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1. Executive Summary

Our team will be working with Ang Mo Kio-Thye Hua Kwan Hospital(AMKH) and liaising with the IT and HR Department representatives Wayne Lee, Chua Zhirong and Agnes Tay respectively, to create a recruitment tracking system web application for the HR department to implement and use within their intranet infrastructure.

The main objective of this project is to create a workable Recruitment Tracking web application that allows the Human Resource department to track the recruitment status of various job openings.This application will be beneficial and helpful for our client as their current system is not streamlined and efficient, which would impact their productivity at work. Agnes has also asked her co-workers from the HR department to be present during the weekly meetings to provide their feedback and opinions on the features and wireframes as well. After discussions, we have come up with a list of features that our application would have - Login, Dashboard, Job Listing, Send emails, Candidates, Code Values, Access Rights, Audit Logs, Email Templates and Form Templates. Features Code Values, Access Rights, Audit Logs, Email Templates and Form Templates would be administrator only features.

For development, hardware wise, we would only require a Windows 10 computer with version 1903 and above, which all members in this group have. Software wise, we would be using visual studio and ASP.NET MVC framework to develop the application and Microsoft SQL Server 2016 for the database. Adobe Illustrator, Photoshop and Xd will be used for design.

To better describe and understand our users needs, we have used user stories to put ourselves in their shoes so we can view the situation as how they might view it.

Our team has been following the SCRUM framework, and having a new sprint every 3 weeks.We would have our SCRUM meetings before every sprint. All minutes during meetings are recorded for backtracking and reference purposes and our burndown charts are updated regularly to show our progress.

The steps that we have and plan to take would help ensure the completion and success of our project, which would lead to the final handover of the application to AMKH in the beginning of August. We would also ensure that all team members would stay on schedule with a common goal in mind while having our own individual tasks to reach that common goal.

2. Introduction

2.1 Our project and application

Figure 1 – Logo of Thye Hua Kwan Hospital

For our project, our team will be working with Ang Mo Kio - Thye Hua Kwan Hospital to develop a Recruitment Tracking system for the Human Resource Department to help provide better convenience that will greatly benefit them.

Thye Hua Kwan hospital is a 360- bed community hospital in Ang Mo Kio, Singapore. As a community hospital, care is primarily focused on providing affordable rehabilitative and intermediate care for geriatric patients. The hospital provides many different inpatient and outpatient services with its vision of being able to reach out to their patients, their families and the community regardless of race, colour, creed, language, culture or religion.

Currently, the HR has to fill various job openings for the hospital and the company does not have an efficient system to track the progress of their recruitment efforts, making the recruitment process very unorganized and tedious.

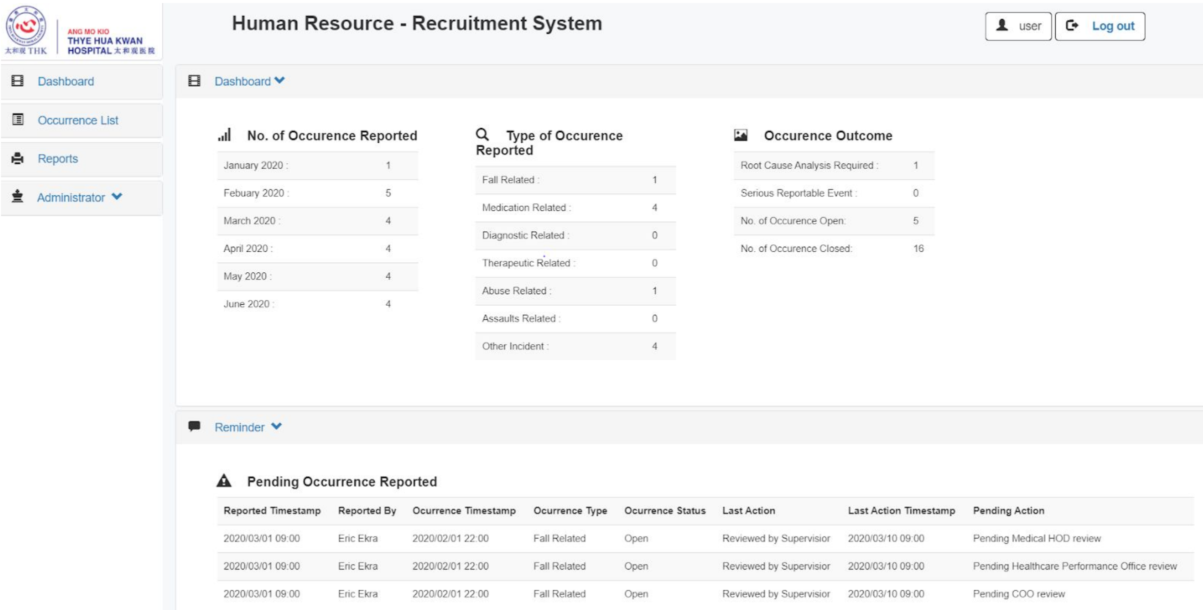


Figure 2 – sample project of Thye Hua Kwan Hospital recruitment system

From this sample project of the hospital’s recruitment system that was done by the IT department, we can see that they only keep track of the different types of occurrence cases reported, the number of occurrences reported and the occurrence outcome. The current system is very basic and does not track the progress of the recruitment efforts efficiently with the use of infographics.

S/N	Recruiter	Department	Position Required	Date Activated	No. Required	No. Outstanding	New (N) / Replacement (R)	Employee Type	Grade	Date Required	Hiring Manager	Status	Date Offer Accepted	Time to hire (TAT) DAYS	Avenue(s) Used	Source(s) Used	Cost of Hire (S$) for agency
8	KC	EDD	Technical Safety Engineer	6-Jul-15	1	0	Replacement	Permanent	E5/E6	Immd	Sze Cheng Kiat	Closed	26-Oct-15	112	Job Portal	1. Jobstreet 2. JobsBank	$51.00
9	KC	Culzean	Project Secretary (Client)	30-Jul-15	1	0	New	Contract	E5	Immd	Thangavelu Guhan	Closed	15-Oct-15	77	Internal Referral	Kenneth Cheng	$0.00
10	KC	QAQC	QAQC Manager	4-Aug-15	1	0	New	Contract	M2/M3	Immd	Thangavelu Guhan	Closed	21-Oct-15	78	Internal Referral	Thangavelu Guhan	$0.00
11	KC	EDD	Senior HVAC Engineer	20-Aug-15	1	0	New	Contract	E6/M1	Immd	Han Hui	Closed	11-Nov-15	83	Internal Referral	Han Hui	$0.00
12	KC	QAQC	QAQC E&I Inspector	20-Aug-15	1	0	New	Contract	E3/E4	Immd	Lay Seow Wee	Closed	19-Oct-15	60	Job Portal	Jobsbank	$0.00
13	KC	EDD	Senior Architect Engineer	21-Aug-15	1	0	New	Contract	E6/M1	Immd	Joanne Oh	Closed	01-Dec-15	102	Job Portal	Monster	$0.00
14	KC	EDD	Structural Design Engineer	21-Aug-15	1	0	New	Contract	E5/E6	Immd	Shi Ping	Closed	14-Dec-15	115	Job Portal	1. Jobstreet 2. JobsBank	$51.00
15	KC	Finance	Accountant	27-Aug-15	1	0	Replacement	Permanent	E5	Immd	Ng Ming Ling	Closed	14-Oct-15	48	Job Portal	1. Jobstreet 2. JobsBank	$51.00
71	KC	Culzean	Structural Assistant Manager	16-May-16	1	0	Replacement	Permanent	M2/M3	Immed	Teoh Bak Koon	Open		1463	Job Portal	Jobsbank	

Figure 3 – Excel sheet storing recruitment data

Data relating to the recruitment process is shown in the excel sheet above. Comparison of important data and statistics such as Turnaround Time (TAT) between departments and status of job openings might be difficult without the use of data visuals and infographics. Additionally, every department has different methods and headers when recording data into datasheets and the different departments use different types of abbreviations which have different meanings in the different departments. This makes it harder for the HR’s to compile data as they might view the columns wrongly or misunderstand the data.

Therefore, we have been liaising with the HR Executive, Agnes Tay and her team to understand more about the hospital's recruitment process, as well as to discuss and update them about our progress of the development of the recruitment tracker web application.

During weekly discussions with our client, we would show them our progress on the prototype and receive feedback and comments on what other features they would like to be implemented or what could be improved. In addition, our team would also prepare a list of questions to ask during the discussion to help clarify doubts on the project and to also understand the client's expectations better.

The main objectives of the creation of this recruitment tracker web application is to allow the HR staff to enter and store information such as position title, department, date of activation, calculate turnaround time (TAT), track the status of various job openings and maintain the job description of each position.

2.2 Objectives

By the end of this project, the following objectives should be met:

- A workable Recruitment Tracking web application that allows the Human Resource department to track the recruitment status of various job openings.
- A web application that meets the requirements of our client
- Data from database can be exported in excel format
- All application and backend servers are connected properly
- Smooth execution of application through testing and debugging

2.3 Justification

The purpose of this project is to develop a Recruitment Tracking system to track the recruitment status of job openings. With the rise in popularity of the Applicant Tracking System (ATS), many companies have started using ATS to help with their recruitment process, its main goal is to speed HR's reviews of jobs and resumes. While outdated systems are still in use at some large companies, we are seeing new ATS being developed for the modern age. Currently Thye Hua Kwan hospital does not have an ATS system or anything similar to it, therefore our team gained an interest in developing a Recruitment Tracking System for the company so that the HR's can focus on growing on a quality workforce, instead of overburdening their schedule with the administration related to the recruitment process. Throughout our academic journey, we have studied modules such as Design for User Interaction and Web Applications Development.Thus, we are confident that we can apply these skills that we have learnt to develop a Recruitment Tracker web application that caters to the needs of our client.

2.4 Project Scope

We would not be converting our clients' whole business and recruitment process into the system as the project scale would be significantly larger and many aspects of the recruitment process will not be feasible. Therefore, we have decided to improve our client's current recruitment process by producing a Recruitment Tracking system and automating any parts of the current process to the best of our abilities.

3. Approach and Deliverables

3.1 Primary Research

3.1.1 Analysis of User Requirements

To find out what our clients of Thye Hua Kwan Hospital feel about the new recruitment tracker web application, Agnes has kindly discussed with and asked around the HR department to get more opinions and feedback. Below are a few of the opinions and feedback that we have collated.

- **Dashboard**
  Many of the HR's mentioned that the dashboard should include standard graphs such as bar graphs, line graphs, pie charts to represent data such as TAT and number of vacant/closed jobs. They also pointed out that they would like the graphs to be able to be expanded when clicked on so that they can read the data easily.

- **Auto Generated Email**
  Upon conducting interviews for selected candidates, the HR's requested an auto generated email function that would send an email to the candidate once they have gone for the interview to inform them whether they have been accepted or rejected. This would help them save time writing an email to each candidate to tell them the results of the interview.

- **Code Value**
  As per request by the IT department, it is common practice in the real world that systems include a code value feature for administrators to much more easily manage all dropdown values in a single table.

3.2 Secondary Research

To start off our project, our team researched more about the Applicant Tracking Systems(ATS) that are being sold in the market today to gain a better understanding of what companies are using to help them with their recruitment process. Based on a research conducted by Capterra, 75% of recruiters use a recruitment or applicant tracking software and over 98% of 500 fortune companies use a recruitment tracking software. Additionally, 94% percent of recruiters in companies say that using a recruitment software has positively impacted their hiring process.

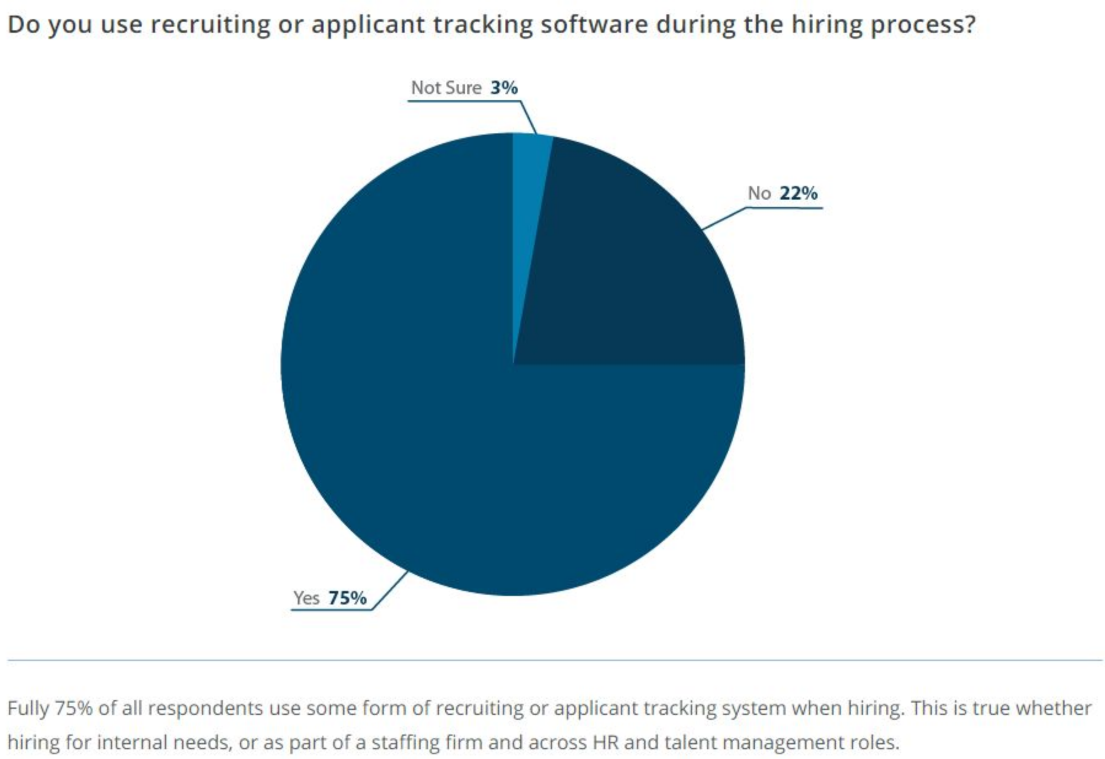


Figure 4 - Statistics represented in a pie chart by Capterra

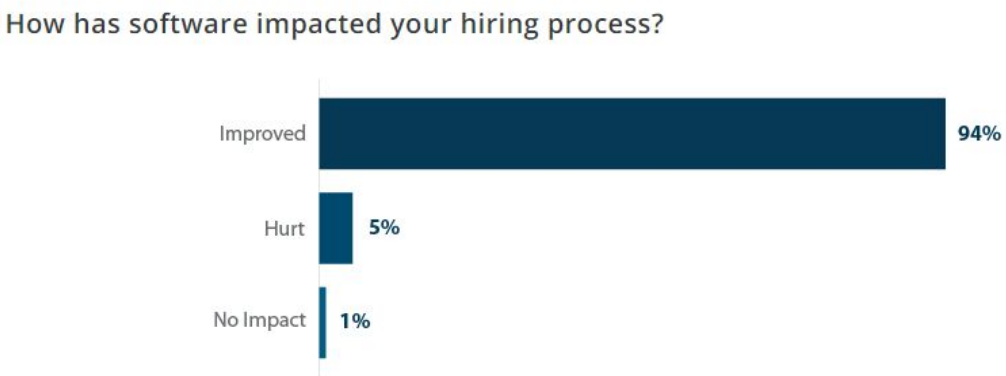


Figure 5 - Statistics represented in a model by Capterra

Afterwards, our team looked at various ATS on the market, and also signed up free trials of ATS's to gain inspiration and also see what kind of innovative features are being used so that we can pick up and use them in our application as well.

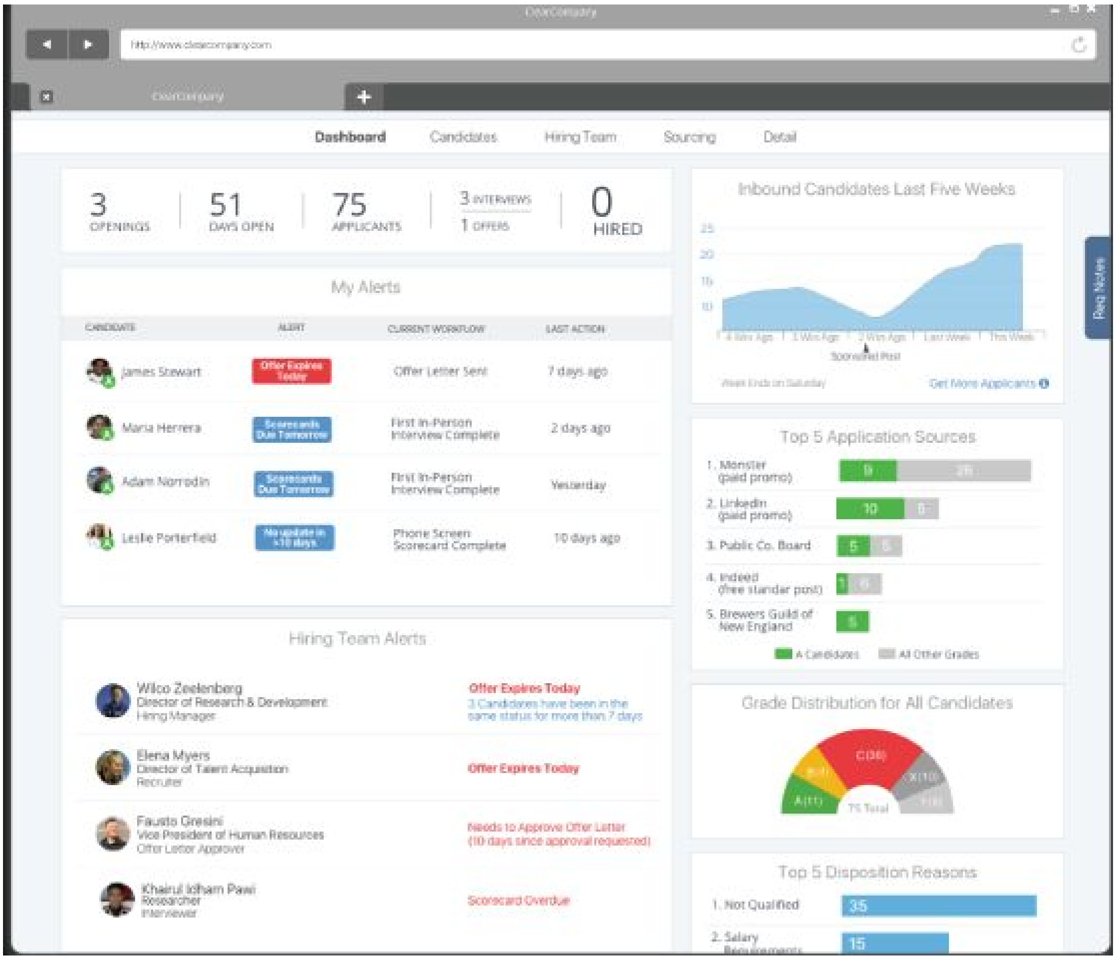


Figure 6 - Clear company applicant tracking system

One of the company's ATS design that stood out to us was by Clear company. This dashboard was ideal as it met all of our initial features for the dashboard and the design looks clean and professional. Important features that we wanted were the numeric information of the HR performance, graphs that captured some less important data and notifications to remind HR members of their progress. One key take away from Clear company's ATS dashboard is to place the most important information at the top to make it the center of our users' attention. Users will be able see the important information easily. Through our research, we found out that a lot of these recruitment softwares were actually focused on being simple and easy to use and at the same time contained many useful features.

3.3 Stakeholder Analysis

For our project, we managed to identify the stakeholders and have analysed them to create the most favourable strategies that would aid us in overcoming challenges and problems when faced with them.

Stakeholder	Organization	Role in Project	Level of interest	Level of Influence	Suggestions on managing relationship
Daryl Lim	Singapore Polytechnic	Supervisor	Very High	High	Update him on the weekly progress of our progress and ask for advice when in doubt or when faced with problems.
Agnes Tay	Thye Hua Kwan Hospital	HR Department Representative	Very High	Very High	Email to arrange weekly meetings with the HR team and her to update progress of work and also clarify and queries that we have.

Chua Zhirong	Thye Hua Kwan Hospital	IT Department Representative	Very High	Very High	Text message or email if we require any assistance or have any queries regarding the coding of the web application.
Users	Thye Hua Kwan Hospital	Users (HR Department team)	High	High	Research to learn about their background and understand their needs. Also use their feedback to adapt to their requests and preferences accordingly.

Figure 7 - Stakeholder Analysis Chart

3.4 Deliverables

The following are the deliverables we plan to deliver by the end of this project.

Thye Hua Kwan Hospital Web Application

A usable recruitment tracking system based on specifications and features provided by Thye Hua Kwan Hospital HR and IT department.

Phase one Presentation and Product Demonstration Showcase

A first presentation and demonstration of the prototype to the client and supervisor with the proposed solution for the respective features.

Phase one Report

A first phase report containing all the tasks and relevant documents that the team has completed will be prepared and submitted.

Promotional Materials

A promotional video, pamphlet and poster containing details of the project.

Phase two Report

A final report containing a complete overview of all features and methods, Evaluation and Key learning details that the team has completed will be written and submitted.

Presentation and Product Demonstration Showcase

A final presentation and demonstration of the Web Application to the client and supervisor displaying the features and highlights of the system.

Test Documents

A complete list of test plans, scripts, integration tests, user acceptance tests.

