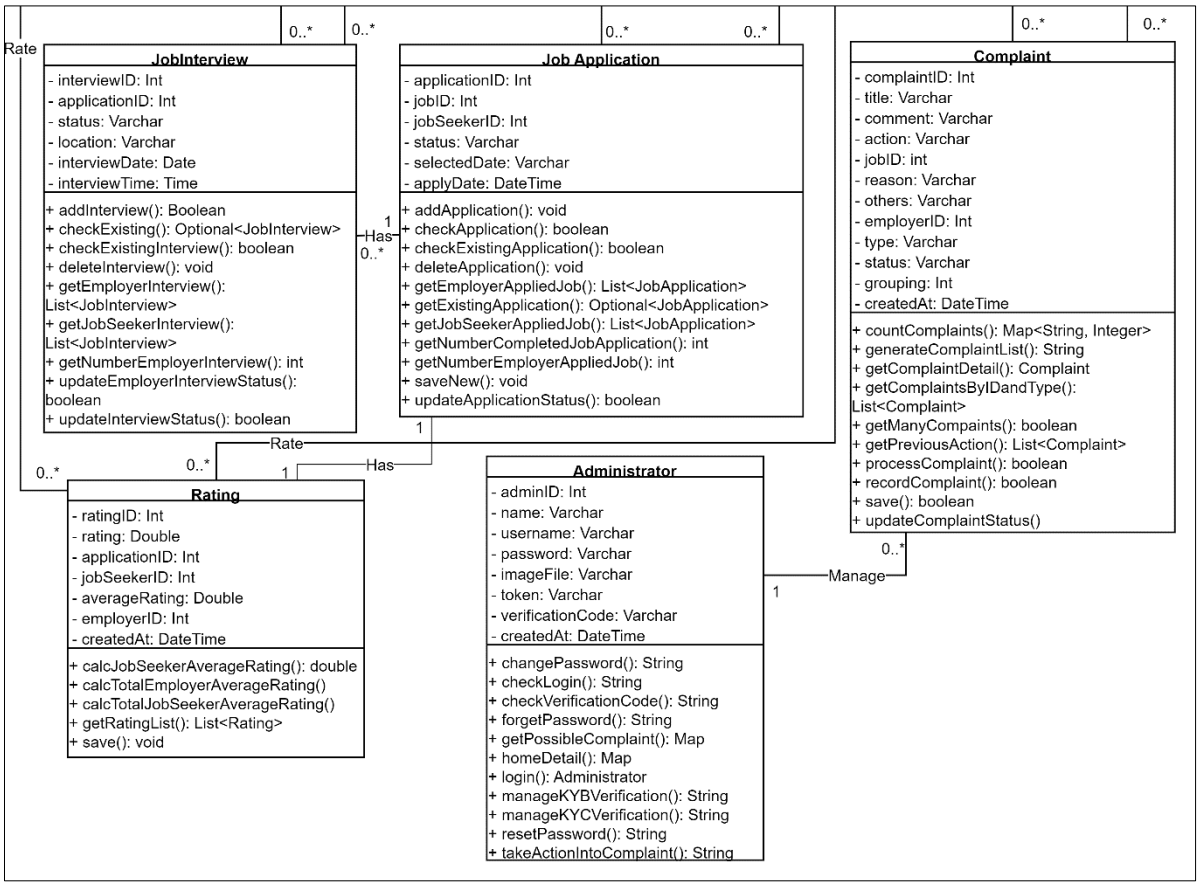

Figure 5: (cont.)

Another important activity of the project development is the creation of data dictionaries and user interface design using wireframe. Unfortunately, due to limitation of the paper, the data dictionary and user interface design cannot be included in the paper.

4. Result and Discussion

In this section, the interface and the code segment will be present in implementation phase to ensure that the final product achieves its objectives. After implementation, the testing phase involves functional and user acceptance testing will be proceed with the aim of identifying any unexpected errors and correcting them.

4.1 Implementation

MyPTJobs application consists of a front-end interface developed using the Flutter mobile application development platform. On the back end, the system is developed using the Spring Boot Java programming language, enabling efficient data handling and communication with the MySQL database. To establish communication between the application and the back-end system, the application use Hypertext Transfer Protocol (HTTP) requests to send and receive data from the server. Figure 6 illustrates the login and register interface of the application, where users can register and log in using their email and password. Figure 7 shows the code segment of login function while Figure 8 shows the code segment of register function. Additionally, for job seekers, the application supports Google Sign In as an alternative method for signing up and logging in.

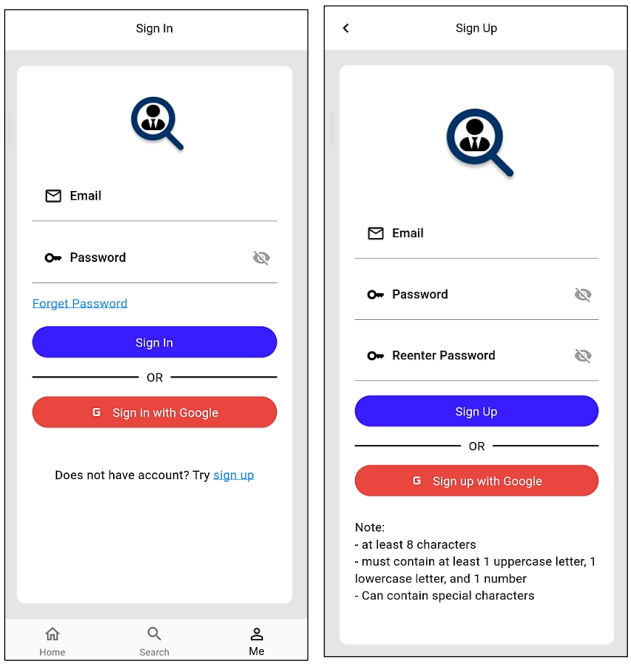

Figure 6: Login and Register Interface of MyPTJobs

```
@PostMapping(path = "/login")
public ResponseEntity<JobSeeker> login(@ModelAttribute JobSeeker jobSeeker) {
    try {
        Optional<JobSeeker> jobSeekerData = jobSeekerRepository.checkExisting(jobSeeker.getEmail());

        if (jobSeekerData.isPresent()) {
            if( !jobSeekerService.checkBlockOrNot(jobSeekerData.get()) ){
                return new ResponseEntity<>(new JobSeeker(jobSeekerData.get().getBlockDate(),
                        jobSeekerData.get().getBlockPermanent()), HttpStatus.FORBIDDEN);
            }
            JobSeeker _jobSeeker = jobSeekerRepository.login(jobSeeker.getEmail(), jobSeeker.getPassword());
            if (_jobSeeker != null) {
                if (_jobSeeker.getId() > 0) {
                    _jobSeeker.generateToken();
                    jobSeekerRepository.saveToken(_jobSeeker.getToken(), _jobSeeker.getId());
                    return new ResponseEntity<>(_jobSeeker, HttpStatus.OK);
                } else {
                    return new ResponseEntity<>(null, HttpStatus.CONFLICT);
                }
            }
            return new ResponseEntity<>(null, HttpStatus.CONFLICT);
        } else {
            return new ResponseEntity<>(null, HttpStatus.NO_CONTENT);
        }
```

Figure 7: Code Segment Login Function of MyPTJobs

```
@PostMapping(path = "/signup")
public ResponseEntity<String> signUp(@ModelAttribute JobSeeker jobSeeker) {
    try {
        Optional<JobSeeker> jobSeekerData = jobSeekerRepository.checkExisting(jobSeeker.getEmail());

        if (jobSeekerData.isEmpty()) {
            jobSeeker.setName("");
            jobSeeker.setIC("");
            jobSeeker.setCreated_at(new Timestamp(System.currentTimeMillis()));
            jobSeeker.setVerification("Unverified");
            jobSeeker.setJobSetting("Off");
            jobSeeker.setVerificationCode("");
            jobSeeker.setRating(0);
            JobSeeker _jobSeeker = jobSeekerRepository
                    .save(jobSeeker);
            return new ResponseEntity<>( body: "success", HttpStatus.OK);
        } else {
            return new ResponseEntity<>( body: "Email Exists", HttpStatus.FOUND);
        }

    } catch (Exception e) {
        return new ResponseEntity<>( body: "Error", HttpStatus.INTERNAL_SERVER_ERROR);
    }
}
```

Figure 8: Code Segment Register Function of MyPTJobs

Figure 9 shows the interface for updating user profiles for job seekers and updating company profiles for employers. Job seekers able to their biodata, current location, work experience, skills, and qualifications. On the other hand, employers can update their company profile, including the company description and operating hours.