Implementation Plan and Checklist

A detailed checklist for Implementing System into client's system.

SQL Code

A full suite of implemented source code and initial SQL insertion code.

Operational documents

User manual and Set up manual.

4. Major Milestones

Timings for your main deliverables and activities. You must ensure that they are aligned with your school's project submission deadline.

Major milestones provide a high level overview on the progress of the project. We have agreed upon several milestones which includes deliverables and key meetings.

1. Phase 1 Report and Presentation (29th May 2020)
2. Finalise Prototype with Client (29th May 2020)
3. Promotional Material (27th July 2020)
4. Hand over of Project (10th August 2020)
5. Phase 2 Report and Project Write up and Presentation (Week 18)
6. FYP Showcase (24th August 2020)

5. Constraints and assumptions

Constraints are the issues or obstacles faced when handling this project and we have identified the following constraints that we will face in this project:

1) Delivery Constraints
2) Knowledge Constraints
3) Testing Constraints

By identifying the possible constraints we will face in this project, we can pay much greater attention to what we can and should do to overcome these constraints.

5.1 Delivery Constraints

This project uses ASP.NET MVC Framework that the team is not well versed in. Use of our clients SMTP server to send emails, Active Directory to verify login credentials and LDAP server access are functions that our group has little to no experience with. If the team is unable to learn about SMTP, Active Directory and LDAP servers, it may result in slow progress, which leads to late completion and delivery of our project deliverables.

5.2 Knowledge Constraints

As mentioned in the Delivery Constraints above, our team lacks the background knowledge and information of some of the tools and deliverables required, thus requiring us to learn them within a small time frame. Due to our team having little background knowledge on some of the deliverables, we might encounter errors that we are unsure how it can be resolved, resulting in staggered development which can affect the whole project.

5.3 Testing Constraints

Testing constraints refers to the problems faced when we have finished coding certain sections and start to perform debugging. Debugging can be difficult as it can be quite frustrating at times. For example, code that gives errors even though the whole team believes that it should be working can be quite frustrating.
We would also be trying to test our application with their intranet but it can be difficult given the current events.
It can also be tedious as it often requires a lot of effort to narrow down to the specific code that is causing issues. And even if that was done, the changes made to fix that error could create a different error in a different area of the application.

6. Resources

6.1 Development

Our client has specified that the application is to be configured as an intranet web application within their premises and to be used only by their Human Resources Department. Our team has little experience with building an intranet application prior to this project. Therefore, the team has conducted research on the suitable resources and development tools required to fulfill the needs of our client.

The research is meant to find out the questions we have on various things such as:

1. The suitable coding language to build the application
2. Refresh our memory on the development process and steps
3. Frameworks required to create the application
4. Tools that are required to build the database
5. Other miscellaneous tools/items required

Based on the research we have done, we have decided on the hardware and software required to develop the application.

6.1.1 Hardware

Windows Products	
No.	Item
1.	Windows 10 Computer with version 1903 and above

6.1.2 Software

Framework

No.	Item
1.	ASP.NET MVC
Backend	
No.	Item
1.	Microsoft SQL Server 2016
Design	
No.	Item
1.	Adobe Photoshop
2.	Adobe XD
3.	Adobe Illustrator
Development	
No.	Item
1.	Visual Studio
2.	Internet Explorer version 11 and above
3.	Google Chrome

Figure 8 - Tools required

6.2 Deployment

Our application is developed to be solely used as an intranet application within their premises on their windows desktops/machines with version 1903 and above. Their IT department has also provided us with information such as their preferred database management system(Microsoft SQL server 2016), their LDAP server and SMTP server. As this application is to be run on windows machines, deployment would be only for windows machines in the HR department. This web application should be accessible by Internet Explorer version 11 or above, and Google Chrome on their windows machines.

7. Major Risks

In the process of working on the project, unforeseen circumstances may happen or occur, and affect the entire project's progress and schedule. Therefore, in order to prevent or mitigate such situations from happening, we have detailed the possible situations and came up with preventative measures to take as well as actions that are to be taken if it happens.

Risk Assessment Report							
No.	Risk	Description	Risk Severity	Risk Likelihood	Risk Level (Risk Severity * Risk Likelihood)	Preventive Measure	Actions to be taken
1	Computer Failure	Unexpected computer failure as a result of technical issues of external circumstance (e.g. Blue screen, broken monitor) This will lead to a loss of work and hinder the progress	5	2	10	Keep backup copies on hard drive. Send all completed work to the group.	Member's pair to take over with assistance of team leader. Member affected to find replacement as soon as possible. If required, request temporary replacement from school.
2	Telecomm service provider failure	Unexpected failure of Telecommunications Providers will result in difficulties contacting group members and clients.	4	1	4	NIL	Contact supervisor immediately. Wait till failure is resolved. Team leader to re-allocate workload.

4	System does not meet client's satisfaction	Certain features or parts of the system might not meet the client's expectations as a result of misunderstanding key information from the client	3	1	3	First step to ensure there isn't any misunderstanding is to create a comprehensive wireframes clearly depicting the features before development. Weekly meetings will be conducted with the client to update them on our progress and any issues during the development process.	Discuss with the IT department (Zhi Rong) on a compromise and, if required, re-do the part that does not meet the client's satisfaction.
5	Difficulties with development work	As this is the first time we will be developing an entire system from scratch and attempting features we have not learnt before, we may face difficulties coding and delay progress.	4	4	16	To make up for our lack of experience and knowledge, we will be turning to friends or lecturers online for assistance. We will also spend excess time on coursera to learn as much as possible.	Research online for any solutions or guide for the problem faced.

6	Unable to deliver project on time	Additional Features may be introduced as development process continues. This could affect the timeline and cause other features to be skipped.	5	4	20	Finalize the features with the client beforehand and maintain a detailed product backlog to ensure critical features to be completed before attempting to add new ones.	If the situation should arise, discuss with the client the importance of the additional feature and discuss with team members which minor features should be given up.
7	Change in Business Logic	Between now to the end of the project, the client's might make certain changes within their business structure which may result in significant changes to the system or render the system completely unuseable.	5	2	10	NIL	Discuss with the Client regarding the project, and decide either to make major changes to the system to reflect changes within the company or continue with the project.
8	Testing	As the project is to be used solely within the intranet of the hospital, certain features such as sending emails through the SMTP port would be	4	4	16	Further research on SMTP is required.	One possible step is to hand over the system early to the client's IT department and request them to test within the system.

		difficult to carry out and simulated from home.					

Figure 9 - Risk Assessment Report

8. Project Organization

8.1 Group Roles and Responsibilities

8.1.1 Shaun Cheong Jia Yong

Team Role : Leader

Project Role : Scrum Master

Tasks :

1. Responsible for all Scrum related documents (Product Backlog, Scrum Meeting, Weekly Attendance Report, Weekly Monitoring Report)
2. Maintain and coordinate Team's progress and quality
3. In charge of organising meetings and preparing questions with client/supervisor
4. Main Contact between Team members and client/supervisor
5. Oversees and assists in overall development and progress

8.1.2 Brandon Lim Jin Zheng

Team Role : Assistant Leader

Project Role : Lead Developer

Tasks :

1. In charge of backend development with Microsoft SQL 2016
2. In charge of designing and setting up database (Microsoft SQL 2016)
3. In charge of the creation of Slides and Reports
4. In charge of testing and debugging
5. Aids in minutes of meeting

8.1.3 Iffah Irsalina Binte Mohd Azmi

Team Role : Member

Project Role : Lead Designer

Tasks :

1. In charge of designing wireframes using Adobe Illustrator and sketches for:
    a. Sign in page
    b. Report page
    c. Audit page
    d. Email template page
    e. Form template page
2. In charge of creating prototype for both normal login and admin login
3. Assist in testing and debugging for frontend
4. In charge of preparing weekly minutes of meetings
5. Assist in report writing

8.1.4 Tan Kok Kiong

Team Role : Member

Project Role : Frontend Developer

Tasks :

1. In charge in designing wireframes using Adobe Xd and sketches for:
    a. Dashboard page
    b. Job Listing page
    c. Candidates page
    d. Code Values page
    e. Access Rights page
2. In charge of creating prototype for both normal login and admin login
3. In charge in coding frontend
4. Assist in report writing

8.1.5 Darien Lim Guo Dong

Team Role : Member

Project Role : Backend Developer

Tasks :

1. Assists in backend development with Microsoft SQL
2. In charge of designing and setting up database (Microsoft SQL)
3. In charge of creating data for database
4. In charge of testing and debugging backend
5. Phase 01 report (Introduction, Research on client, Approach and Deliverables, Resources)

8.2 Project Supervisor

8.2.1 Mr Daryl Lim

Project Role: Supervisor

Tasks:

1. Ensure that the allocation of workload among the group members is fair and agreed upon.
2. Meet the project group regularly during the allocated time according to the timetable with the group to provide guidance pertaining to the project.
3. Act as a System User to the group and answer any queries.
4. Ensure that the group adheres to deadlines and work according to schedule.
5. Provide the group with detailed project specifications (if they are written by the staff members) and explain clearly what is required.
6. Advice the project group so that they are heading in the right direction and within the project scope.
7. Arrange for accounts to be created if students require access to the various laboratories.
8. Collect deliverables from group submission.
9. Give feedback on group performance and individual team performance.

8.3 External Clients

8.3.1 Ang Mo Kio-Thye Hua Kwan Hospital HR Department

Project Role: Client

8.4 Technical Advisors

8.4.1 Agnes Tay Lee Leng

Project Role: HR Department Representative

8.4.2 Chua Zhirong

Project Role: IT Department Representative

8.4.3 Wayne Lee

Project Role: IT Department Representative

9. Project Schedule

9.1 Overview of Project Schedule

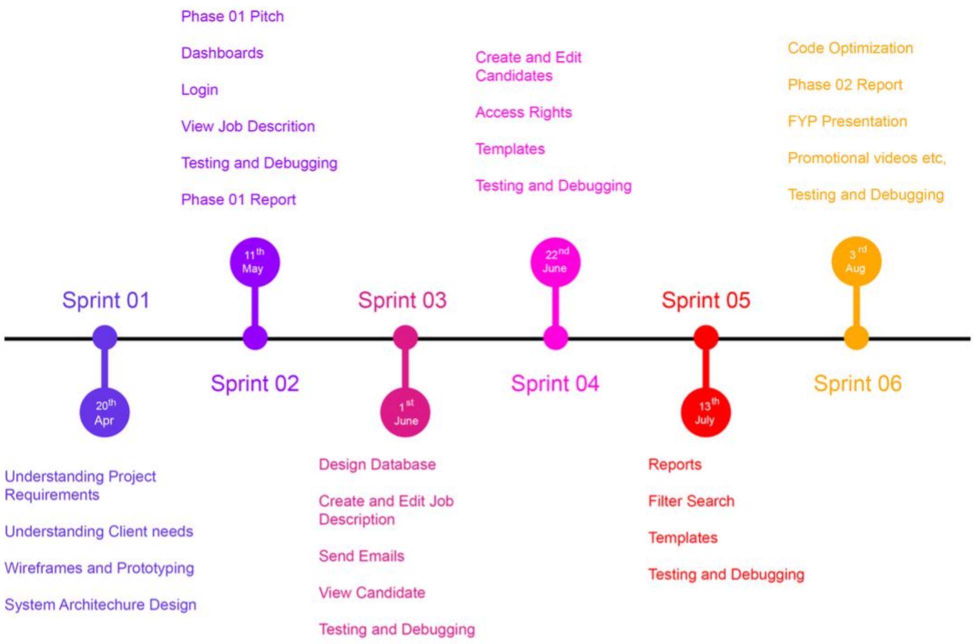


Figure 10 - Project Schedule Overview

9.2 Detailed Schedule

Priority	Product Backlog Item	Start Date	Estimated Completion Date	Lead	Assistant
Sprint 1 (20^{th} April 2020 - 10^{th} May 2020)					
1	Understanding Project Requirements	20^{th} April 2020	20^{th} April 2020	Everyone	
2	Wireframes & Prototyping	25^{st} April 2020	21^{st} May 2020	Iffah	Kok Kiong
3	Understanding Client needs	1^{st} May	1^{st} May	Everyone	
4	Research on Existing Solutions, Database	20^{th} April 2020	25^{th} April 2020	Brandon	Darien
5	Prepare Business Process Diagram	24^{th} April 2020	27^{th} April 2020	Shaun	

Sprint 2 (11th May 2020 - 31st May 2020)					
6	Database Design	2nd May 2020	15th May 2020	Brandon	Darien
7	Phase 1 Report	22nd May 2020	29th May 2020	Everyone	
8	Phase 1 Pitch	22nd May 2020	29th May 2020	Everyone	
9	Dashboards	27th May 2020	8th June 2020	Kok Kiong	Iffah
10	Login	28th May 2020	8th June 2020	Iffah	Kok Kiong
11	Database	30th May 2020	5th June 2020	Brandon	Darien
Sprint 3 (1st June 2020 - 21st June 2020)					
12	View Job Description	9th June 2020	12th June 2020	Darien	Brandon
13	Add Job Description	12th June 2020	16th June 2020	Brandon	Darien
14	View Candidates	10th June 2020	15th June 2020	Kok Kiong	Iffah
15	Create and edit Candidates	17th June 2020	22th June 2020	Iffah	Kok Kiong
16	Code Values	14th June 2020	24th June 2020	Brandon	Darien
17	Testing and Debugging	19th June 2020	21st June 2020	Shaun	
Sprint 4 (22nd June 2020 - 12th July 2020)					
18	View Access Rights	23rd June 2020	26th June 2020	Shaun	
19	Add Access Rights	27th June 2020	30th June 2020	Shaun	
20	Audit	26th June 2020	8th July 2020	Darien	Brandon
21	Sending Emails	26th June 2020	8th July 2020	Iffah	Kok Kiong
22	Testing and Debugging	8th July 2020	12th July 2020	Brandon	Darien
Sprint 5 (13th July 2020 - 2nd Aug 2020)					
23	Reports	15th July 2020	22th July 2020	Iffah	Kok Kiong
24	Templates	16th July 2020	31st July 2020	Brandon	Darien
25	Export	24th July 2020	30th July 2020	Iffah	Kok Kiong
26	Logout	31st July 2020	4th Aug 2020	Darien	Brandon
27	Testing and Debugging	15th July 2020	2nd Aug 2020	Shaun	
Sprint 6 (3rd Aug 2020 - 29th Aug 2020)					
28	Code Optimization	4th Aug 2020	11th Aug 2020	Kok Kiong	Iffah

29	Testing and Debugging	5th Aug 2020	12th Aug 2020	Brandon	Darien
30	Promotional material	12th Aug 2020	15th Aug 2020	Iffah	Kok Kiong
31	FYP Presentation	24th Aug 2020	24th Aug 2020	Everyone	
32	Phase 2 Report	16th Aug 2020	24th Aug 2020	Everyone	

Figure 11 - Detailed Project Schedule

10. Preliminary Design

10.1 Project architecture

10.1.1 Research on Frontend

Since we are developing an intranet web application for our client, we can use tools such as Visual Studio to code the application. This is favourable for our team as we have some experience using Visual Studio.
Based on our clients recommendations, the framework we should be working with is ASP.NET MVC, which after further research, is a discontinued web application framework developed by Microsoft and is open source.

Stands for "Model-View-Controller." MVC is an application design model composed of three interconnected parts. They include the model (data), the view (user interface), and the controller (processes that handle input).

The MVC model or "pattern" is commonly used for developing modern user interfaces. It provides the fundamental pieces for designing programs for desktop or mobile, as well as web applications. It works well with object-oriented programming, since the different models, views, and controllers can be treated as objects and reused within an application.

Traditionally used for desktop graphical user interfaces (GUIs), this pattern has become popular for designing web applications. Popular programming languages like JavaScript, Python, Ruby, PHP, Java, C#, and Swift have MVC frameworks that are used for web or mobile application development straight out of the box.

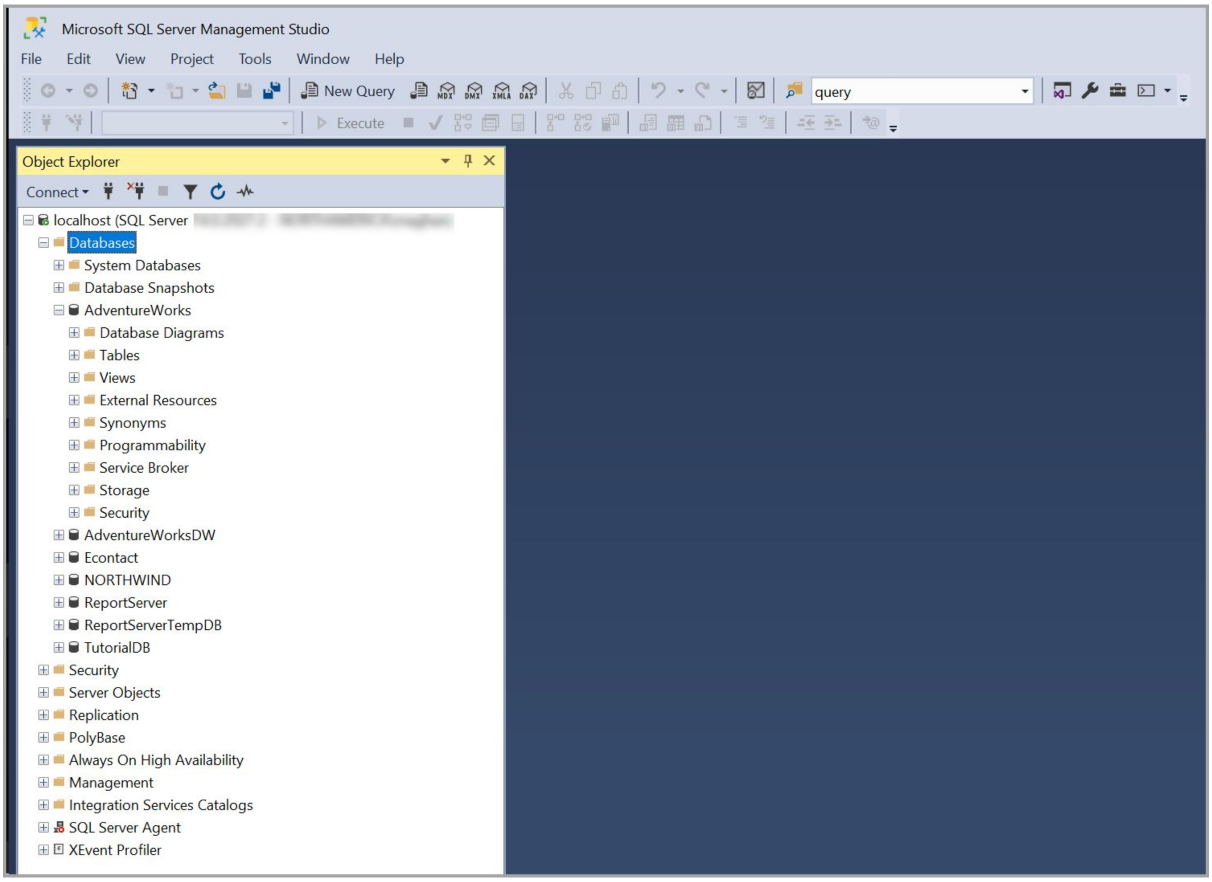
10.1.2 Research on Backend

The client requires a backend database that allows them to store data such as names, Job Descriptions, etc and recommends us to use Microsoft SQL Server 2016 to manage the data in the database.

SQL Server Management Studio (SSMS) is a software application first launched with Microsoft SQL Server 2005 that is used for configuring, managing, and administering all components within Microsoft SQL Server.

SSMS is free, it can be installed with only a few steps on a Windows system, and it will allow you to connect to and manage MS SQL Server directly from the server or a remote workstation.

SQL Server Management Studio (SSMS) is an integrated environment for managing any SQL infrastructure. Use SSMS to access, configure, manage, administer, and develop all components of SQL Server, Azure SQL Database, and SQL Data Warehouse. SSMS provides a single comprehensive utility that combines a broad group of graphical tools with a number of rich script editors to provide access to SQL Server for developers and database administrators of all skill levels.



10.1.3 Setting up of environment

To get started in developing the application, we would need to create a dummy database to test if we can successfully Create, Read, Update and Delete(CRUD). After that, we would need to connect that database to our code in Visual Studio so that changes from the actions in the frontend of the application can affect the backend database as well. Once that is set up, we would need to test the connection of our clients Active Directory to our application and test if it is successful. Our code would be compiled on Github to ensure that there is a backend as well as to compile our code in one area.

10.1.4 Backend configuration

To connect the database to our application, we have done research for steps as to how to connect Microsoft SQL server to Visual studio and found a step by step guide by using the mssql extension in visual studio.
https://docs.microsoft.com/en-us/sql/visual-studio-code/sql-server-develop-use-vscode?view=sql-server-ver15

After connecting, we can implement CRUD functions to test if the connection is working.

10.2 Functionalities

One of the key purposes and objectives of this final year project is to create a more efficient and user friendly platform for the user's in Human Resources (HR) at Thye Hua Kwan Hospital to ease their day to day activities and maximise organisational skills. With the help of the team together with Agnes (Client of Thye Hua Kwan) have listed some features to include in the system.