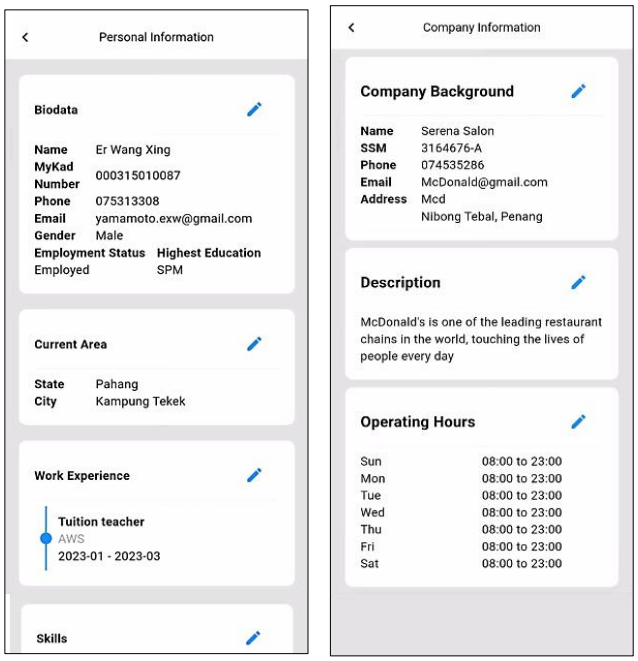

Figure 9: Update Profile Interface of MyPTJobs

Figure 10 displays the KYC and KYB verification interface of MyPTJobs. Job seekers are required to verify their identity through KYC by providing their name, IC details, along with images of their MyKad and a selfie with their MyKad. Employers can perform KYB verification by submitting their business registration number and corresponding image. These verification processes ensure the authenticity and legitimacy of users on the platform.

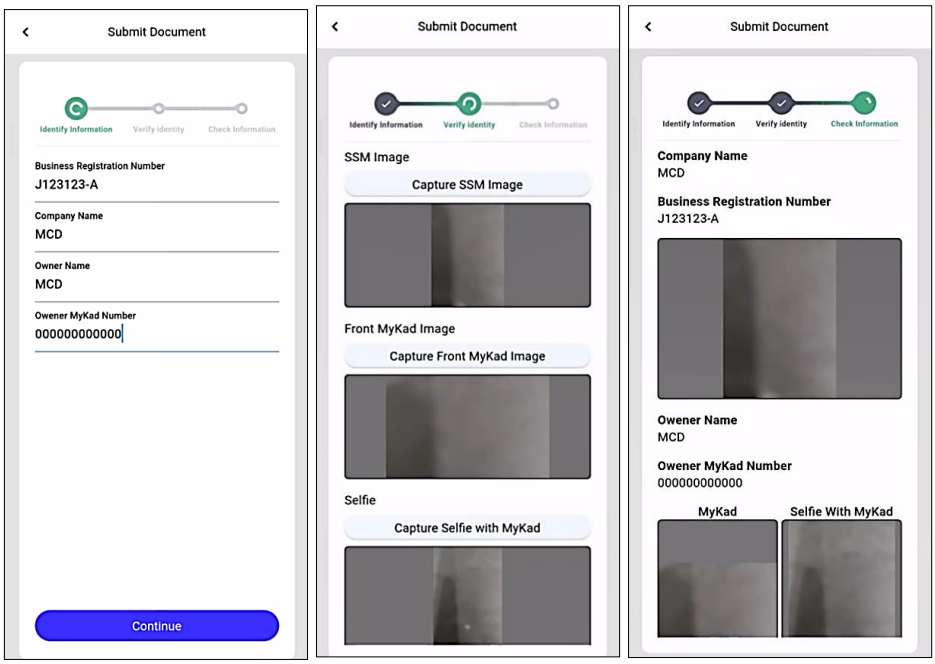

Figure 10: KYC and KYB Verification Interface of MyPTJobs

Figure 11 illustrates the job application interface for job seekers in MyPTJobs. Job seekers can utilize this interface to search for their desired job and access detailed information such as the job title, job description, hourly salary, and duration of the job. Upon deciding to apply for a particular job, job seekers are prompted to select the dates within the work range that align with their preferred availability. These selected dates are then presented to employers during the candidate review process, aiding them in assessing and considering suitable candidates for the job.

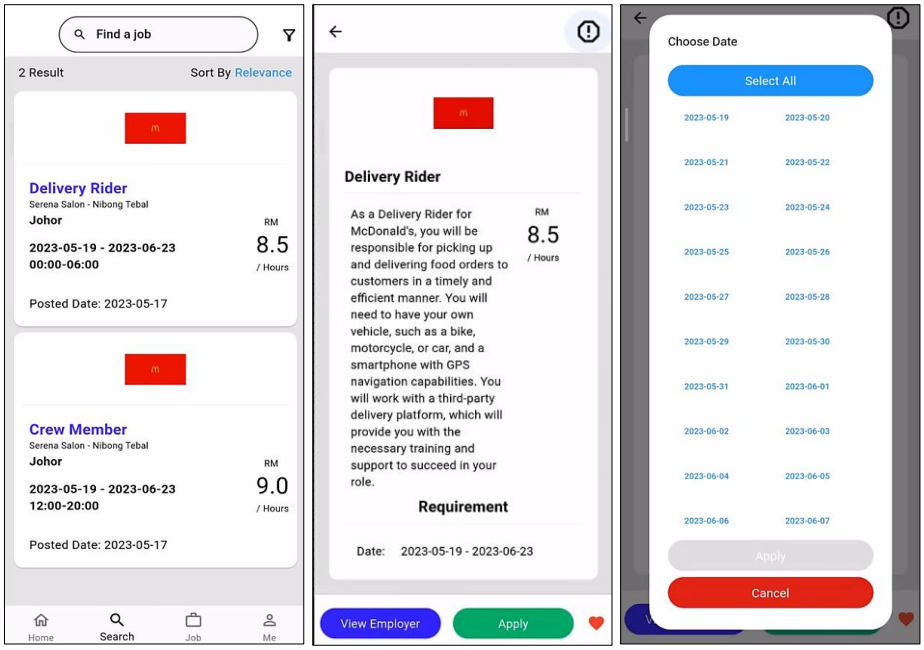

Figure 11: Search and Apply Job Interface of MyPTJobs

Figure 12 shows the interface for employers to add a new job posting in MyPTJobs. Before posting job, employers must complete KYB verification first and complete company information. Once process is completed, employers can proceed to provide job details, including image, job title, job type, description, location with latitude and longitude, area, salary per hour, and date and time range for job.

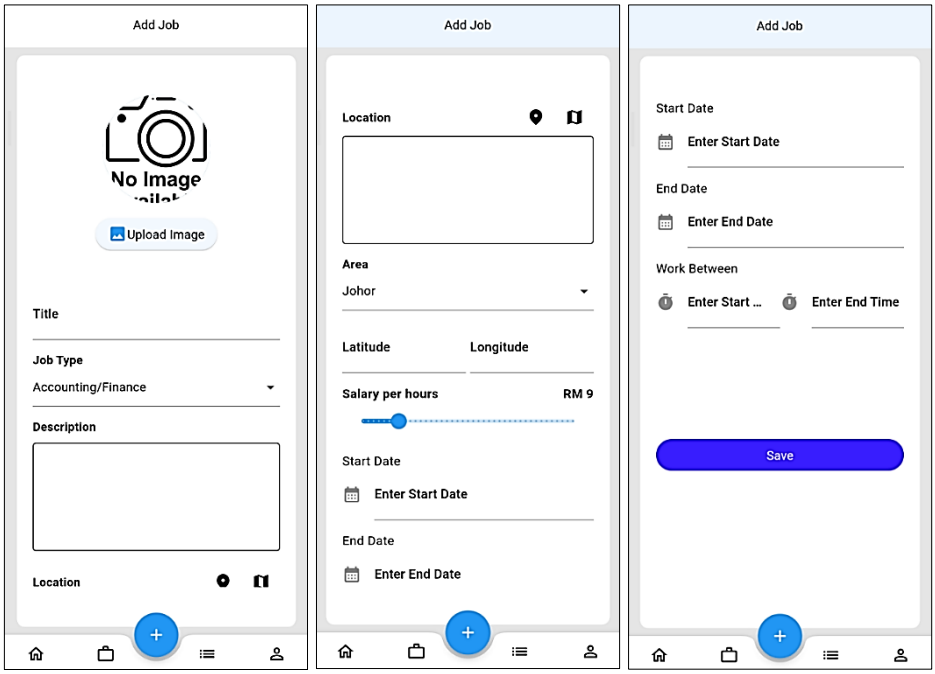

Figure 12: Search and Apply Job Interface of MyPTJobs

After a job application is submitted, the employer can view the new job applications in the form of a list, as shown in Figure 13. From this list, the employer has two options to process the job application. Firstly, the employer can choose to invite the job seeker for an interview by providing the date, time, and location details, as shown in Figure 14. Upon sending the interview invitation, the job application will appear in the "Interview" tab. Secondly, the employer has the option to approve or reject the job application directly. Once the interview invitation is sent, job seekers can view the interview details and respond accordingly. Employers can also respond to the job seekers after the interview, indicating whether they accept the job seeker for the position. This response can be provided at any time following the interview, provided the job seeker has attended the interview.