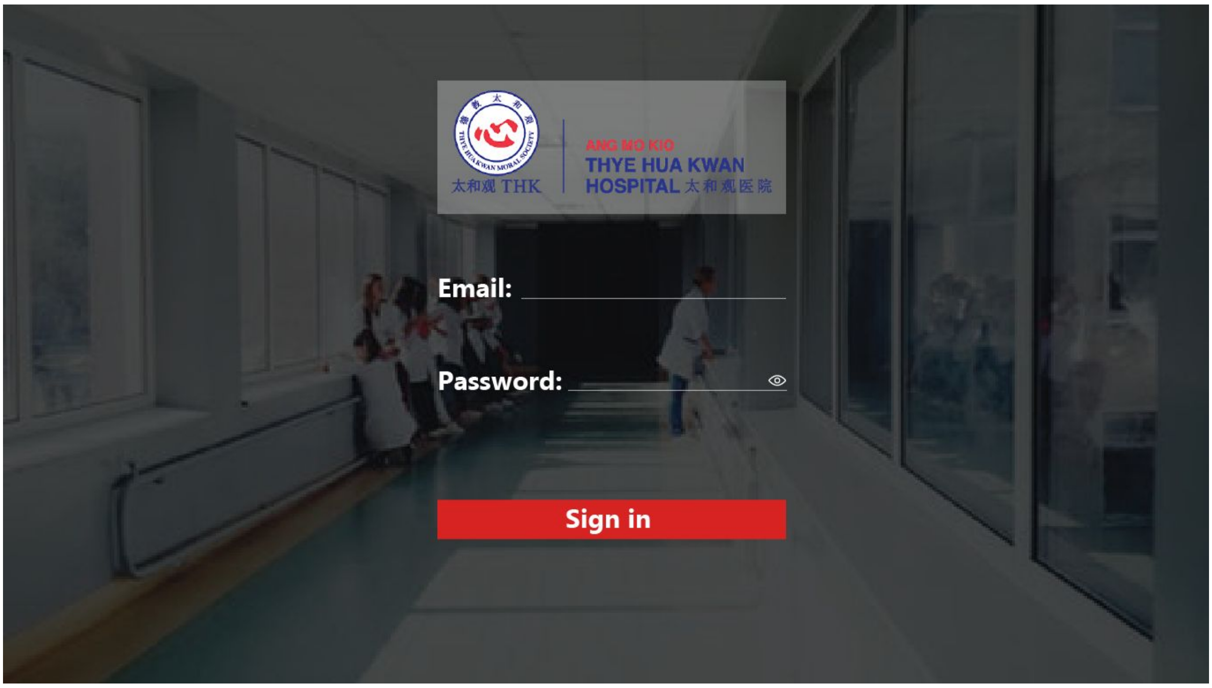
10.3 Features

1) Basic Layout
2) Login
3) Dashboards
4) Job Listing
5) Candidates
6) Send Emails
7) Reports
8) Code Values
9) Access Rights
10) Audit
11) Email Templates
12) Form Templates

10.3.1 Basic Layout

The common side navigation bar and header will be used throughout the entire project. The main difference between administrators and users will be the ability to access the Administration tab located at the side navigation bar.

10.3.2 Login



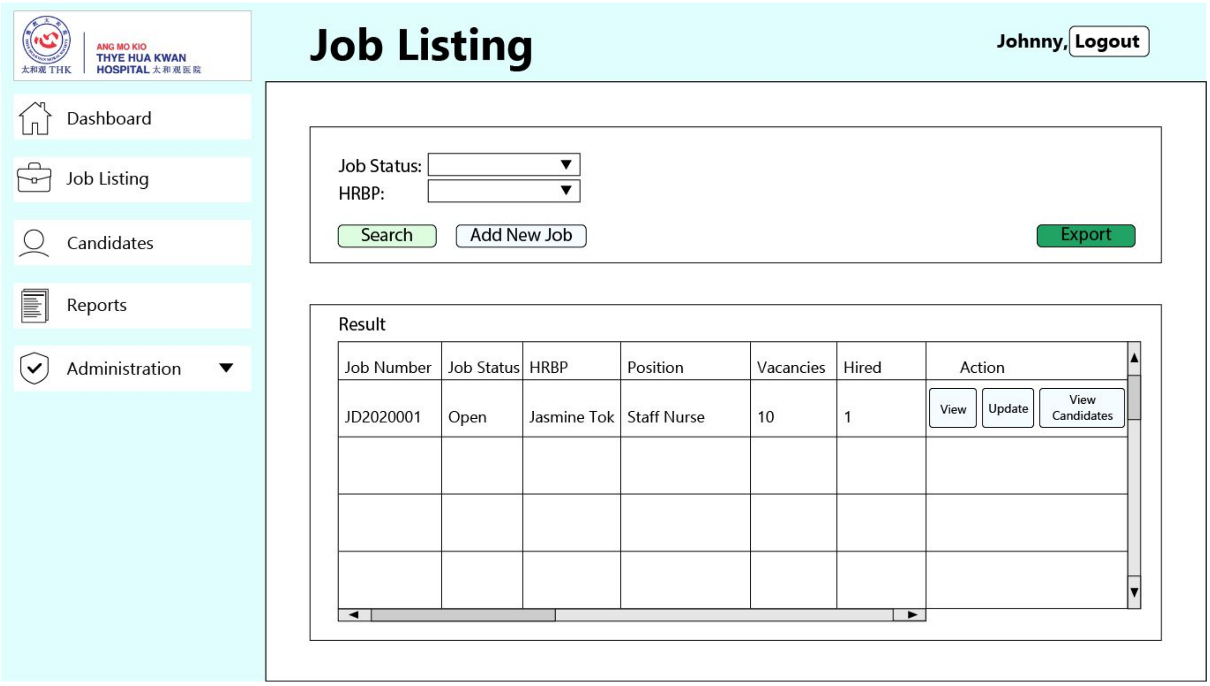
The “Login” page is to provide authentication for users(HRs) who are using the Recruitment tracker application. Unlike other applications, users will be authenticated first through the active directory using the LDAP server and we will be using their email to check against our own user table.

10.3.4 Dashboard

This is the landing page for all users after they successfully login to the application.
The dashboard page displays the information regarding the HRBP. The number of vacancies

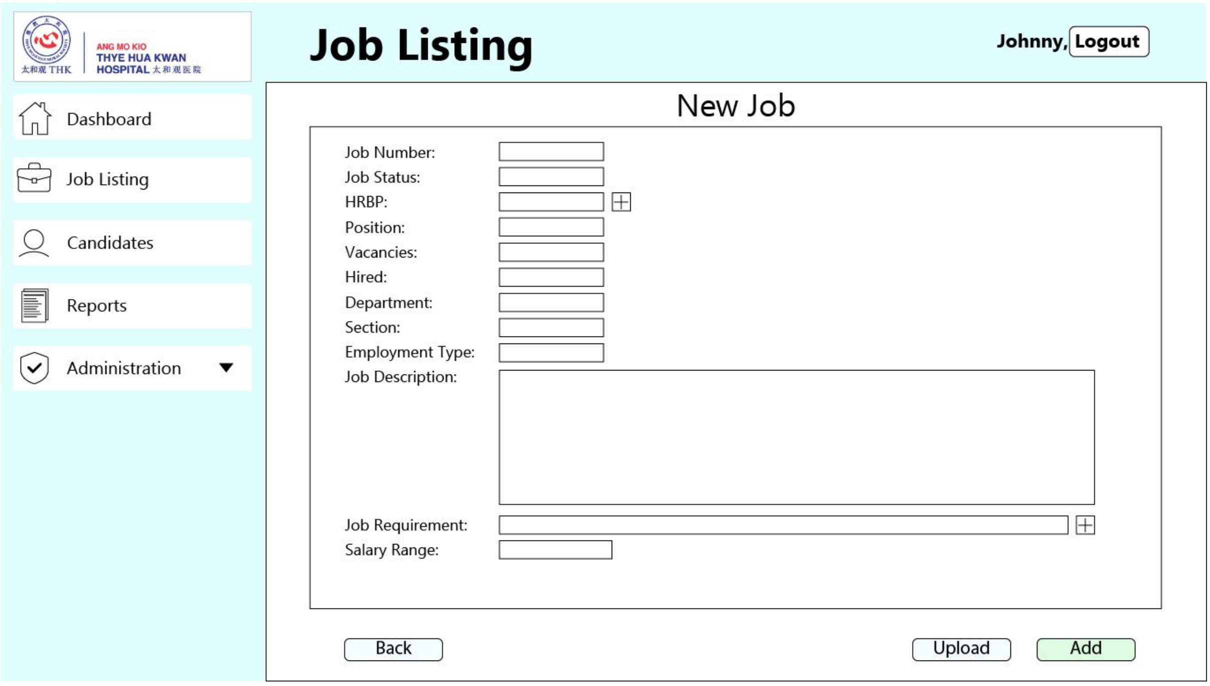
graph illustrates the different sections within each department, eg. the weight control section under the basic design department. The graph at the bottom shows the average Turn Around Time(TAT) which is calculated by taking the current date subtracting the date the position was vacated this will allow users to gather information and also promote friendly competition among the HRBPs.

10.3.5 Job Listing



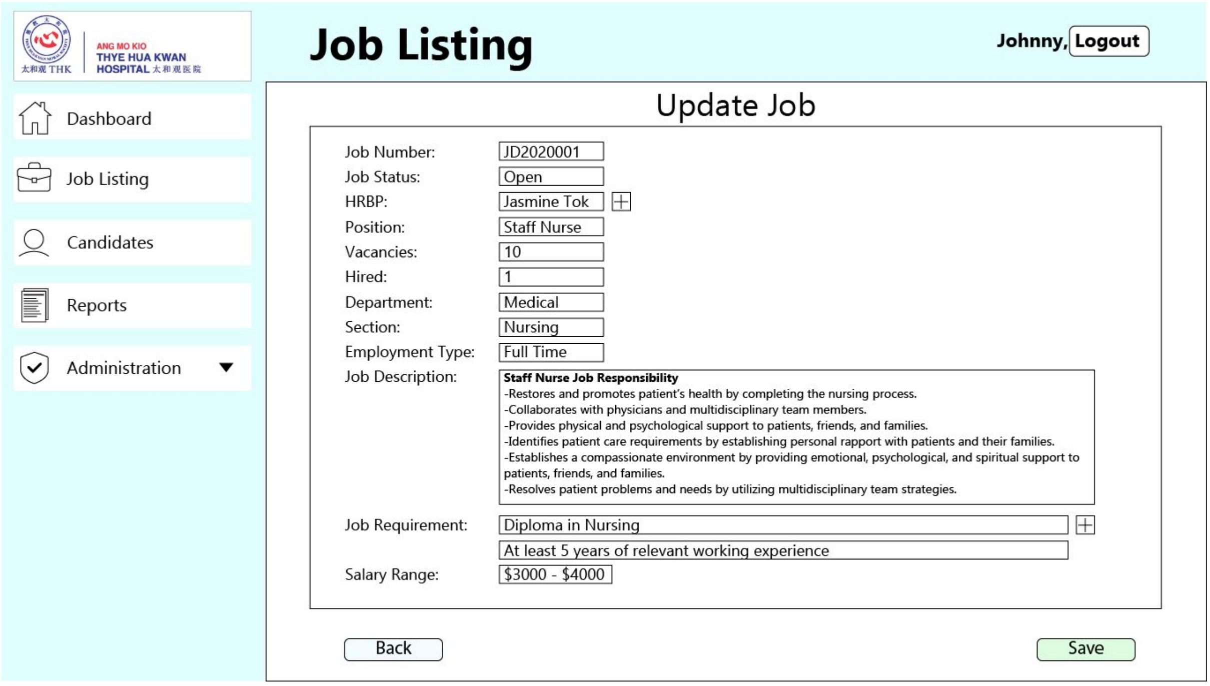
The job listing page displays the listing in a tabular format information regarding each job position. The search button allows the job to be filtered by job status and by HRBP and the add new job button allows new jobs to be added. Lastly the export the excel button at the top right allows HRBP to quickly retrieve info and use it to write reports. As all information for all jobs are easily accessible and HRBPs will not have to ask for documents from other departments during the hiring process. In the current recruitment process, HR will be required to seek information from each department when posting the jobs on other platforms. However, as each department records different types of information, not all required information may be provided.

10.3.6 Add New Job



The Upload button allows pdf files related to this job to be uploaded as it was mentioned by the client that certain jobs will require documents tagged to them. Therefore the team has added the upload button. The add button confirms the addition of this new job with the information inputted.

10.3.7 Update Job

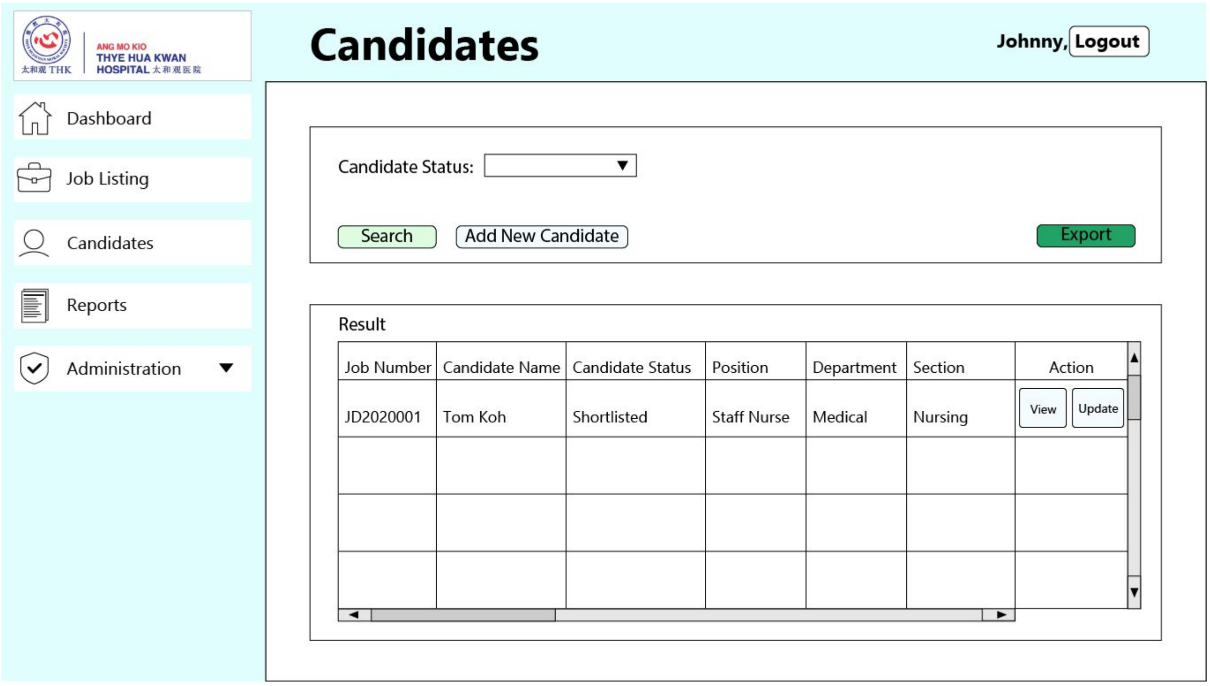


The plus button beside the HRBP text box allows them to add additional text boxes and update the job details which will be done using partial views. While the save button confirms the update.

10.3.8 View Job

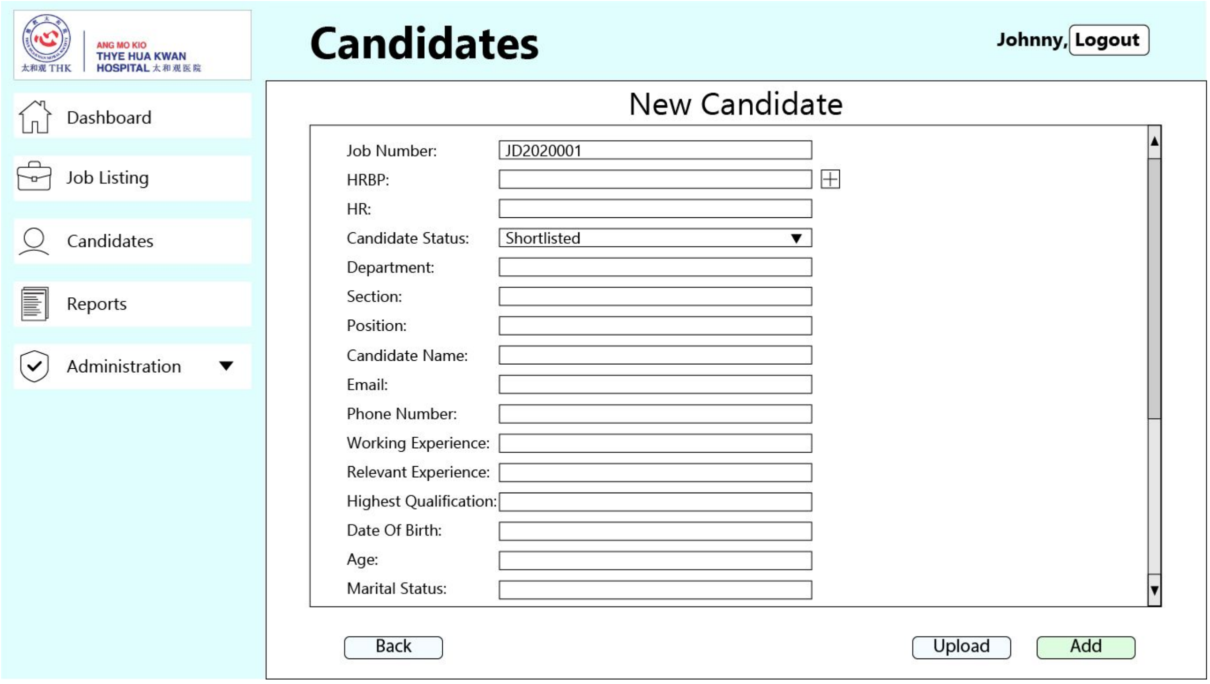
The view job page allows users to view the job details. The view Candidate button allows viewing of candidates related to the job.This will allow the HRBP to quickly peek at the number of candidates that are being considered for this job and make a decision if to accept more candidates to consider. The Add candidate buttons allows adding candidates to the job. The attachment button is to view the uploaded file related to this job. Lastly the update job button updates the job's page.

10.3.9 Candidates



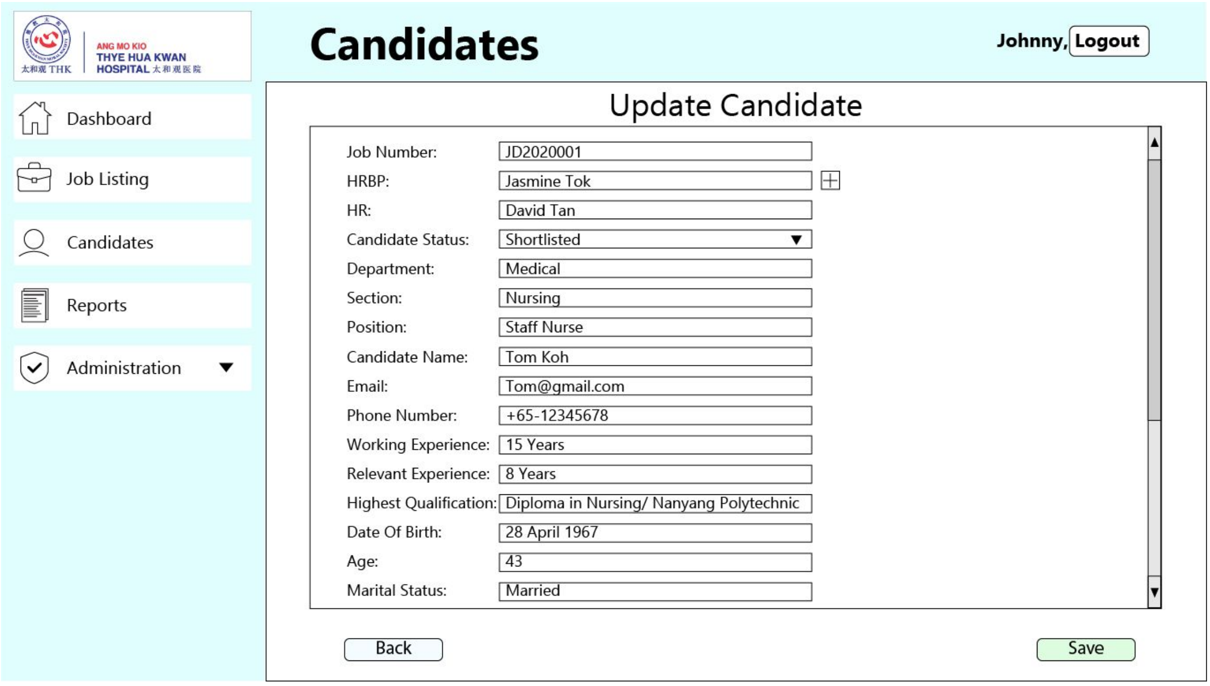
The candidates page displays the listing in a tabular format information regarding the candidate. The search button allows the candidates to be filtered by candidate status and the add new candidate button will link to the new candidates page (10.3.10). Lastly the export to excel button at the top right allows HRBP to quickly retrieve candidate information and export it into an excel sheet to aid HRBP with the writing of reports.