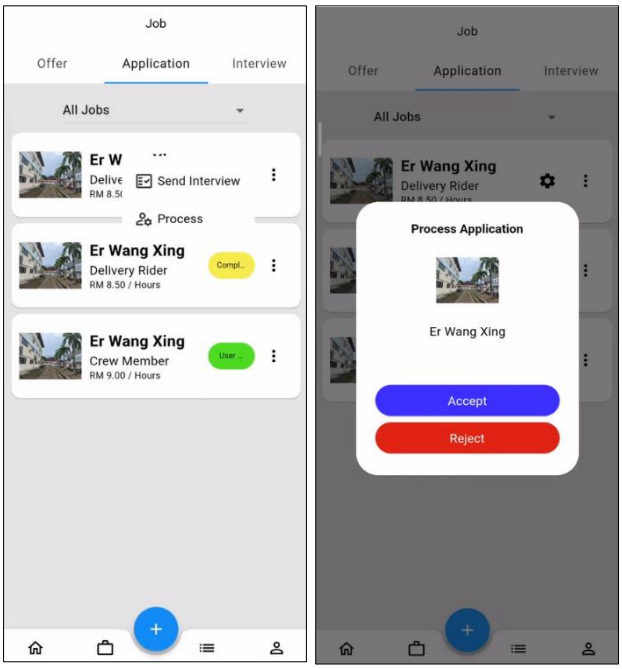

Figure 13: Job Recruitment Interface of MyPTJobs

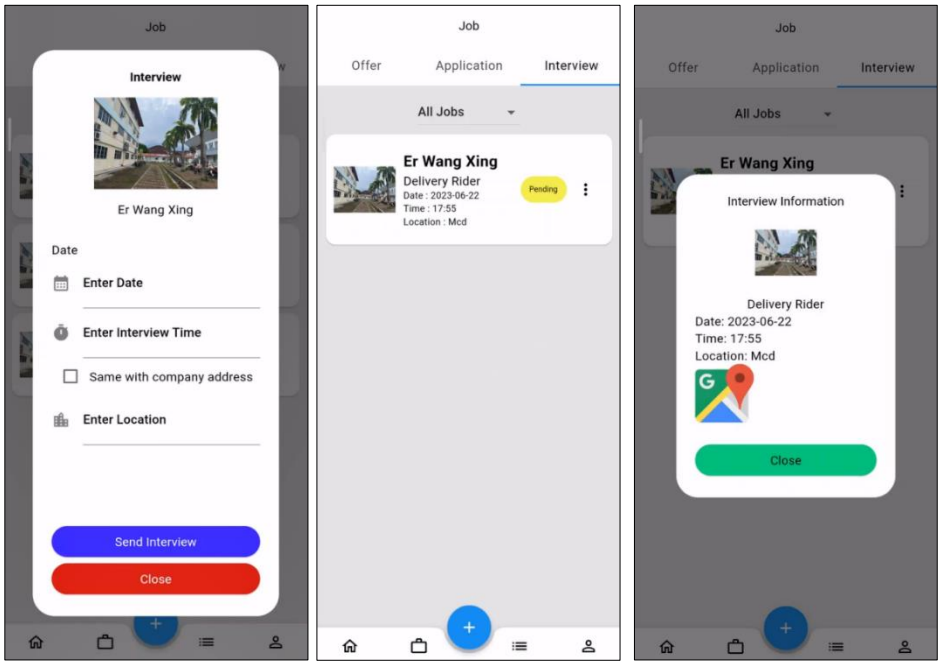

Figure 14: Interview Interface of MyPTJobs

In addition to job seekers applying for jobs, employers also have the option to send job offers to potential candidates. The employer can select a job posting and view a list of recommended job seekers for that particular job. These recommended job seekers are generated based on the job settings provided by the job seekers themselves, as shows in Figure 15. The job settings include preferences such as job type, salary per hours, location, desire working days and range of working time. By considering these preferences, the system generates a list of suitable candidates for the employer to choose from when sending job offers. After sending the job offer, the job seekers can decide whenever they want to accept the job offer or not.

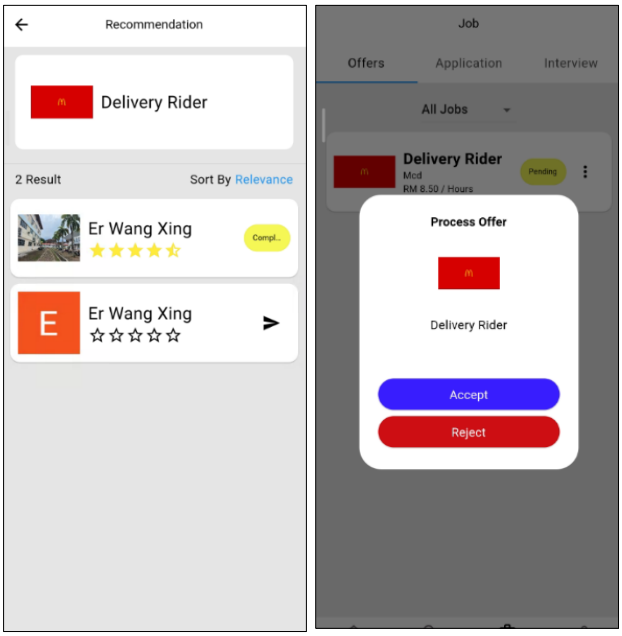

Figure 15: Search and Apply Job Interface of MyPTJobs

Figure 16 displays the interface for three types of complaints available in MyPTJobs. Job seekers have the option to report issues related to jobs and employers, while employers can file complaints regarding jobs and job seekers. Each type of complaint offers different criteria for selection.

When reporting complaints about jobs, job seekers can choose from reasons such as discrimination, unlawful requirements, unreasonable qualifications, false information, poor working conditions, improper language, lack of information, and others. On the other hand, when filing complaints about job seekers, employers have the options of discrimination, harassment, lack of information, and others. Additionally, complaints about job seekers can include reasons such as false information, unprofessional behaviour, discrimination, lack of qualifications, failure to follow instructions, misrepresentation, poor communication, and other relevant factors.

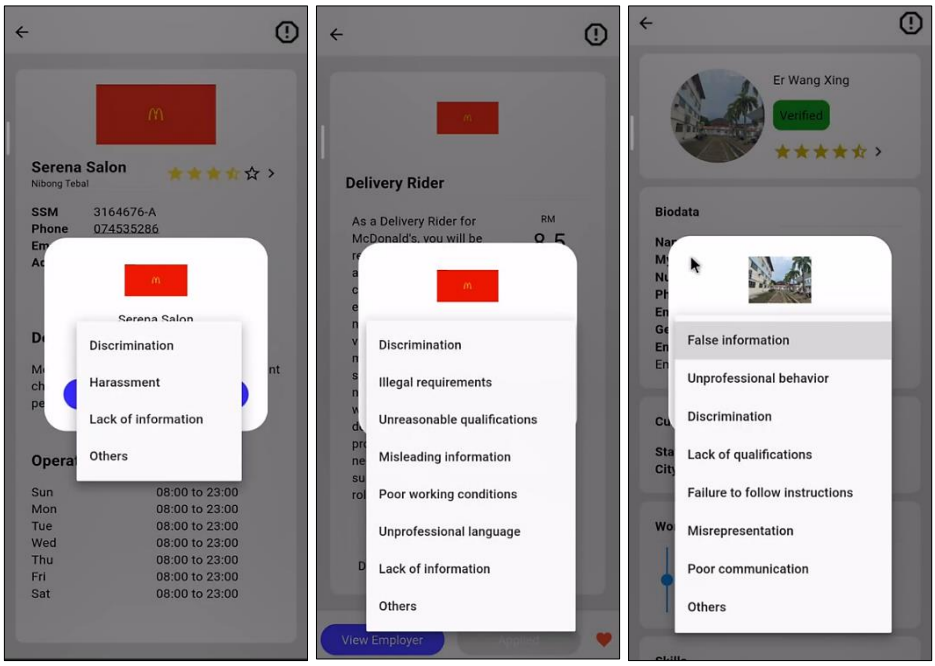

Figure 16: Complaint Interface of MyPTJobs

Figure 17 shows the rating interface in which employers can rate job seekers based on provided criteria. Upon completing a job, employers have the opportunity to give ratings to job seekers, considering factors such as job satisfaction, work-life balance, compensation, professional growth, work environment, communication, and job security. Conversely, job seekers can also rate employers using predefined criteria. The rating criteria for job seekers assessing employers include job performance, dependability and reliability, communication skills, initiative and problem-solving skills, adaptability and flexibility, professionalism, and overall fit. These criteria enable job seekers to provide feedback on the employer's performance and the overall experience of working for them.

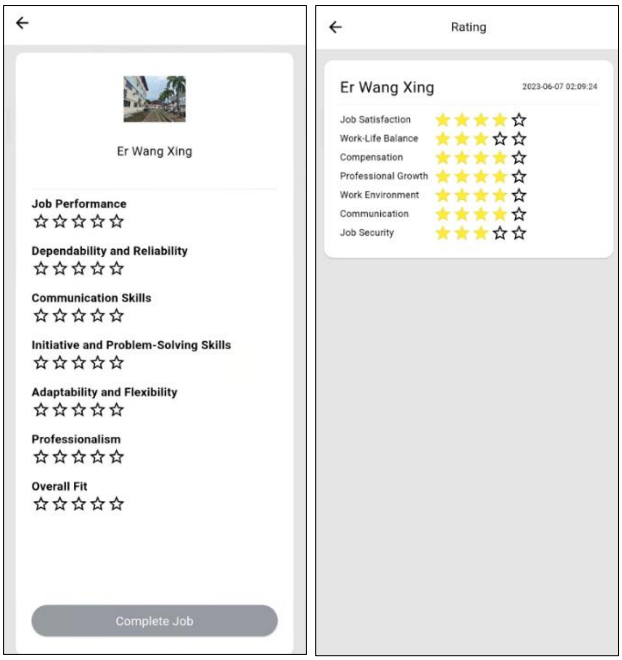

Figure 17: Rating Interface of MyPTJobs

4.2 Application Testing

4.2.1 Functional Testing

The functional testing of the MyPTJobs application is shown in Table 5. The test plan outlines the estimates and deliverables for the final product application to ensure that the final application meets the previously defined application requirements[12]. Following functional testing, the results of the test plan for each module were successful.