10.3.10 Add New Candidates



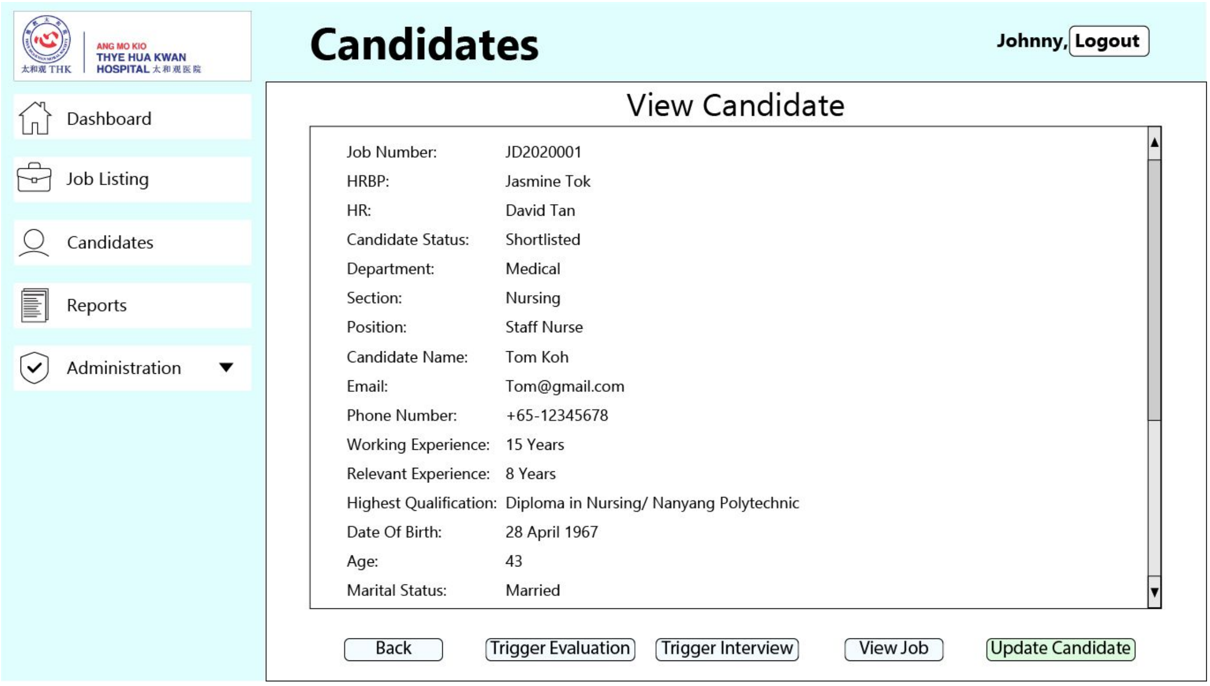
The add new candidate page has a lot of text fields which the HRBP will have to fill up in order to successfully add the new candidate. To make things easier for the HRBP, there is an upload button to upload a Candidate Summary Sheet (CSS) which contains the candidate’s details and fills up the text fields that are matching. This will significantly reduce the number of manual inputs the HRBP will have to enter and improve productivity.

10.3.11 Update Candidates



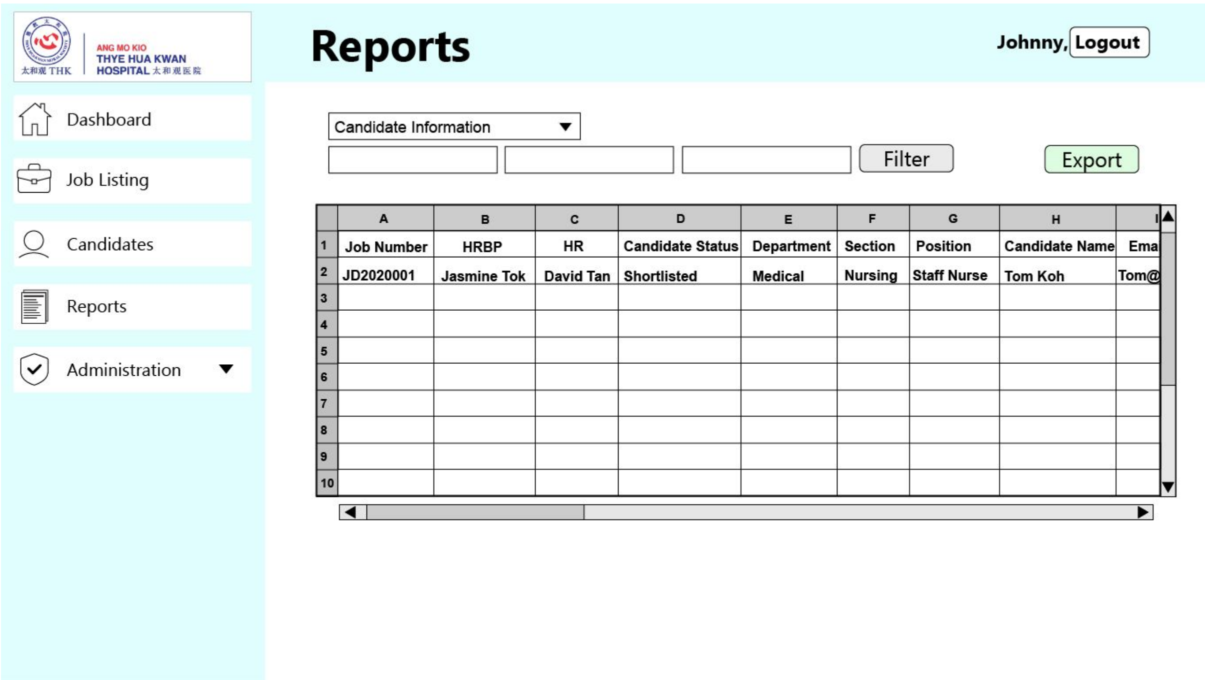
The update candidates page allows HRBP to edit any of the candidate's information. There is a save button which will save the edited candidate's information and the back button will bring the user back to the candidates page without saving.

10.3.12 View Candidates (Send Emails)



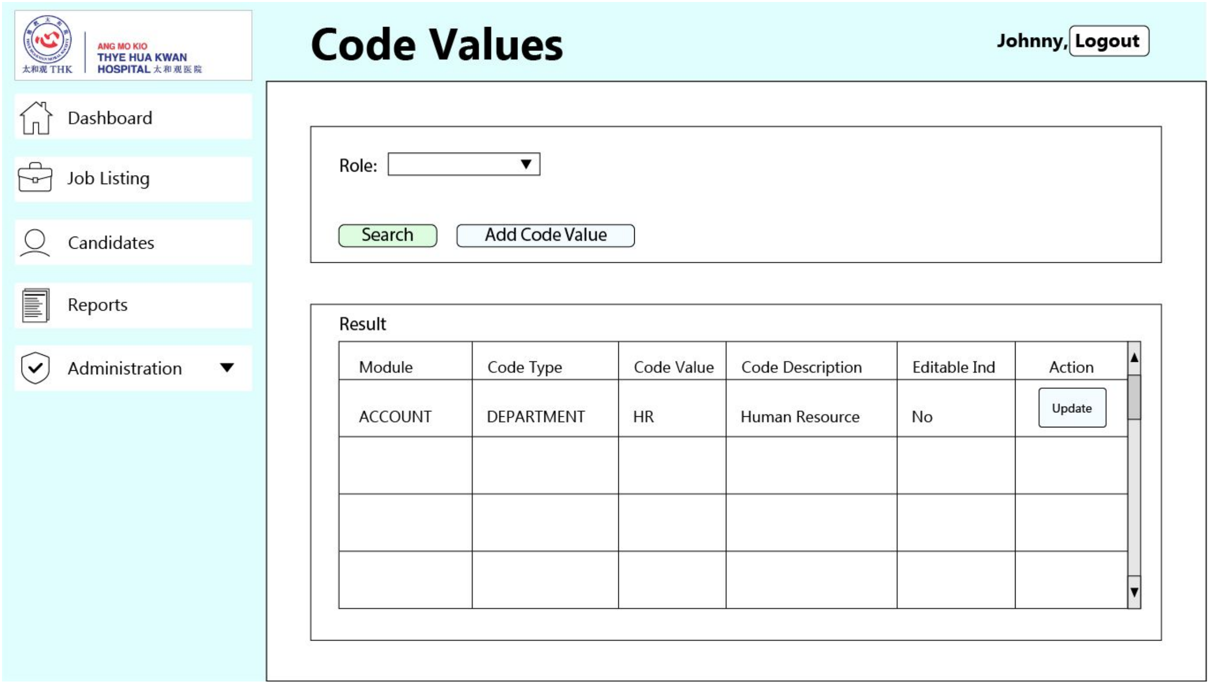
The view candidates page displays all of the candidate's information. The trigger evaluation button will send the interview evaluation form for this candidate to the respective Hiring managers that were present at the interview. The trigger interview button is to send email to the respective hiring manager and candidate to inform them details of the interview. This will also reduce the number of emails HRBPs are required to type and send out. While the view job button is to view the job information that this candidate has applied for. The update candidate button is to edit the candidate's information (10.3.11).

10.3.13 Reports



The Report page displays the data of the graphs that were shown in the Dashboard. The user can use the dropdown to change to other reports. If they want the report to be in an excel file, then can press the Export button available in the top right of the page.

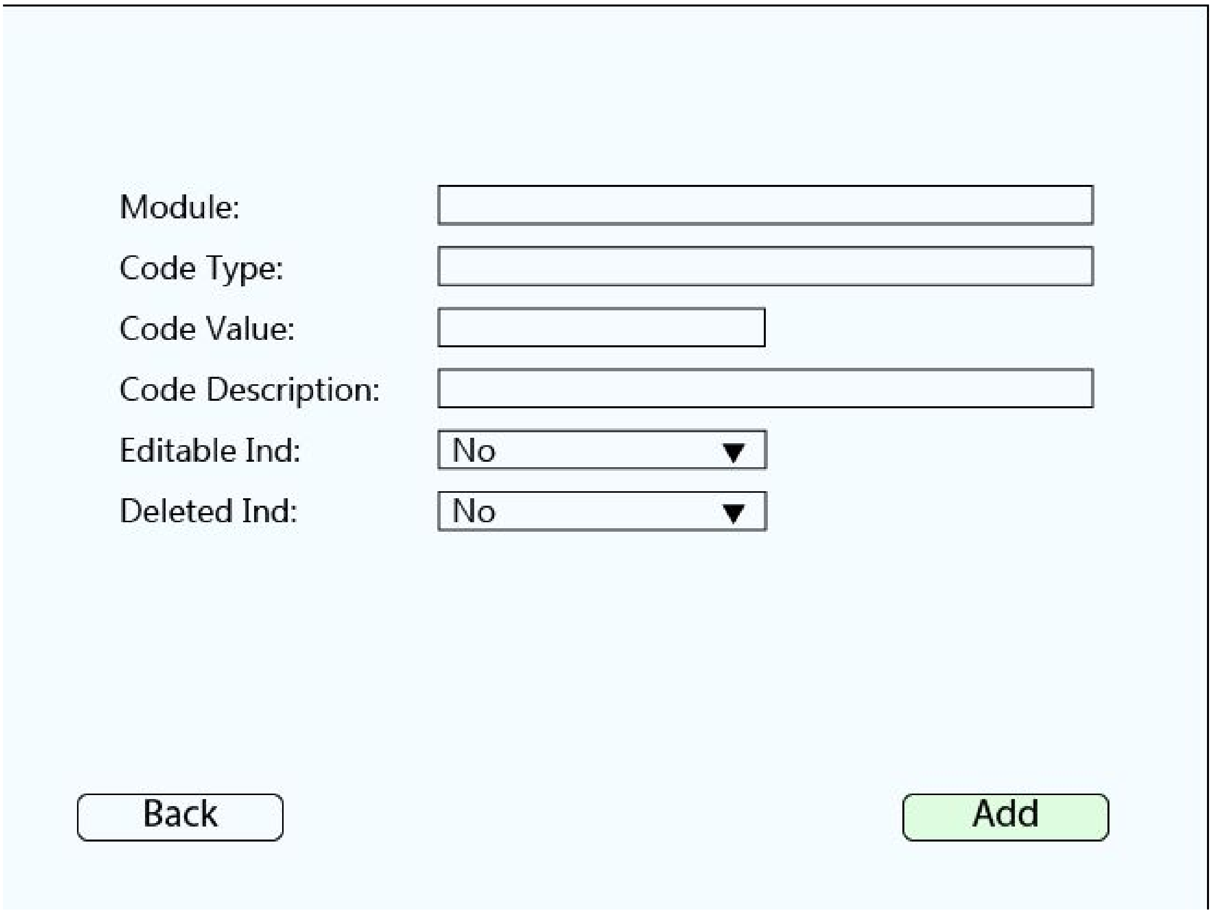
10.3.14 Code Values



The code values page is to store all dropdown values of the different pages to manage the values more properly. The add code value button is to add new dropdown values into the code values table (10.3.15). While the update button would link to the update code page (10.3.16).

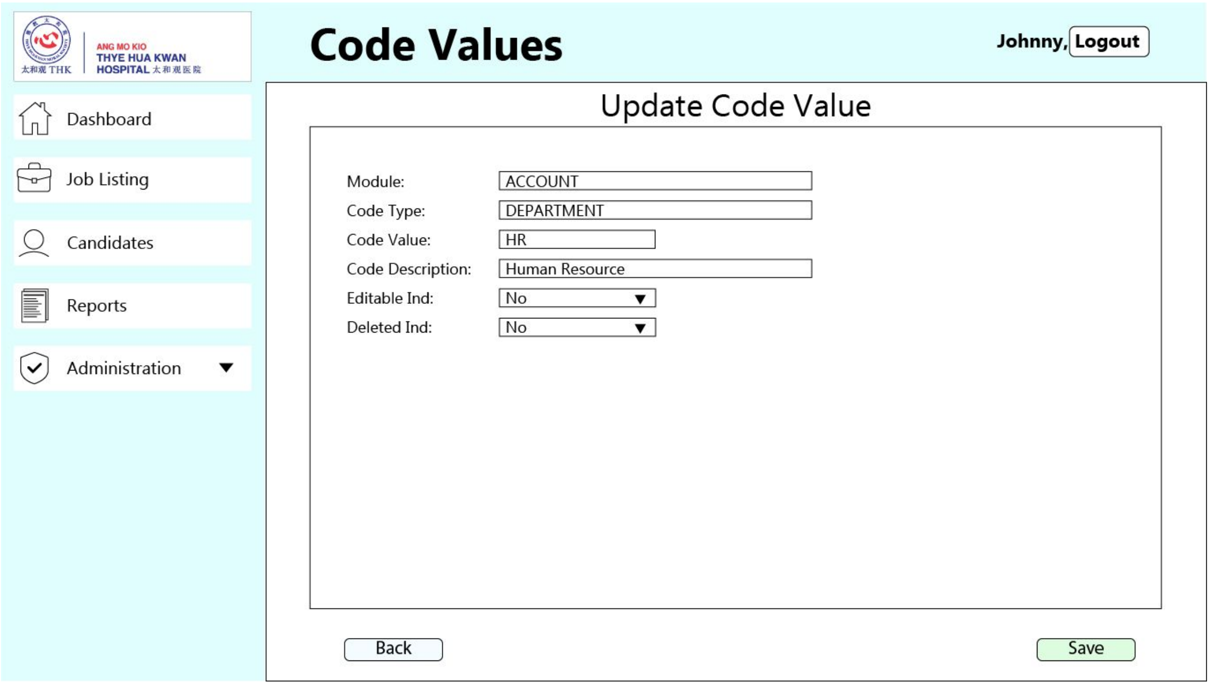
The code table is common practice in real world systems which allows administrators the ease of control over all drop downs. It was suggested by the IT department that we include one so as to simulate a real world system.

10.3.15 Add Code Value (Pop up)



The add code value is a pop up which then HRBP will fill in the information for the code value. The add button is to add the filled in data into the code values table and the back button is to go back to the code values page without adding new code values.

10.3.16 Update Code Value

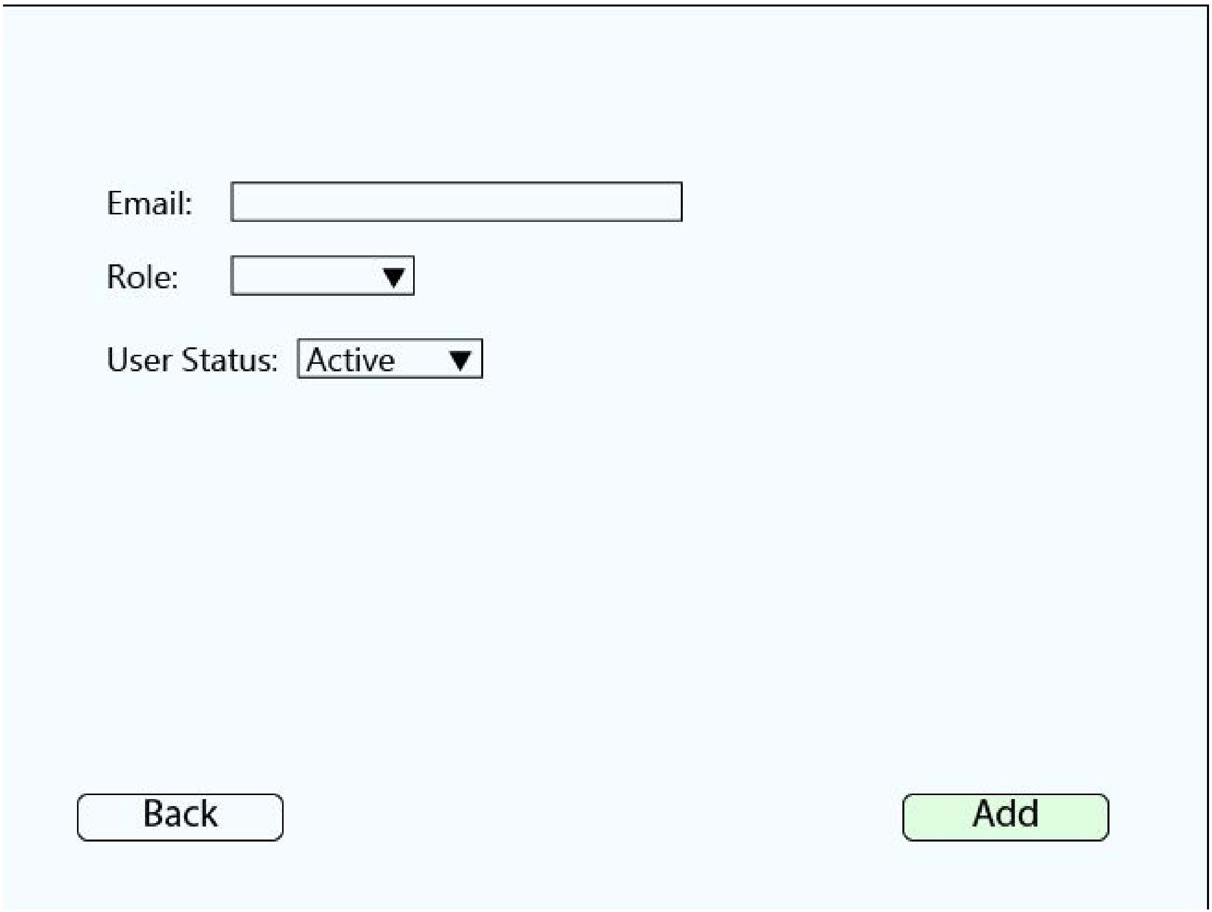


The update code value page is to edit the respective code values. The save button is to save the edited code values into the code values table. The back button is to go back to the code values page with saving any edited information.

10.3.17 Access Rights

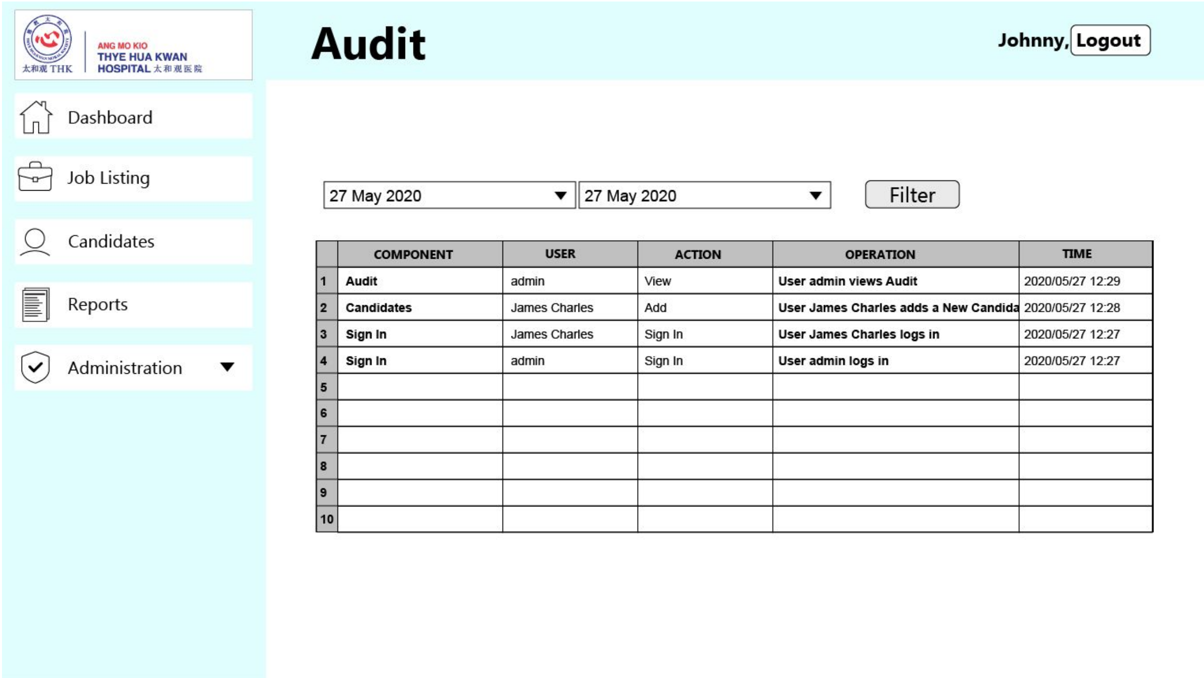
The access rights page displays users that have access to our application. The add new user button allows the admin to add users from their active directory to have access to our application.