Table 5: Outputs of Functional Testing Execution on the MyPTJobs

Modules	Functionalities	Actual Output
User Management Module - Job Seeker - Employer - Administrator	Users should be able to log in with their valid ID and password	Pass
	Job seekers and employers should be able to register as new users of the application	Pass
	Job seekers and employers should be able to perform CRUD operations in their profiles.	Pass
	Job seekers should be able to manage their job setting.	Pass
	Administrators should be able to manage employers.	Pass
	The application should show an alert for any invalid input.	Pass
	The application should show the status after the user completed the login, register, and update their profile.	Pass
Job Application Module - Job Seekers	Job seekers should be able to search for a job with keywords and filtering.	Pass
	Job seekers should be able to view the job details of a job.	Pass
	Job seekers should be able to apply for the job.	Pass
	The application should show the status after job seekers apply for the job.	Pass
Job Posting Module Employer	Employers should be able to post new job recruitment with job details.	Pass
	Employers should be able to edit and remove posted job recruitment.	Pass
	The application should show the status after employers insert, edit, and remove	Pass
Job Recruitment Module Employer	Employers should be able to view the applicant for each posted job.	Pass
	Employers should be able to accept or reject applicants for each posted job.	Pass
	Employers should be able to view recommended job seekers.	Pass
	Employers should be able to invite applicants for an interview.	Pass
	The application should show the status after accepting or rejecting an applicant.	Pass
	The application should show the status after an invitation to interview has been sent to an applicant.	Pass

Table 5: (cont.)

Modules	Functionalities	Actual Output
Complaint Module - Job Seeker - Employer - Administrator	Job seekers should be able to make a complaint to jobs and employers.	Pass
	Employers should be able to make a complaint to job seekers after the job is completed.	Pass
	The administrator should be able to manage the complaint.	Pass
	The application should show the status after job seekers and employers make a complaint and the administrator manages a complaint	Pass
Rating - Job Seekers - Employer	Job seekers and employers should be able to rate each other based on criteria after completing a part-time job.	Pass
	The application should show the status of job seekers and employers after they have been rated.	Pass
	The application should display the ratings of job seekers and employers to the public after they have been rated.	Pass

4.2.2 User Acceptance Testing

User Acceptance Testing (UAT) is a kind of testing that ensuring the software work properly and meet all the requirements that suitable for users [13]. Due to the time constraints, only 20 respondents took part in this test: 15 job seekers and 5 employers. The results have been collected, evaluated, and presented in a graphical form as shown in Figure 18, Figure 19, and Figure 20.