10.3.18 Add New User (Pop up)



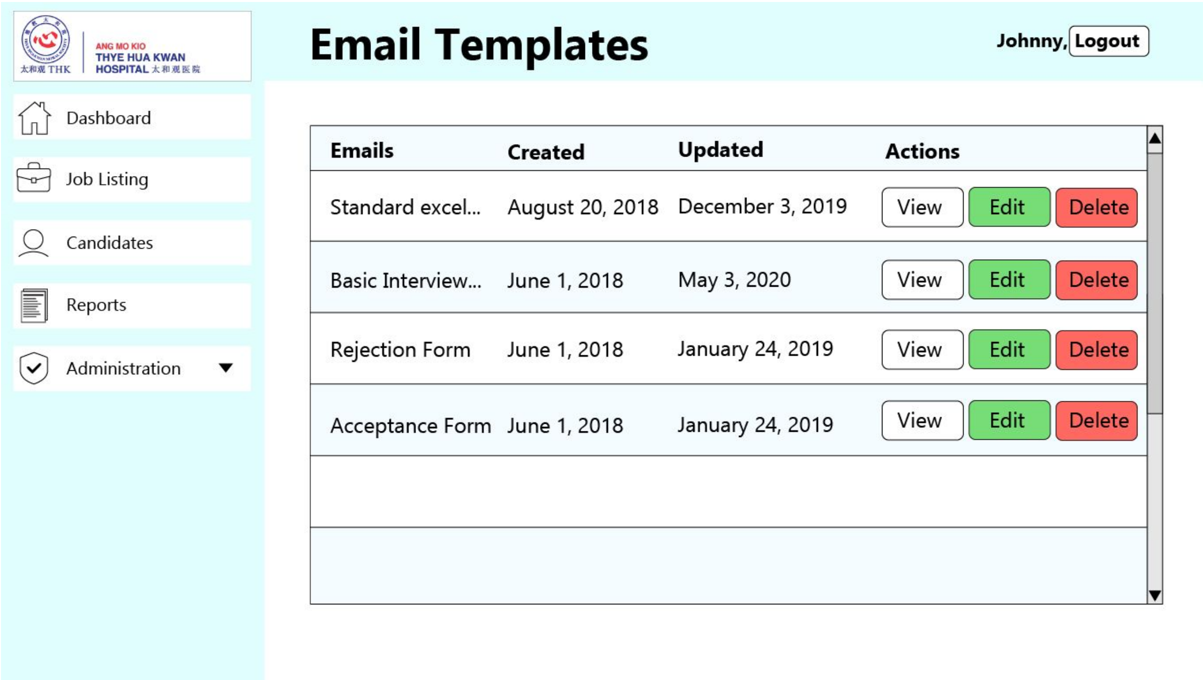
The add new user is a pop up which allows the admin to add users from their active directory to have access to our application. The add button is to add the filled in details into the access rights table and the back button is to go back to the access rights page without adding new users.

10.3.19 Audit



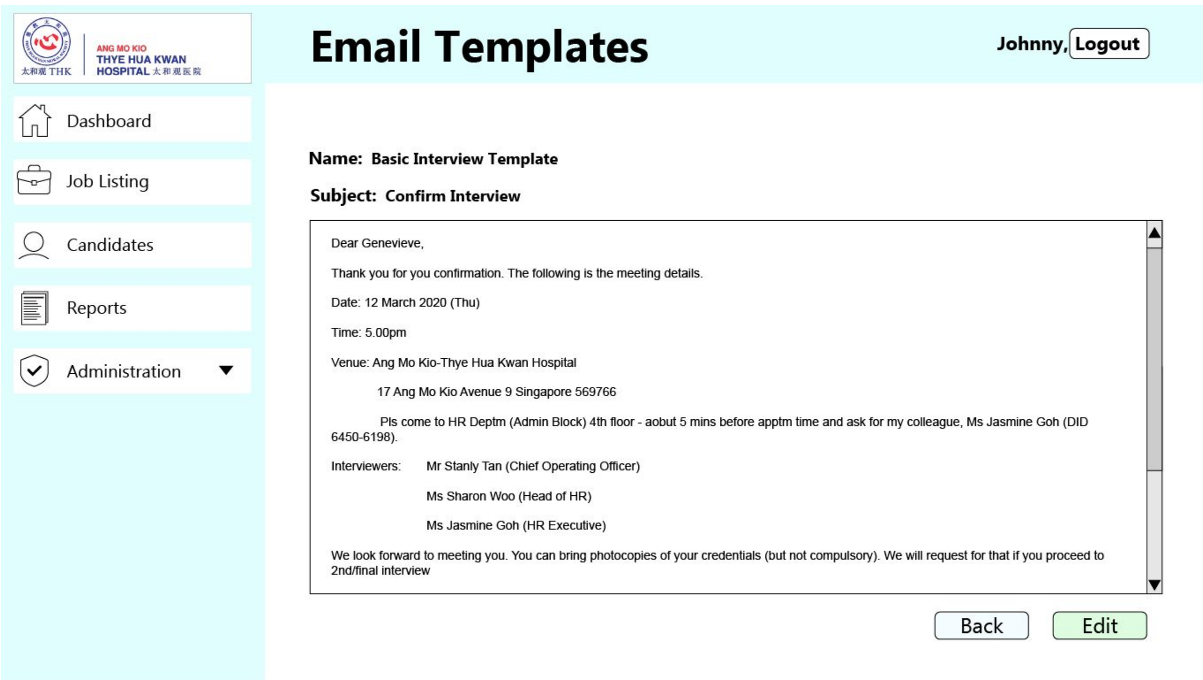
The audit page is to record all actions done by the users and store them into this Audit table. There is a date range function to allow the admin to see what actions were made during a specific time period. This is also another common feature in real world systems and was requested by the IT department. This audit table will allow the administrator to check the user’s actions in the case of any foul play.

10.3.20 Email Templates



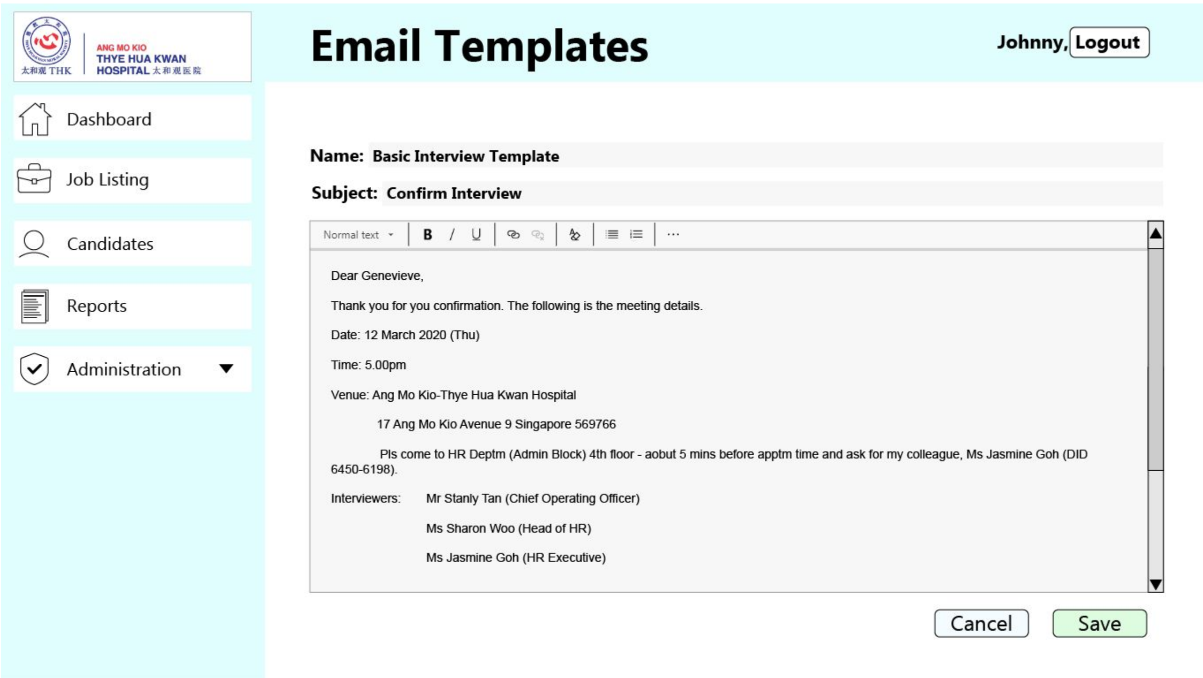
The Email Template page is used to store the templates the user will send to the respective Hiring Managers and HRBPs. The Administrator can view, edit, and delete the template by pressing the buttons at the end of each row. This will ensure that emails sent to other departments or candidates conform to a strict standard.

10.3.21 View Email Templates



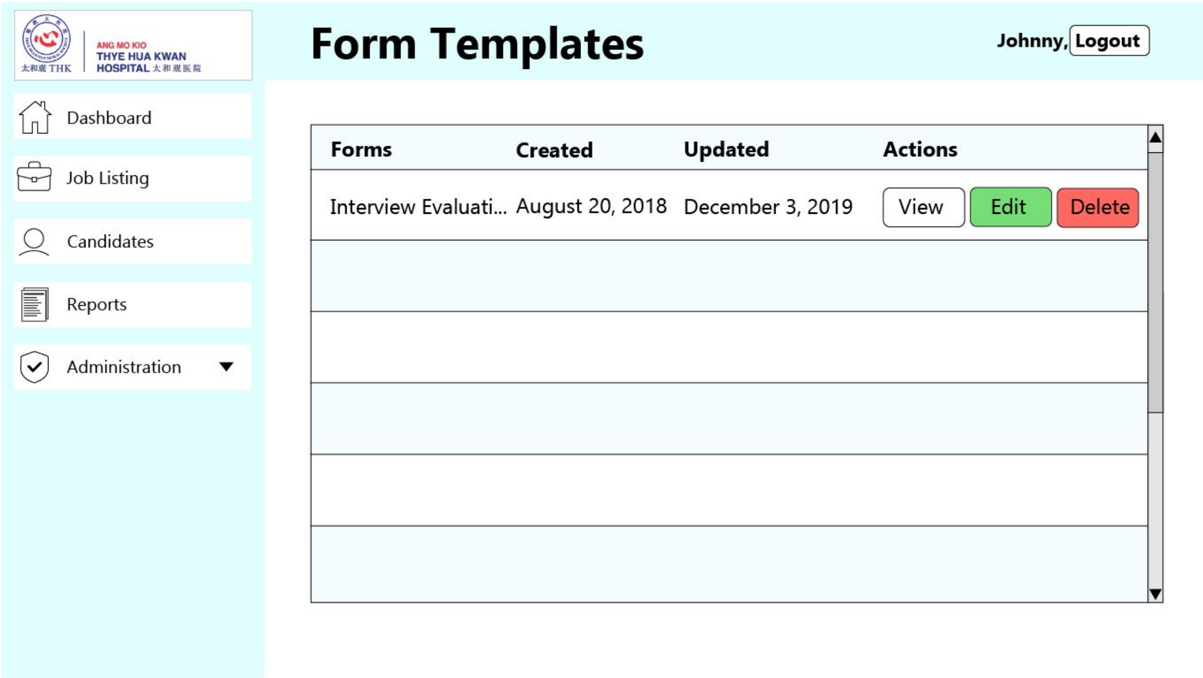
The View Email Template page is used to view the respective template available in the system. The user can choose to go back to the main Email Template page or to edit this template by pressing the buttons available at the bottom right of the page.

10.3.22 Edit Email Templates



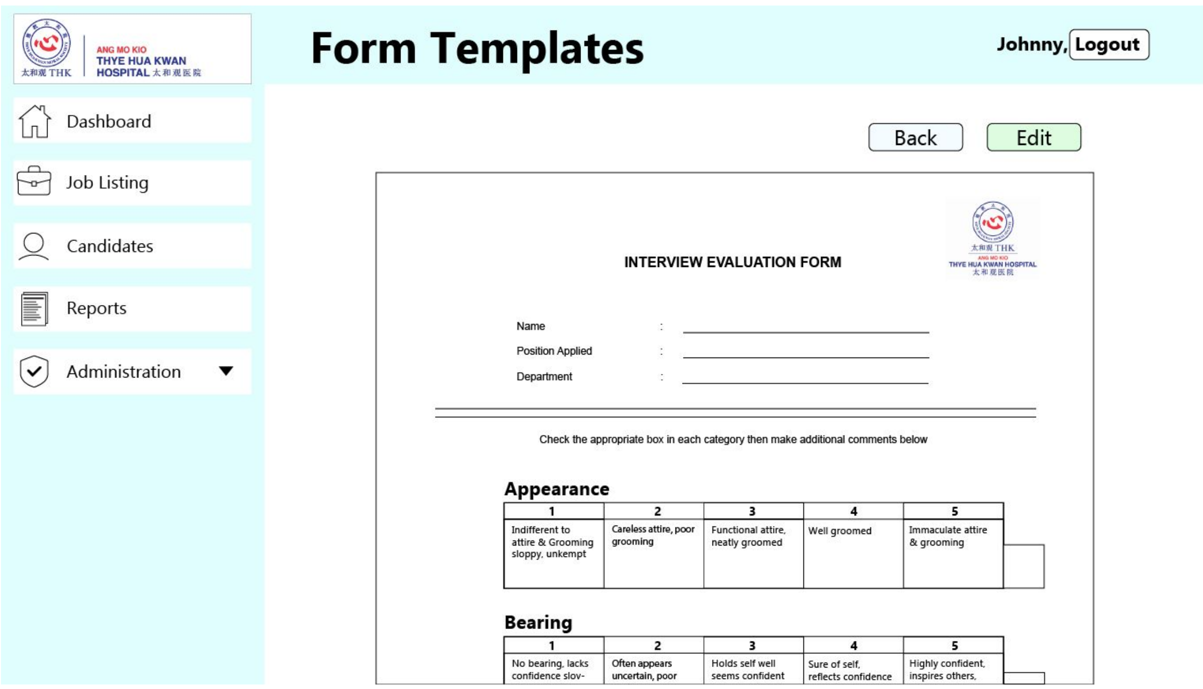
The edit email templates page allows the admin to change the name, subject and contents of this email template. The save button is to save the edited details. The cancel button is to go back to the view email templates page without saving any edited information. The body of the email would be edited using a rich text field which is suited to save information like the email. This will allow administrators to alter the email templates sent out quickly and need not worry HRBP might still be following an older template for emails.

10.3.23 Form Templates



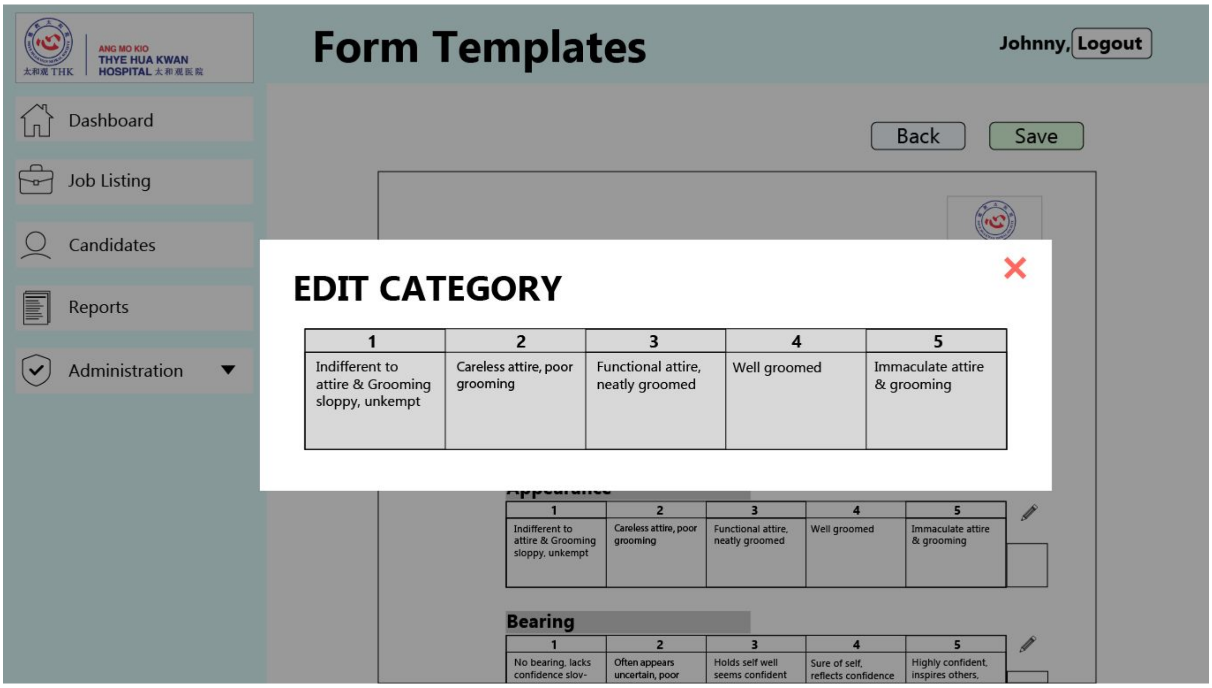
The form templates page used to store the forms that the HRBP will send to the Hiring managers to fill in after their interview with the candidates. The view button is to view the respective form templates available in the system. The edit button is to edit contents of the respective form templates. The delete button is to delete the selected form template from this form templates page. As of now, the only form requested by the client is the form templates and we need not worry about adding new forms. This form template will be used by HRBP and hiring managers after completing an interview.

10.3.24 View Form Templates



The view form templates page displays the form templates contents. The edit button is to edit the form template's contents (10.3.25). The back button is to go back to the form templates page.

10.3.25 Edit Form Templates



The edit form templates page is for the admin to edit the form contents. For this interview evaluation form, admin can change the name of the category and the grading rubrics of the category.

10.4 Database design

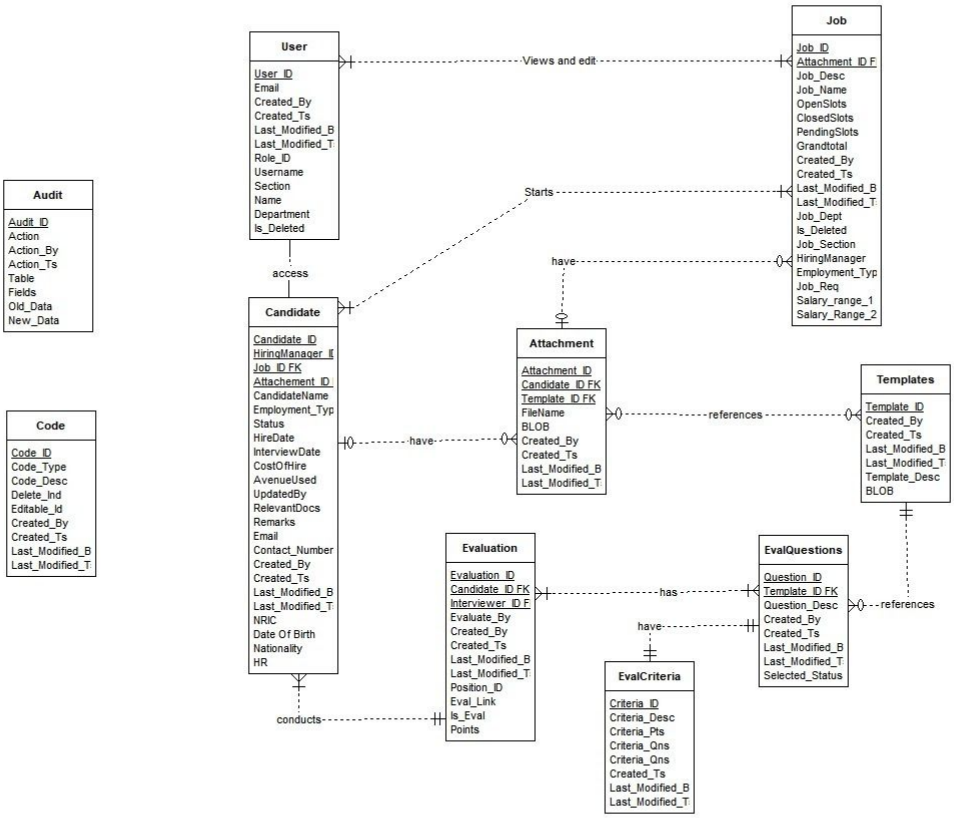


Figure 12 - ERD Diagram

10.5 Use cases

Use case diagram

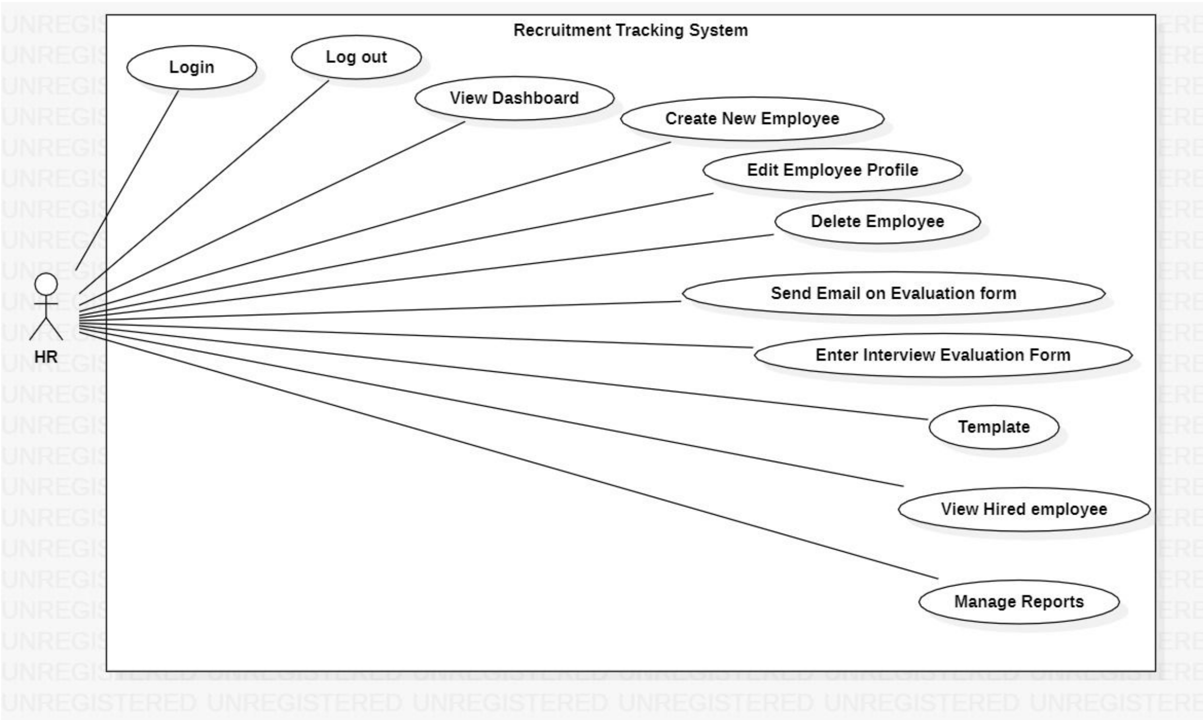
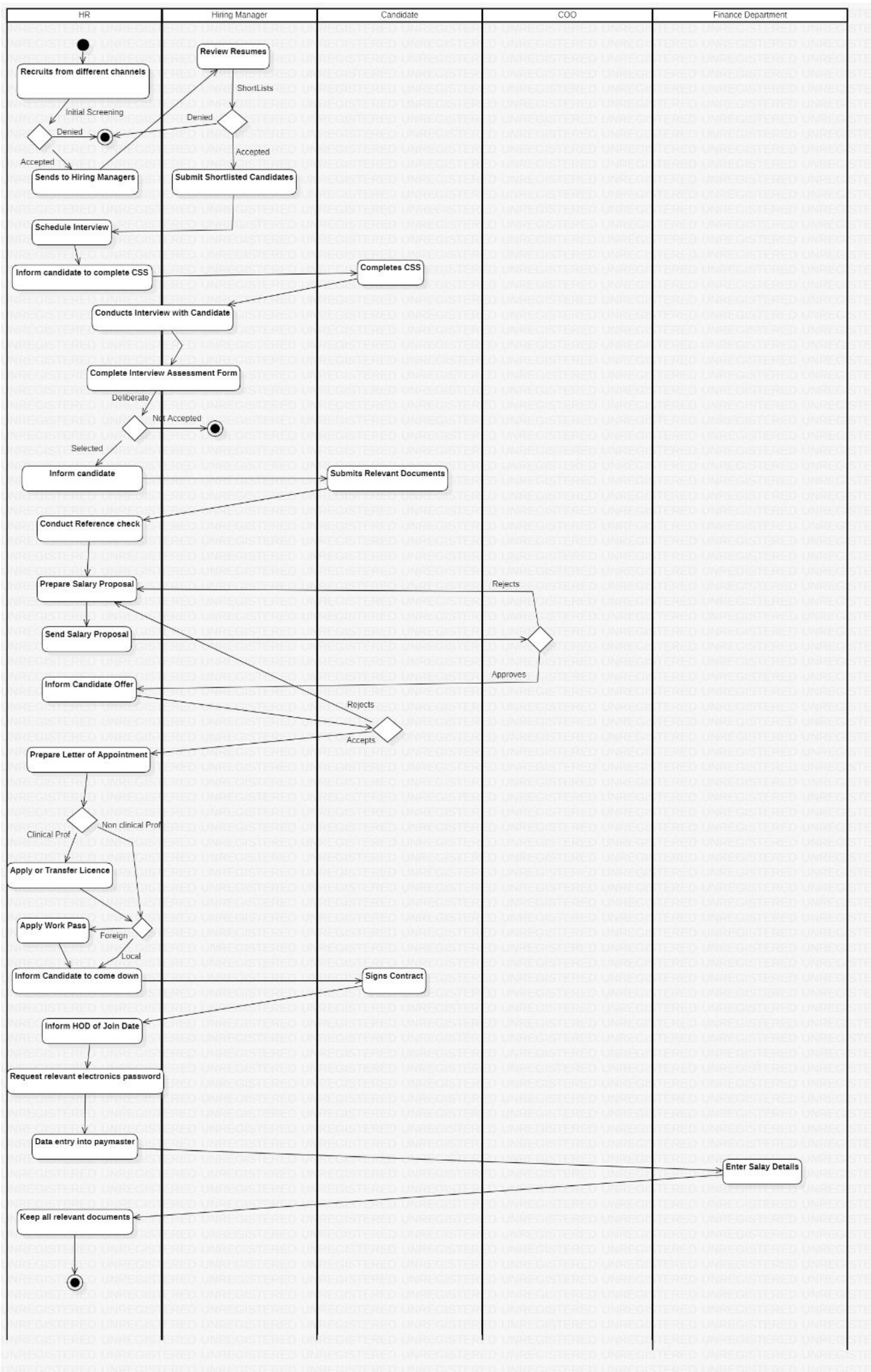


Figure 13 - Use Case Diagram

10.6 Activity Diagram

Activity diagram (part 1)



Activity diagram (part 2)

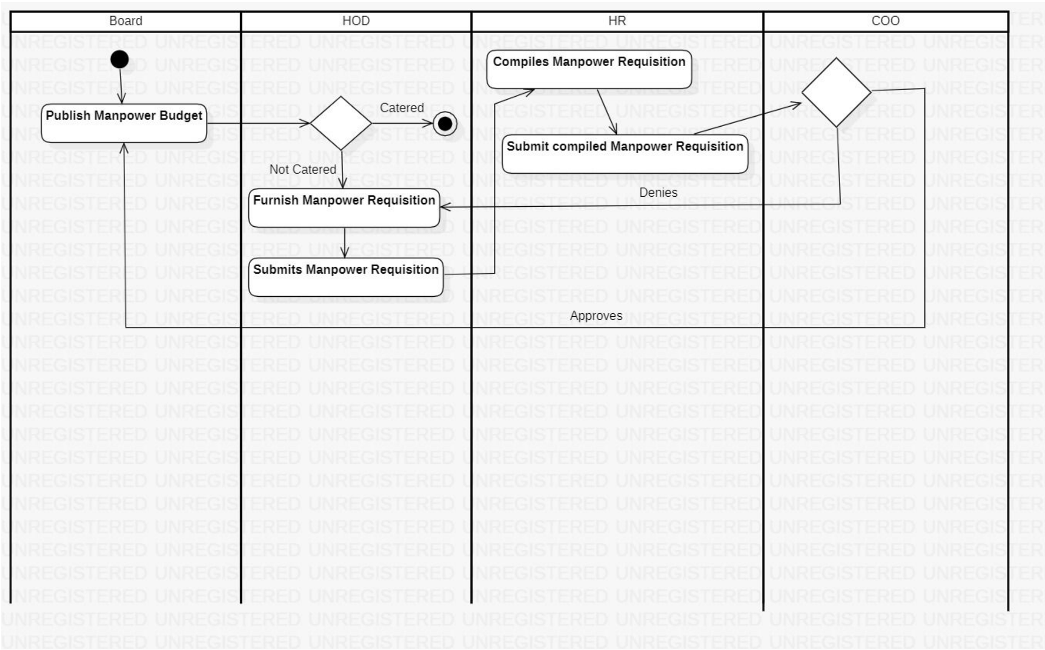


Figure 14 - Activity Diagram

10.7 Sitemap

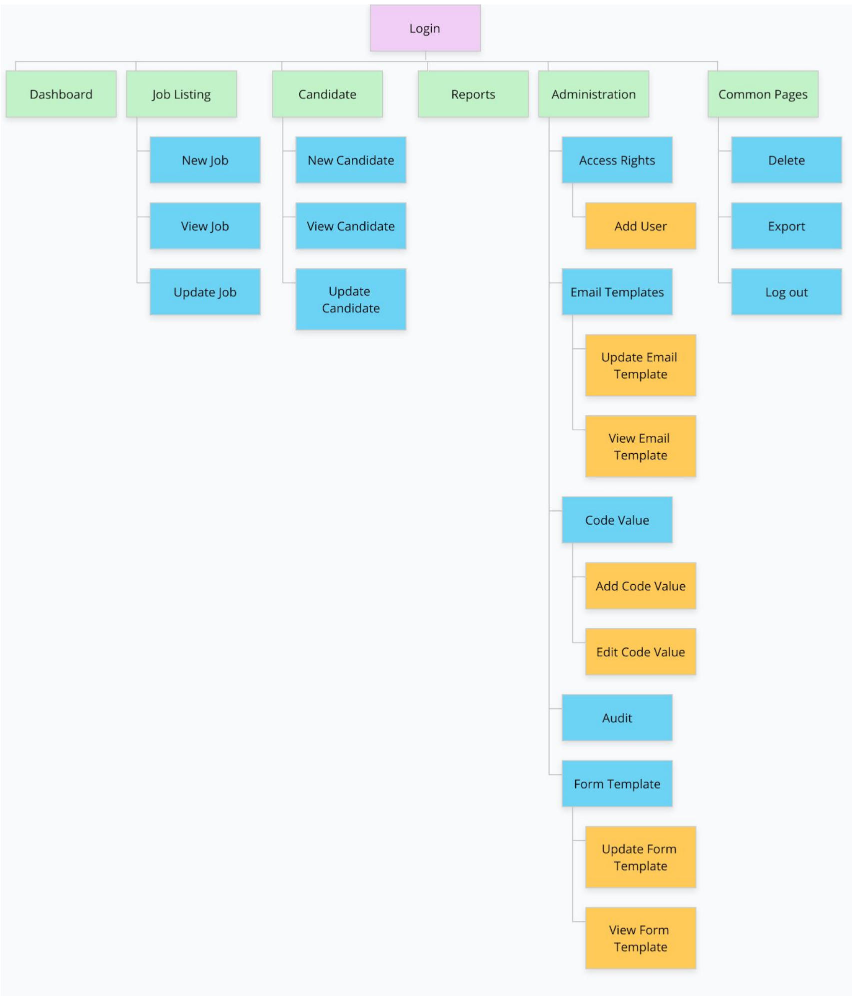


Figure 15 - Site map

11. Quality Management Plan

To ensure the quality of work delivered would meet the criteria set not only by the client but also by the members of the team, we have prepared certain guidelines we would abide by through the process of the project.

11.1 Guidelines

11.1.1 General Guidelines

1. Prioritize Key Features

   The key features of the project should be the main focus of the group while additional features should only be considered later. To meet the objectives and purpose of the project, we must first resolve the main issues of the clients. Therefore, the team and the client have discussed and agreed upon a list of features and the priorities in which they are ranked. The features listed at the top of the product backlog with the highest priorities will be developed on first before other additional features.

2. Quick and Efficient

   When the client uses our system, it should be quick and seamless. If the system is slow and hard to use, it will result in a bad user experience and negatively impact the user. To avoid this problem, the team will constantly be testing the program to ensure everything runs smoothly, in addition to carrying out code optimizations to improve the system's performance.

11.1.2 Design Guidelines

1. Ease of Navigations

   One important factor when designing a seamless user experience, is the ability for the user to navigate the application easily. Features should not be hidden layers deep within the system and instead should allow the users to get to all pages within no more than 5 clicks. Therefore, when the team was designing the system, we ensured that all pages were easily accessible and also that all pages are listed with a title and users would not be mistaken which page they are on.

2. User Friendly Design

   A simple user-friendly design was requested by the client and will be taken into considerations when designing the system. As the target users of our system are the

HRBP, we have to ensure that all texts and graphs are visible and interactive elements appropriately labelled. To accomplish this task, we will be placing ourselves in the point of view of the user when testing. In addition, we will be asking third party testers without any background knowledge of our system to test it to ensure that the system is simple and understandable.

12. Deliverables

12.1 Thye Hua Kwan Hospital Web Application

A usable recruitment tracking system based on specifications and features provided by Thye Hua Kwan Hospital HR and IT department.

12.2 Phase one Presentation and Product Demonstration Showcase

A first presentation and demonstration of the prototype to the client and supervisor with the proposed solution for the respective features.

12.3 Phase one Report

A first phase report containing all the tasks and relevant documents that the team has completed will be prepared and submitted.

12.4 Promotional Material

A promotional video, pamphlet and poster containing details of the project.

12.5 Phase two Report

A final report containing a complete overview of all features and methods, Evaluation and Key learning details.

12.6 Presentation and Product Demonstration Showcase

A final presentation and demonstration of the Web Application to the client and supervisor displaying the features and highlights of the system.

12.7 Test Documents

A complete list of test plans, scripts, integration tests, user acceptance tests.

12.8 Implementation Plan and checklist

A detailed checklist for Implementing System into client's system.

12.9 SQL Code

A full suite of implemented source code and initial SQL insertion code

12.10 Operational documents

User manual and Set up manual

13. Product Backlog

Priority	Items	Effort Required (Mandays)
1	Understanding Project Requirements	4
2	Wireframes and prototyping	9
3	Understanding Client needs and priority	2
4	System Architect Design	5
5	Phase 1 Pitch	3
6	UI Design	6
7	Backend Integration	3

8	Dashboards	7
9	Job Description	6
10	Send Emails	5
11	Candidate	6
12	Phase 1 Report	4
13	Access Rights	3
14	Store Templates	4
15	Reports	5
16	Login	3
17	Testing and Debugging	15
18	Code Optimization	7
19	Phase 2 Report	5
20	Promotional Material	4
21	FYP Demonstration	3

Figure 15 - Product Backlog

14. User Story

14.1 UI Design

Card 01: Side Navigation Bar
As a user,
I want to be able to navigate through the system with ease
So that I won't have to waste time exploring the entire system.
Acceptance Criteria **1.** Side Navigation Bar is to be located on the left side of every page. **2.** All Icons are clickable and linked to their respective pages. **3.** Thye Hua Kwan Hospital logo to be displayed on the top of the side navigation

Card 02: Header
As a user,
I want to be able to navigate through the system with ease
So that I know which page I am currently on and which account is in use.
Acceptance Criteria **1.** Log out Button to be located on the right side of the header **2.** Page Title to be displayed

Card 03: Colour Scheme
<u>As the</u> user,
<u>I want</u> simple colours soothing to the eyes
<u>So that</u> I would not grow tired after extended periods of time using it.
<u>Acceptance Criteria</u> **1.** Font size should be readable **2.** Text stand out from the background **3.** Clear division between different groups of information

14.2 Dashboards

Card 04: Dashboards
<u>As a</u> user,
<u>I want to</u> be able to view overall stats graphically
<u>So that</u> I know the progress of my employees and identify any outlier.
<u>Acceptance Criteria</u> **1.** The Dashboards page will include data such as Average Turnaround time, Average cost per hire, Total number of vacancies etc.

Card 05: Viewing Dashboards
As a user,
I want to be able to view detailed statistics of each dashboard
So that I can understand the graphs better.
Acceptance Criteria **1.** The Dashboard graph should be clickable and display the detailed information of each graph **2.** The dashboards should be able to be exported to excel format.

14.3 Candidates Page

Card 06: Viewing Candidates
As a user,
I want to be able to view and store all shortlisted candidates
So that I am able to view any candidate information with ease
Acceptance Criteria **1.** Candidate information is to be displayed in a tabular format **2.** A filter feature to quickly filter through all the candidates

Card 07: Editing Candidates
As a user,
I want to be able to edit the candidates stored
So that I can add or remove data regarding each candidate
Acceptance Criteria **1.** An edit button to allow user to change information and save to the database

Card 08: Viewing Candidates Interview Report
As a user,
I want to be able to view the Interview Evaluation Reports completed by the HRBP
So that I can analyse the feedback given.
Acceptance Criteria **1.** A Button that goes to the respective candidate's Report and displays it in the text field.

Card 09: Send Emails
<u>As a</u> user,
<u>I want to</u> be able to send emails to the respective HRBP
<u>So that</u> I can send the Interview Evaluation form
<u>Acceptance Criteria</u> **1.** A button at every candidate’s profile to manually send the email. **2.** An automatic system to send the emails to the respective HRBP at the end of the day.

Card 10: Upload CSS
<u>As a</u> user,
<u>I want to</u> be able to upload the CSS form regarding the candidate
<u>So that</u> I can reduce the number of information HRBP can input manually.
<u>Acceptance Criteria</u> **1.** A button at every candidate’s view page to upload the CSS Excel file. **2.** The information is to be retrieved and displayed on the page.

14.4 Job description

Card 11: Jobs Description
As a user,
I want to be able to view and store all Jobs
So that I am able to see all the staffs hired to each position
Acceptance Criteria **1.** Information on jobs to be displayed in a tabular format **2.** Data to be ranked by active and number of vacancies.

Card 12: Adding Job Listing
As a user,
I want to be able to create a new job listing
So that I am able to store all information related to the job.
Acceptance Criteria **1.** A form like page for user to enter all key information

Card 13: Export Job Listing
As a user,
I want to be able to export the job listing in an excel sheet
So that I am able generate the report quickly
Acceptance Criteria **1.** An export Button to process all job listings in an excel sheet.

Card 14: Viewing Hired Staff
As a user,
I want to be able to see the number of vacancies and hired staff in each position
So that I am able to identify which position lacks in employees
Acceptance Criteria **1.** The candidate table should show the number of hired and vacant positions. **2.** The view details of the job listing should include a list of employees hired.

Card 15: Viewing Candidates
As a user,
I want to be able to see the candidates shortlisted for each position
So that I am able to quickly see which candidates are for each position
Acceptance Criteria 1. The detailed job description page should have a button to go to the candidate page for the respective job.

14.5 Access Rights

Card 16: Viewing Access Rights
As an admin,
I want to be able to view all users with access to the system
So that I am able to maintain security.
Acceptance Criteria 1. User data to be displayed in a tabular format.

Card 17: Controlling Access Rights
As an admin,
I want to be able to control the user with access to the system
So that I am able to add, disable or remove users.
Acceptance Criteria **1.** Buttons located at the end of each row with the option to disable or delete. **2.** A button to add users located at the top left of the table.

14.6 Email Templates

Card 18: Viewing Templates
As an admin,
I want to be able to view the different email templates used when sending emails
So that all emails sent will conform to the standard template.
Acceptance Criteria **1.** Use Rich Text field to store email templates.

Card 19: Managing Templates
As an admin,
I want to be able edit the templates
So that I can change the format of the emails sent
Acceptance Criteria 1. Use a Rich Text field to store email templates. 2. The subject of the email to be done using a text field

14.7 Reports

Card 20: Maintaining Reports
As an admin,
I want to be able to view the reports
So that I can view the different types of reports
Acceptance Criteria 1. A list of all different kinds of reports.