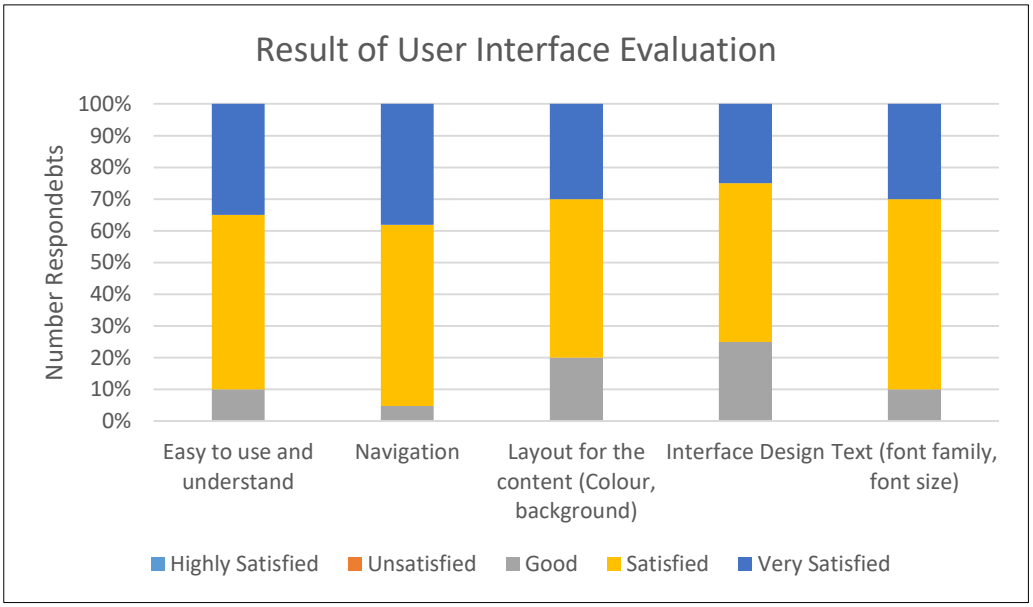

Figure 18: Diagram of Result of User Interface Evaluation

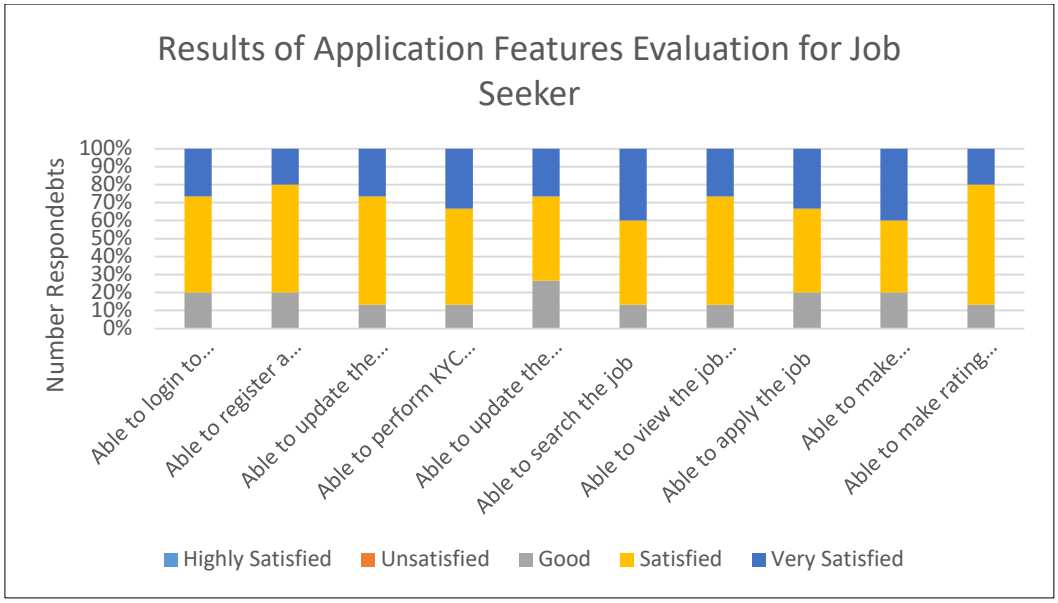

Figure 19: Diagram of Results of Application Features Evaluation for Job Seeker

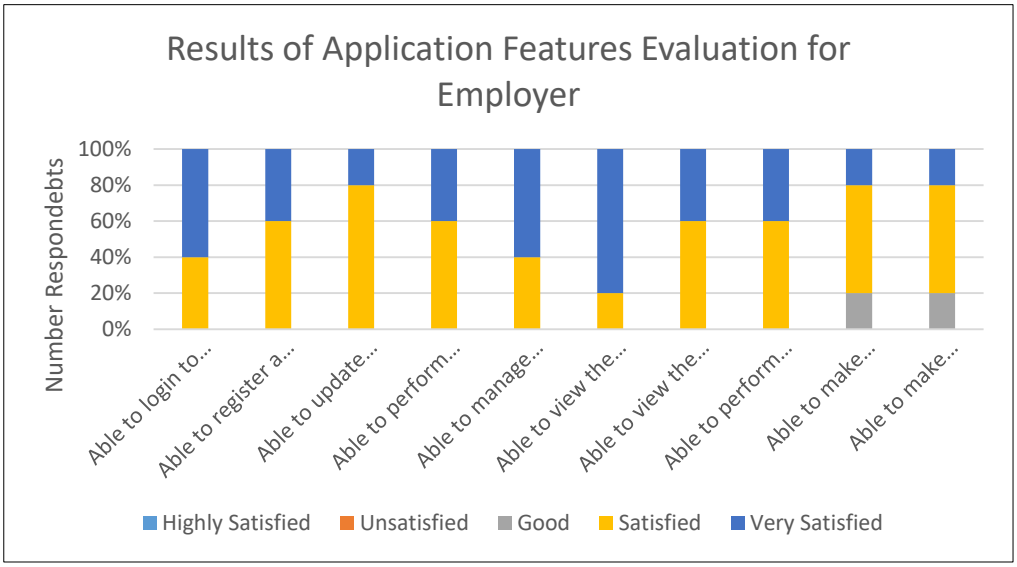

Figure 20: Diagram of Results of Application Features Evaluation for Employer

5. Conclusion

In conclusion, the MyPTJobs application has been successfully developed and majority of respondents are satisfied with all features of the application as evaluated in application features evaluation. However, the application still has some limitations. The lack of a notification function hinders real-time updates and progress tracking for users. There are also limitations with the rating system as it is currently only based on a fixed criteria and it is not possible to freely write comments and attach photos. In addition, KYC and KYB verification is done manually by the administrator in this application. In addition, the application does not have a chat function that allows communication between job seekers and employers.

To further enhance the application, a number of improvements could be made in the future. Adding notifications for job seekers, employers and administrators would improve the user experience. In addition, the rating system could be enhanced by allowing job seekers and employers to provide their own reviews and additional media files. Not only that, the implementation of automation of KYC and KYB verification using artificial intelligence (AI) will speed up verification and reduce administrative

workload. The integration of chat functionality will facilitate direct communication between job seekers and employers, further improving the user experience and enabling additional services such as customer support.

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