15. Sprint Meetings

15.1 Sprint Planning Meeting 01, From 20/4/20 to 10/5/20

Product Backlog	Not started	In progress	Done
Understanding project requirements **Total Effort Required:** 4 Mandays			**Task**: Research on company's background, what they require, etc. **Effort Required**: 2 Manday **Assigned Member(s):** Darien **Due Date:** 25th April
			Task: Find out the project hardware/software requirements **Effort Required:** 1 Manday **Assigned Member(s):** All **Due Date:** 27th April
			Task: List down all the requirements/features of the project **Effort Required:** 1 Manday **Assigned Member(s):** Shaun **Due Date:** 28th April

Wireframe & Prototyping **Total Effort Required:** 9 Mandays			**Task:** Sketch based features discussed **Effort Required:** 2 Manday **Assigned Member(s):** Iffah, Kok Kiong **Due Date:** 30th April
			Task: Create Wireframe mock up in Adobe Xd **Effort Required:** 2 Manday **Assigned Member(s):** Iffah, Kok Kiong **Due Date:** 3rd May
			Task: Make improvements to previous wireframes based on feedback from client **Effort Required:** 1 Manday **Assigned Member(s):** Iffah, Kok Kiong **Due Date:** 9th May

		Task: Re-do sketches based on client's feedback **Effort Required:** 2 Manday **Assigned Member(s):** Iffah, Kok Kiong **Due Date:** 12th May	
		Task: Transfer new wireframe sketches based on client's feedback **Effort Required:** 2 Manday **Assigned Member(s):** Iffah, Kok Kiong **Due Date:** 15th May	

Understanding Client's needs and priorities **Total Effort Required:** 2 Mandays			**Task:** Meet up with client and discuss features in the product backlog **Effort Required:** 0.5 Manday **Assigned Member(s):** All **Due Date:** 20th April
			Task: Review the mock up Wireframes and receive feedback **Effort Required:** 0.5 Manday **Assigned Member(s):** All **Due Date:** 15th May
		Task: Discuss and finalize client's expectations **Effort Required:** 1 Manday **Assigned Member (s):** All **Due Date:** 15th May	

System Architecture Design **Total Effort Required:** 5 Mandays			**Task:** Research on how the system should work **Effort Required:** 1 Manday **Assigned Members(s):** All **Due Date:** 20th May
			Task: Design a diagram that clearly shows all functionalities of the system **Effort Required:** 2 Manday **Assigned Member(s):** Brandon, Shaun **Due Date:** 21st May

15.2 Sprint Planning Meeting 02, From 11/5/20 to 31/5/20

Product Backlog	Not started	In progress	Done
Database Design **Total Effort Required:** 6 Mandays			**Task:** Research on database **Effort Required:** 1 Manday **Assigned Member(s):** All **Due Date:** 11th May

			Task: Create database tables **Effort Required**: 2 Manday **Assigned Member(s):** Brandon, Darien **Due Date:** 1st June
			Task: Link database to system **Effort Required**: 3 Manday **Assigned Member(s):** Brandon, Darien **Due Date:** 1st June
Phase one pitch **Total Effort Required:** 3 Mandays			**Task:** Create Presentation slides **Effort Required:** 2 Manday **Assigned Member(s):** Shaun, Brandon, Darien **Due Date:** 30th April
			Task: Presentation Rehearsal and Preparation **Effort Required:** 1 Manday **Assigned Member(s):** Iffah, Shaun, Brandon **Due Date:** 28th May

Phase one Report **Total Effort Required:** 5 Mandays			**Task:** Prepare scrum documents **Effort Required:** 0.5 Manday **Assigned Member(s):** Shaun **Due Date:** 24th May
			Task: Annotate Wireframes **Effort Required:** 2 Manday **Assigned Member(s):** Kok Kiong , Iffah **Due Date:** 29th May
Dashboard **Total Effort Required:** 5 Mandays			**Task:** Research use of chartist, datatables **Effort Required:** 1 Manday **Assigned Members(s):** All **Due Date:** 30th May
			Task: Develop Graphs and Stats board **Effort Required:** 4 Manday **Assigned Member(s):** Kok Kiong, Iffah **Due Date:** 1st June

Login **Total Effort Required: 4** Mandays			**Task:** Research use of LDAP server **Effort Required:** 1 Manday **Assigned Members(s):** Shaun **Due Date:** 1st June
			Task: Develop Login using Active Directory **Effort Required:** 3 Manday **Assigned Member(s):** Shaun **Due Date:** 1st June

16. Scrum Documents

16.1 Sprint 1 kanban Chart

Everyone	Shaun	Brandon
Darien	Kok Kiong	Iffah
Tasks	In Progress	Done
Finalise Wireframes	Sketch Wireframes	Research on Database

Create database in Microsoft SQL	Improve wireframes based on client feedback	Research on Company
Link Database	Phase one Report	Research on Hardware and software
Create dummy data		Project Plan
Presentation Slides for Phase one		Meet up with client
		Draft 1 wireframes with client
		Research Business Process
		Design ERD
		Improve ERD based on Client Feedback
		Finalise ERD
		Product backlog
		Design Business

		Process

16.2 Sprint 2 kanban chart

Everyone	Shaun	Brandon
Darien	Kok Kiong	Iffah

Tasks	In Progress	Done
Create Microsoft SQL Database	Finalise Wireframes	Sketch Wireframes
Link Database	Presentation Slides for Phase one report	
Code Login Page	Phase one Report	
Testing and Debugging	Improve Wireframes based on client feedback	
Create Shared View		
Presentation Rehearsal		

17. Burndown Charts

17.1 Sprint 01

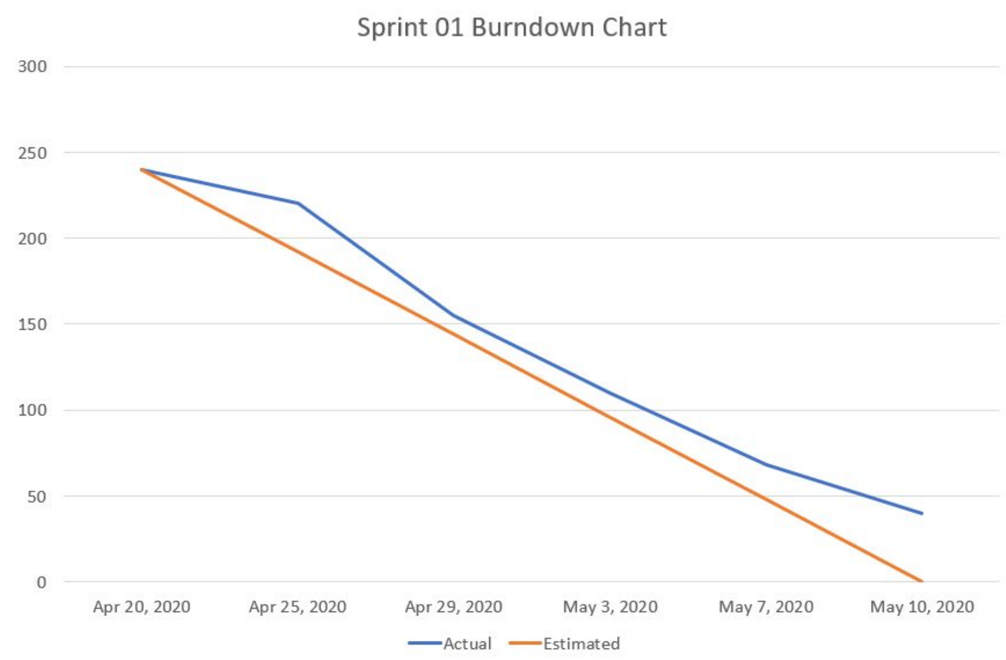


Figure 16 - burndown chart for sprint 1

Sprint 1 lasts from the 20th of April to the 10th of May. We have assigned a total of 240 man hours to the whole of sprint 1. From the chart we were behind on the time and schedule planned however we managed to pick up a little bit of speed from the 3rd of May to the 29th of April. Overall we still managed to follow our planned duration and tasks for sprint 1.

17.2 Sprint 02

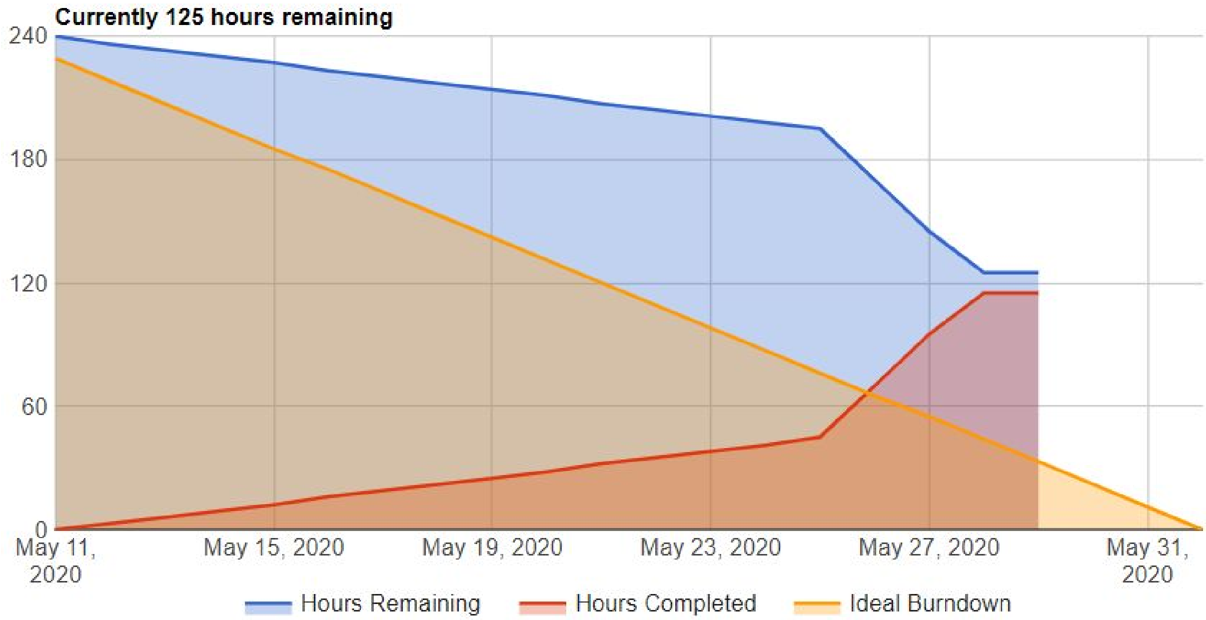


Figure 17- burndown chart for sprint 2

Sprint 2 lasts from 11th of may to the 31st of may. We have assigned a total of 230 man hours for sprint 2. From the chart we were behind schedule the first 3 quarters of the sprint due to the heavy workload of submissions back to back. Towards the end of the sprint, we managed to catch up with our overall scheduled timeline and duration.

18. Minutes of Meetings

18.1 Meeting with Mr Daryl Lim - Week 0, 8 April 2020

Date : 8 April 2020

Time : 4pm

Venue : Online – MS Teams

Present : Shaun, Brandon, Kok Kiong, Darien, Iffah

Minuted by : Iffah

Vetted by : -

	Items Discussed	**Action By**
1.	Personal ● Profile photo in MS teams must be professional ● During the online meetings, on your camera, it is a video call, not a voice call ● Be self-disciplined ● Have good time management	Everyone
2.	Roles and Responsibility ● Leader ○ Manage the team ○ Has a heavy responsibility ● At least 3 main (hardcore?) coders	Everyone
3.	Softwares used ● Visual Studio ● Microsoft SQL ● Adobe XD	Everyone
4.	Tips (to get good grades) ● Don’t ask the teacher [for answers] ● Tell him what we are doing instead of him telling us what to do ● Take initiative	Everyone

5.	Tips (when meeting the client) ● Discuss among each other to come up with questions to ask client ● Analyze the current situation ○ How do they resolve the situation currently ○ Why do they need this [project] ○ How does it help them ● Find out who is the technical person to ask	Everyone
6.	Next meeting will be on **16 April 2020**	

18.2 Meeting with Mr Daryl Lim - Week 0, 16 April 2020

Date : 16 April 2020

Time : 4pm

Venue : Online – MS Teams

Present : Shaun, Brandon, Kok Kiong, Darien, Iffah

Minuted by : Iffah

Vetted by : -

	Items Discussed	**Action By**
1.	Meeting with client ● It is on zoom @ 3pm ● Change the background to hide your (messy) room ● Do it at a place in the house that does not have much noise ● Make a good first impression ○ Dress well (formal outfit à polo/collared shirt) ○ Put on a good show ○ Don’t be afraid to ask questions	Everyone
2.	About Assignment ● if you think it is too simple, then following the assignment brief is clearly not good enough ○ Add more things ● Work as hard as possible in the beginning!!	Everyone

3.	Work Load
	
	• Business is NOT the same as Technical
	• Use Rojak method; or
	    ○ Everyone work a bit on everything
	• Split Method
	    ○ The team splits into 2 smaller groups
	        ■ e.g. 2 business & 3 technical
	• With the team's current division, the work load could be like:
	    ○ Front end – business
	    ○ Back end - technical
		Everyone

4.	Next meeting will be on **20 April 2020**	

18.3 Meeting with Ang Mo Kio - Thye Hua Kwan Hospital - Week 1, 20 April 2020

Date : 20 April 2020

Time : 3pm

Venue : Online – Zoom & MS Teams

Present : Shaun, Brandon, Kok Kiong, Darien, Iffah

Minuted by : Iffah

Vetted by : -

	Items Discussed	**Action By**
1.	Q2. Why is a web-based application currently required ? Not looking at web-based • The application is not web based, but it is Intranet ○ Their work laptops are not connected to the internet	

2.	Q5. Page 1 Feature 1, How to calculate turnaround time? TAT = Turnaround time = Date of Activation of Job and Date of Acceptance ● e.g. if "Agnes/Jasmine" is stated, Agnus is the main and Jasmine is the backup ● Notifications ○ Maybe only the main will receive the notification, but if the team wants, it can be sent to the backup too ○ Ideal: if the system knows that the main is not available, the notification will be sent to the backups instead	
3.	Q9. Page 1 Feature 2, What do you mean by maintain JD of each position ? i.e. Does that mean to simply record, or should the system be allowed to change it? Allow HRBP to key in the JD of each position ● Make it editable ● Able to see job descriptions of each role ● Used only by the HR department ● Retrieve by function	
4.	Q12. Page 1 Feature 4, In what format of the resume file and size. Can upload PDF/ Word file and can be purged out ● Can house at least 6 months and up to 12 months ● If there is no space, the first priority to purge out are the ones who are already hired	
5.	Q13. Page 1 Feature 4, Limitations for the available fields. i.e. length of text, acceptable characters ? To be advised by IT team ● 3 lines of words & 300 characters	

6.	Q14. Page 1 Feature 5, What does positions that are vacant for more than 2 months mean? Not necessary if there is colour code differentiation Does that mean that all HR person in-charge have a position they oversee? Yes
	
	• More than 1 position
	• Traffic light system
	  ○ Set TAT
	    ■ E.g.
	    ■ 0 – 30 = Green (everything is fine)
	    ■ 31 – 45 = Amber/Yellow (Warning)
	    ■ > 46 = Red (Too much time spent/struggling)	

7.	Q17. Page 1 Feature 5, Example of Statistics and data visuals ?
	
	• Method 1: Direct Hire
	  ○ Ad (e.g. from JobStreet) says $70, then it is $70
	• Method 2:
	  ○ E.g. pay is $6000/mth, but * 13 months for annum, then * 15% to get $11,700	

8.	Q19. Is there a division between Administrator login and employee login ? Need just User Login • Login is just for HR	
9.	Q20. Does the HR department have different groups ? Yes. We have L & D Team and HR Management Team • L & D = Learning and Development ○ But we are just focusing on HR	

10.	Q21. What type of report is required to be generated for management ?
	
	• Evolution for dashboard
	  ○ TAT
	  ○ No. of openings
	  ○ Graphs & stats	

11.	Other Features ● Different job, Different TAT ● Build a flowchart ● 1 position to 10 people --> how do we monitor for closure of each one? (TAT) ● Audit trail (changes last made by __ at __)	

12.	Roles and Responsibility
	
	● Front end
	  ○ Business --> do the flowchart
	● Back end
	  ○ Constantly think about technicality
	  ○ Think about the details
		Front and Back end (Everyone)

13.	What we can do right now ● Research current ATS (Attendance Tracking System) ● Primary & Secondary research ● Look at project guide for more ideas	Everyone
	Next meeting will be on **28 April 2020**	

18.4 Meeting with Mr Daryl Lim - Week 2, 28 April 2020

Date : 28 April 2020

Time : 12.30pm

Venue : Online – MS Teams

Present : Shaun, Brandon, Darien, Iffah

Minuted by : Iffah

Vetted by : -

	<u>**Items Discussed**</u>	**Action By**

1.	Funding ● Do we need to fund anything? ○ e.g. server ■ Do we need a web server to test our project?	
2.	Getting Help ● Do we have any lecturers and/or friends that we can ask for help?	
3.	Coursera ● Do we need Coursera for our project?	
4.	Reminders ● Peer Assessment by 5th June ● Weekly monitoring report by Sunday 2359 ● Record Minutes of meeting and funding req by Wednesday (29/04/2020)	Everyone
5.	Next meeting will be on **1 May 2020**	

18.5 Meeting with Mr Daryl Lim - Week 3, 5 May 2020

Date : Tuesday, 5 May 2020

Time : 12.30pm

Venue : Online – MS Teams

Present :

Shaun	Leader
Brandon	Assistant Leader
Kok Kiong	Member

Darien	Member
Iffah	Member
Mr Daryl	Lecturer

Minuted by : Iffah

Vetted by : -

	Items Discussed	**Action By**
1.	Minutes By (explained on how it works) ● Action by: the person who will do the thing ● Don't change the previous ones ● To see how much you improve in doing ● Current ones can be improved a lot	Iffah
2.	Weekly Report ● Graded 50% on group and 50% individually ● Evidence work done by team & by team & individual ● 1 person hold accountable of tasks ○ Take responsibility ○ e.g. ERD – 2 people but 1 person take charge ○ no freerides, no carries ● possible to see who does what? ○ e.g. ERD diagram, do together or do individually? (give credits) ○ assess as a whole or individually? ○ Indicate who do what	Everyone

<table>
<tr><td>3.</td><td>Folder(s) for Mr Daryl

Organize files & folders professionally

Minutes of meeting
e.g. 280420 (current one) looks confusing, write it like Mins By_Meeting with (person)_ DD/MM/YYYY

Weekly monitoring report

Don’t write reports at the end/last minute
Start now!!

Posters, promotional video, etc, can wait
</td><td>Everyone</td></tr>
<tr><td>4.</td><td>Deliverables

Take it seriously!
Want to see people speak up

Comment, ask questions
Peer assessment
Speak up and do things

Project always has risks
Good quality vs bad quality
Time is fixed (in this case) and the time for the project cannot be extended
Scope & quantity & time
Project management is graded 10%-20%
Figure out the project objective by Week 3

Can change the objective in the future, but inform the supervisor first
If the change is very minor, you can overwrite it without informing
If the change is major, DO NOT overwrite
Archive & create another file with timestamp

</td><td>Everyone</td></tr>
<tr><td>5.</td><td>Aim (Goal) of project and objectives

Optional

Very generic and can be ignored; or
Write down 1 statement for this and everyone must remember [the main goal]

Goal: generic
Objective: specific
Develop: create app
Evaluate: how useful it is
List down possible objectives
SMART guideline
</td><td>Everyone</td></tr>
</table>

<table>
<tr><td>6.</td><td>Deliverables

Minutes
Weekly report
Wireframes
Report
Schedule
Presentation
Etc.
</td><td>Everyone</td></tr>
<tr><td>7.</td><td>Resources required (HW, SW etc)

In the real world, there would be a budget, but this is an FYP, so there is no budget. Instead, it is HW (Hardware) and SW (Software)
</td><td>-</td></tr>
<tr><td>8.</td><td>Schedule Plan

Shaun’s current Gantt Chart is fine
Not meant for leaders only, it is for everyone
</td><td>Shaun</td></tr>
<tr><td>9.</td><td>Risk Management

What are the possible risks of the project?
Have or don’t have risk?
Some can be avoided
E.g. weekly backups
If it happens, how do you avoid/fix it?
Rank them

Likeliness (how likely it will happen)

1 – unlikely
2 – unlikely
3 – very likely

Impact (If it occurred, how impactful is it?)

1 – insignificant
3 – okay / not to bad / neutral
5 – very impactful

Risk score: likeliness * impact

Some can’t be avoided, so go to plan B
Computer crash --> no backup à just redo from scratch
Top 10 risks --> monitor weekly
</td><td>Everyone</td></tr>
</table>

10.	Ground Rules and Routines for team
	
	● Time to plan down the rules and routines
	● Weekly Meetings can be a routine too
	    ○ e.g. when there are meetings, make sure everyone is punctual
	    ○ e.g. Iffah minute taking
	        ■ when she's unwell and absent, Darien would do it instead
	    ○ e.g. upload Weekly Monitoring Report by Monday
		Everyone

11.	Team roles and responsibilities
	
	● Who do what
	    ○ Leader and Assistant leader lead the team
	    ○ e.g. Programmer does technical and development work
		Everyone

12.	Schedule plan ● The plan is a living document ● It is dynamic and may change along the way ○ As weeks go by, we may have to amend the schedule	Everyone

13.	'Work Breakdown Structures' technique
	
	● To make it meaningful, think of tasks that have to be done.
	● Tasks
	    ○ Quite clear
	    ○ Comprehensive
	    ○ Detailed
	    ○ If the tasks are detailed enough, we can be confident to estimate the time of completion
	    ○ If the tasks is **not** detailed however, we can break the task into smaller tasks
		Everyone

14.	Next meeting will be on **2.00pm Wednesday, 6 May 2020, Zoom**	-

18.6 Meeting with Ang Mo Kio - Thye Hua Kwan Hospital - Week 3, 6 May 2020

Date : Wednesday, 6 May 2020

Time : 2pm

Venue : Online – MS Teams & Zoom

Present :

Shaun	Leader
Brandon	Assistant Leader
Kok Kiong	Member
Darien	Member
Iffah	Member
Agnes Tay	Client
HR Team	Client

Minuted by : Iffah

Vetted by : -

	Items Discussed	**Action By**

1.	Qn1. What is the admin login ? Previous meeting mentioned only a single type of login
	
	● Used by HR Team only
	● Maximum used by only 10-11 people
	    ○ Whoever is in the list has access
	● Admin Login
	    ○ Can control how many people and who are allowed access to this project
	        ■ User list
	        ■ Coding
	        ■ Auditing
		-

<table>
<tr><td>2.</td><td>Qn3. Will the HOD have access to the System

HOD no access but alerted by email

E.g. to accept interview session

Key in the email & attach a file

If possible, autofill the names of interviewees and HRBP HR managers
E.g. an online form (file/link)

Make it editable so that they can change the questions
Name, position, date, interviewer are auto-filled

HOD fill up interview evaluation forms and it takes them forever to submit
Can calculate/grade the interviewees
If passed, trigger the system to send the user a prompt to fill in a form.

</td><td>-</td></tr>
<tr><td>3.</td><td>Qn4. How does each HOD furnish the requisition and support document to HR? how?

Doing it offline at the moment
Don’t add it yet
</td><td>-</td></tr>
<tr><td>4.</td><td>Qn6. Does the Interview Evaluation Forms only apply to certain grades? e.g. senior manager and above

For everyone of all grades
</td><td>-</td></tr>
</table>

5.

Qn9. How many kinds of functions are there?

- HRBP open position(s) (in the last week)
    - Show ratio (ideal)
    - Average per head (20.5, overloaded, underloaded etc.)
- Motivational features
    - Highlight who is doing the best
        - E.g. place a star beside their name when
            - they have the fastest TAT
            - most position closed
    - to make the system more fun
- Upcoming Interview
    - CVs sent
    - Then phone call for interview
    - Hiring managers are not the ones who call them, it's the HRBP helpers
    - Template can be used to be sent to the interviewee
    - Their reply can be used to confirm their meeting time
- Auto Generated Email
    - Generate an email to say "Thank you for your time, we will keep you in our database" once the candidate has done the interview and has been rejected, but also for when they got accepted
        - Research on an interview template & a acceptance & rejection template
        - After the HOD shortlist, 7 of 10 selected, 3 of those non selected. Those could be sent template rejection letters.
        - Interviewed or shortlisted interviewees will be stored in their database
    - Editable
    - Basic
    - No need to hardcode

6.	Front End
	
	- Recruitment portal
	  - Sign in login page
	- Dashboard
	  - New hires
	  - Put profile pictures? What if the person has no photo?
	- Announcement
	  - "20 Days Left" change to "20 Days has lapsed"
	- Sign In Page
	  - Why is the sign in part so big? Haha
	- Reports
	  - To contain information about:
	    - Closed positions
	    - Hired candidates
	    - Recruiters
	    - Departments
	- Calendar
	  - To contain:
	    - Email
	    - Contact number
	- Candidate
	  - previously known as Past Hires
	  - Is its own database
	  - To contain:
	    - Attach CV
	    - Phone Number
	    - Email Address
	    - Status
	      - Shortlisted
	      - Rejected
	      - Blacklist (sotong/shrimp ?)
	- Profile
	  - No need
	  - But could have profiles for current hires (birthdays etc.)
	- Calendar/Create Interview Form
	  - Might need a calendar, not sure…
	  - Nicer icon (said it looks like a house)
	  - Change "event name" to "activity name"
	  - To contain:
	    - Who are the interviewer(s)
	    - Hiring manager name
	    - Contact information
	  - Go to a specific date immediately (e.g. go to June 2022 from May 2020)
		Iffah and Kok Kiong

	○ If there is an interview scheduled, the system will send out an email to the candidate containing information of: ■ When the interview will take place ■ Where it will take place ■ With who the interview will take place ○ Replicating previous schedule forms ■ Search a name and the information can be auto filled ○ Dropdown to send contract signing, interview, etc.	
7.	Site Navigation (that they have stated) ● Dashboard ● Job requisition ● Candidates (includes Past Hires) ● Interview/Calendar ● Reports	Everyone
8.	Next meeting will be on **12.30pm Tuesday, 12 May 2020, MS Teams**	-

18.7 Meeting with Mr Daryl Lim - Week 4, 12 May 2020

Date : Tuesday, 12 May 2020

Time : 12.30pm

Venue : Online – MS Teams

Present :

Mr Daryl	Lecturer
Shaun	Leader
Brandon	Assistant Leader
Kok Kiong	Member
Darien	Member

Iffah	Member

Minuted by : Iffah

Vetted by : -

	Items Discussed	**Action By**

<table>
<tr>
<td>1.</td>
<td>

Progress

- Front End (by Iffah & Kok Kiong)
  - Split the work into two and did their own parts
  - Iffah combined all the wireframes to make the prototype (v.1)
- Back End
  - ERD diagram (by Brandon & Darien)
    - Currently it is the 3rd draft
      - They each did their own version (v.1),
      - combined it (v.2),
      - get feedback from the IT department and made respective changes (v.3)
      - The feedback:
        - Generally, it could be a lot better
        - the tables would need to have more attributes
        - some tables are not necessary
        - could make it more efficient
- Report Documents (by Shaun)
  - SCRUM
  - Burn down chart
  - Man effort
  - Backlog

The progress that has been made in the previous week has been separated into 3 parts, Front End, Back End, and the Report Documents. Iffah & Kok Kiong (Front End) have done their part by doing the wireframes and completing their first draft of prototype. Brandon & Darien (Back End) has finished their third draft of the ERD diagram, with the help of the IT department from our client. Shaun (Report Documents) has done the other important work for the team by starting on documents such as the burn down chart and the backlog.

</td>
<td>-</td>
</tr>
</table>

2.	Current Agenda ● Send an email before the meeting about what we are going to discuss about Send an email out to the clients to inform them about what will the meeting be about so that they will know if they need to attend the meeting or not	Shaun

3.	Project Concerns
	
	● Calendar feature
	    ○ Client interested, but we were told that it is too advanced for us
	● Number of features
	    ○ Afraid that the client might not be satisfied with the number; or
	    ○ We over planned and gave too much
	
	Our current project concerns are if we should include the Calendar feature in our project, which we have been told that it is difficult to do, and if the client is satisfied with the number of features we currently have.
		-

4.	Student guide
	
	● "Approach & Deliverables" vs "Research process & Results"
	    ○ "What you use" vs "what are your results"
	● · Why do we need to do research?
	    ○ Some things are not taught in class
	        ■ What is Active Directory?
	        ■ How to do emails on the Internet?
	    ○ Information about current available ATS (Applicant Tracking System)
	    ○ Inspiration & ideas
	    ○ Features available that are needed
	
	The Student Guide provided has stated that we note down on what we use to research and the results of the said research. We should also take note on why we do the research.
		-

<table>
<tr><td>5.</td><td>Peer Assessment
SPA factor
What other people perceive of your working attitude
If you can hit a score of ‘1.0’ ± 0.1, it’s good enough
Peer Assessment will show how you act whilst working on this project and your teammates will rate you based on that. Hence if you want a good score, don’t leech off of your teammates.</td><td>-</td></tr>
<tr><td>6.</td><td>Naming Convention
The organization of the folder is bad
The naming of the files and folders are bad too
Remove the “To Be Checked” folder
“Meeting Minutes” change to “Minutes of Meeting”
“Weekly Report” change to “Weekly Monitoring Report”
Change the document names from “Week4” to e.g. “Weekly Monitoring Report_11 May 2020”
Our current naming of folders and files in the MS Teams – Files is bad, very bad. We need to remove the “To Be Checked” folder we had originally made for convenience, but it was deemed unnecessary, hence it will be deleted.</td><td>Iffah</td></tr>
</table>

7.	Minutes of Meeting
	
	● Action By
	    ○ **X** “Everyone” → put 1 person’s name instead
	        ■ To take responsibility
	    ○ “everyone” = “[blank]” (no name)
	● · Items Discussed
	    ○ Bullet points
	        ■ Because it is a list
	    ○ Paragraph
	        ■ Summary of the bullet points
	        ■ Essentials
	
	This is just a further elaboration of what the Minutes of Meeting has to contain. The “Items Discussed” column consists of what has been discussed in the meeting. It has to contain the list of items in bullet point form and the summary of the item written in a paragraph, just like this passage.
	
	The “Action By” column has to contain either one or no name at all. It will show who is responsible for the things listed in “Items Discussed”. If no name is stated, that means it is directed to everyone.
		Iffah

8.	Gantt Chart
	
	● Used to schedule the plans and the amount of time taken
	        ■ Once we have completed the planning, we use this to monitor the schedule.
	● What is wrong (with our current version)?
	        ■ We only showed a Gantt Chart filled with only completed tasks.
	        ■ Never state the future appointed tasks
	        ■ It was more of a report than a plan
	● Only present high level schedule
	
	A Gantt Chart is used to schedule our plans and to state how much time we have taken to complete the said task. However, our current Gantt Chart is very wrong. It seemed more like a report than a plan when we only stated the tasks that we have completed with no future appointed tasks in sight.
		Shaun

9.	Aims & Objectives ● Separate from Risk Assessment & Ground Rules ● Make a LIST of objectives --> all we gave was the aim With our current document of Aims & Objectives, we should separate it from the Risk Assessments and Ground Rules. We should also give a list of the objectives, we only gave an aim.	Shaun

10.	Deliverables
	
	● All wrong
	    ○ e.g.
	        ■ Phase 1 report
	        ■ Phase 2 report
	        ■ Phase 1 presentation
	        ■ Phase 2 presentation
	        ■ Promotional materials
	
	Current Deliverables are wrong. Examples of what are Deliverables are stated as above.
		Shaun

11.	Risk Assessment
	
	● X Low, Medium, High
	● X Possible, Likely, Unlikely
	● ✔1,2,3,4,5
	● What is “Risk Level” ??
	        ■ All not related to our project at all
	        ■ Very generic
	
	Our Risk Assessment is wrong. We should be using “1-3” for Likeliness, 1 being “Unlikely” and 3 being “Very Likely”, and “1-5” for Impact, 1 being “insignificant” and 5 being “Very Impactful”
		Shaun

12.	Ground Rules ● Separated document Put Ground Rules in a separate document	Shaun

13.	Improvements ● Expected to see modification be made ● If we want to see the improvements during a major change, we can make a file that consists of our reports and put a big tick beside the section to indicate that it has been improved. With how our team is currently, we are very expected to make modifications and improvements in the future. To see those improvements clearly, we should make a file that consists of work we've done and when a major (good) change has been made, we can put a big tick (✔) to indicate that that section has been improved.	-
14.	Next meeting will be on **3pm Friday, 15 May 2020, Zoom**	-

18.8 Meeting with Ang Mo Kio - Thye Hua Kwan Hospital - Week 4, 15 May 2020

Date : Friday, 15 May 2020

Time : 2.30pm

Venue : Online – Zoom

Present :

Agnes Tay	Client
HR Team	Client
Zhirong	Client (IT Department)
Shaun	Leader
Brandon	Assistant Leader
Kok Kiong	Member
Darien	Member

Iffah	Member

Minuted by : Iffah

Vetted by : -

	Items Discussed	Action By

1.	Q1: Dashboard should it be user specific or shows all hiring manager's data
	
	MIS --> IT department
	
	EL --> HR representative
	
	● MIS & EL: All logged in HR should be able to see the same information and data
	● Dynamic dashboard
	  ○ Cannot change what to see
	  ○ Standard graphs (bar graph, line graph, pie chart etc.)
	    ■ Based on existing data
	    ■ Slowly build up the graphs
	  ○ Cannot change TAT as and when we want
	● Graphs:
	  ○ More efficient = show all the vacancies from 1 job = 1 row; instead of
	  ○ 10 vacancies = 10 rows (but if no choice then inform them)
	  ○ e.g. Medical Service --> bar chart
	    ■ a sub department
	    ■ 1 HOD = 1 chart
	    ■ On vacancies <u>available</u>
	    ■ But HR has no subsections
	  ○ As long as can see trending or see data in graphical form
	    ■ 1 glance can see:
	      ● How many vacancies open at one time
	      ● How many vacancies managed by the department
	
	Dashboard should show the standard graphs such as bar graphs, line graphs, pie charts etc. This cannot be changed by the user and all the users logged in would see the exact same thing. They also wish to see and read the data easily.
	
	The graphs should show all the vacancies from 1 job in 1 row, instead of being shown separately (e.g. 10 vacancies shown on 10 rows). But if we do not have any other choice but to do the latter option, then we should at least inform them first before coding it.
		-

2.	Q2: Job Description page. What does trigger start recruitment mean? EL: Trigger recruitment means a new job opening and to kick start the recruitment process. The job description page…it would be the library where we store the job ads and the content has to be editable. As mentioned previously, this may be linked to a directory in our share drive? MIS to comment on the feasibility of this ● Go into the system to key in ○ At the moment, they are doing recruitment externally MIS: Not sure and does the budget go under job or recruitment? ● Budget ○ just cost per hire ■ cost of hiring the person Trigger recruitment is to make a new job opening and start the recruitment process. Currently they are doing the recruiting externally. The budget refers to only the cost to hire someone.	-

3.	Q4: Will there be someone to enter the candidates page info manually? MIS: As hospitals are internet separated and current infrastructure do not support both internet and intranet together. Alternative, the below is my suggestion 1. HR has to enter everything. 2. HR has to enter partially. Do some macro excel and email candidates to fill up accordingly. Allow upload of excel and update the data into the system. ● Ideas: ○ Excel file --> fill in --> then upload into the system (* preferred) ■ Filled in the HR; or ■ Filled in by the candidate (with the columns fixed so they ONLY have to input their information) ● The rows have unique ID ● All the cells will be blank when sent to the candidate ○ Manually We are suggested to enter the data into the candidates page either by having the HR to manually input everything into it or for them to only input it partially and have the candidates input the other half through some macro excel and email system before uploading the excel into the system.	-

4.	Q5: Interview evaluation trigger
	
	MIS: From what I understand I think there should be some button to trigger an email to the hire managers after the interview. The email's content should include URL that open up the evaluation form. (Like feedback form, no login is required). Reminder email is to send out daily until all hire managers evaluated.
	
	EL: From the tracker page, the email should be triggered once we change the status to "interviewed". Not sure what format the evaluation form should be though. But definitely must be editable for future changes
	
	● Emails received by interviewees per day
	  ○ Not more than 2
	    ■ But the nursing department has a mass interview
	      ● 5-6 candidates per day
	● Our idea:
	  ○ End of the day, send the interview forms to the interviewees
	  ○ Problems:
	    ■ If the interviewees submit the form back, it immediately goes to the database
	    ■ But scared if someone decides to spam the emails and crashes the server
	    ■ Therefore the email has been received, the status becomes complete (binary: true false)
	    ■ Once per interviewee
	● Interviews
	  ○ E.g Nursing department
	    ■ 4 interviewers
	      ● Inclusive of HR
	    ■ Candidates would know the names of the interviewers beforehand
	
	After the interview, there would be an email sent to the hiring managers once the status of the candidate had been changed to "interviewed". The email would contain a URL to an evaluation form (similar to a feedback form) that does not require a login. A reminder is sent everyday until all the hiring managers have been evaluated.
	
	By the end of the day, interview forms will be sent to the interviewees. The number of emails received by the interviewees per day is around 2, depending on how many people were interviewed that day. However, the nursing department has mass interviews which would consist of about 5-6 candidates.
		-

	We thought of a problem of what if a candidate decides to spam emails to the system and crashes the server? Our solution is to use the binary(true false) function so that it limits the candidate to be able to only send 1 email. (Once they send the first email, the status will be changed from "false" to "true" and the candidate will not be able to send anymore emails after that)	

5.	Q7: How to make the form editable? MIS: It is quite hard to make the whole evaluation form dynamic. I would suggest that only the evaluation questions and answers are editable and the remaining content should be static. Which means HR is able to add/update/delete questions with 5 different points (Dropdown or radio button). If the question status is active, these questions will be added into the form. For templates, please look into rich text fields. ● Form dynamic ○ Any criteria & question ○ What if we wanted to change everything? ■ “redo lor” ● Which forms are needed to be printed? ○ Reports ○ Interview evaluation ○ Dashboard ○ Candidate Info ○ Candidate summary sheet (CSS) The client wanted us to have a feature where the forms that we are supposed to send to the candidate(s) to be editable, but we were also told by the IT department that it would be difficult, and are suggested to only make the questions and answers part of the form to be editable, the remaining content will be static. This will allow the HR to be able to add, update, and delete questions by using dropdowns and radio buttons. If the question status is active, these questions will be added into the form. "What if we want to change the entire form?" was asked by one of the clients. We have no other choice but to redo the entire form.. The forms that need to be printed are the reports, interview evaluation, dashboard, candidate information, and candidate summary sheet.	-

6.	Prototype - Dashboard
	
	● "what is "Highest Closer" ?"
	● Take out "fastest TAT"?
	● More graphs
	    ○ There are about 4 HRBPs
	    ○ Show in table format
	        ■ Avg TAT of HRBP
	        ■ Vacancies
	        ■ TAT
	        ■ Cost per hire
	    ○ Each department bar chart is divided
	● Announcement still needed? (no)
	    ○ It's hard to do
	    ○ Every job shows 1 position each?
	    ○ Will it go to another page? Or stay at the announcement at the dashboard?
	    ○ Show how many positions are open/closed
	
	For the Dashboard page, we would probably remove the "Highest Closer" and "Fastest TAT" part. We should also show more graphs that would show the number of vacancies, the TAT, and the cost per hire. If possible show the average TAT of HRBP too.
	
	We might also remove the announcement page too since we were told by the IT department that it will be hard to do.
		Kok Kiong

7.	Prototype – Job Description
	
	- Change name to “Job Listing”
	- How to maintain?
	  ○ Key in the info
	  ○ Hope to allow to copy & paste form word document
	- Filter function
	  ○ By Job & HRBP
	- Add new job
	  ○ New page
	    ■ Job description
	    ■ Job status
	    ■ No. of vacancies
	    ■ Costing
	- List current active jobs
	  ○ Show the closed ones too
	- Action column
	  ○ Go into the job
	  ○ View/edit the job
	
	We were told to change the name from "Job Description" to "Job Listing".
	
	"How are [they] going to maintain [the job descriptions]?" They have to key in the information manually, but they hope that copy and paste from the document will be allowed.
	
	A filter function will be added to easily find the job listings. It will be filtered by job and/or HRBP.
	
	The function "add new job" will be opened in a new page and will consist of the job description, job status, number of vacancies available, and the costing.
	
	The list of jobs will show the active and the closed ones.An action column will be added in the list of jobs and will allow the user to go into the job and view or edit the job.
		Kok Kiong

<table>
<tr>
<td>8.</td>
<td>
· Candidate

“Not scheduled” ?
Haven’t set a date for interview
“Reject” ?
Only after interview
Maybe need “not shortlisted” by hiring manager
Show all active candidates
Rather candidates that are shortlisted
Show active/not rejected/not blacklisted candidates
“Remarks” column
If they want to edit the candidate, it leads them to another page?
Don’t show other candidates while editing
No multi-delete
Filter out who you want to see
Blacklisted, shortlisted etc.
Add candidate
Another page
Point to which job to add candidate (candidate --> job); or
Directly add candidate from the job (job --> candidate)
Actions
View
View <u>only</u>
Edit function
Delete function
Trigger evaluation function
Update
Standard excel template
HR key in; or
Ask candidate to key in
Only for certain fields
The column titles will be fixed
Then the data will be updated automatically into the system
“Candidate profile”
Contains:
Candidate info
Interview info
Who are the interviewers
When was the interview
Remarks

</td>
<td>Kok Kiong</td>
</tr>
</table>

	We might remove the "not scheduled" and "rejected" options from the candidate's status since they only want to see all the active candidates, or rather all the candidates who were shortlisted. If they also want to see the other candidates who were not shortlisted, we can add a filter function where they could choose if they want to see the other candidates who are, for example, blacklisted. Add a remarks column at the end of the candidates list. If the user wants to edit the candidate's information, it will lead them to another page since the clients have stated that they do not want to see the other candidates while editing. The multi-delete function will be removed because it is unnecessary. If the user wants to add a candidate, it will lead them to another page where the user has to point which job the candidate will be added to, or they can go to the job itself and add the candidate directly from there instead. The Actions column will consist of View function and Update function. The View function will allow the user to only view the candidate's information. There will be buttons available below to allow the user to edit, delete, and even trigger the evaluation. In the standard excel template, the HR has to key in the information. We have an idea that we could send a partially completed file, with some fixed cells, to the candidate and ask them to fill in the necessary information. The data will then be updated automatically into the system. The candidate will have a profile which will contain the candidate's info, the interview info, such as who were the interviewers, when was the interview, and the remarks.	

9.	· Report ● "Unprofessional" ● "Currently weird" ● In table format ● Date range ● If don't want to create a lot of sub-options, ○ Create a dropdown for each report ● Select info that they want ○ Generate to excel ● Data in the system ○ Downloadable to excel ■ There is a library where you can download the report ● ASP have ■ Just google it The current Report prototype looked unprofessional and weird. It should have been displayed in a table format with a date range. If we don't want to create a lot of sub-options, we can create a dropdown for each report. They would also like the function where they can select the info they want and generate it to excel. In addition, they want the data in the system to be downloadable to excel. There is a library available to assist us in this. ASP has it, just google it.	Iffah

10.	· Admin
	● User
	    ○ access
	● Hiring manager
	        ■ list of hiring managers
	● Code value
	    ○ dropdown
	        ■ e.g. search "Gender"
	        ■ retrieves all code ID for gender
	    ○ some codes cannot (and **<u>should not</u>** be removed
	        ■ but can add more
	● Templates
	● Audit**
	    ○ there is standard library, just google it
	    ○ Log in AD successful
	    ○ Check list in User
	    ○ Their name is there
	        ■ Allowed to go in
	    ○ Their name is **<u>not</u>** there
	        ■ Out
	
	In the Admin page, it will consist of a User page, Hiring Manager page, Code Value, Templates page, and Audit. The User page will be where the admin controls the access of the users. The Hiring Manager page will have the list of the Hiring Managers. The Code Value will have a dropdown of codes. An example will be when you search for "Gender", the system will then retrieve all code IDs for "Gender". However, some codes can not, and should not, be removed, but we can add more if needed.
	
	Audit will also control who will be able to have access in the system. It will start where they will log into the Active Directory successfully. It will then check if their name is listed in the system. If it is, then they are allowed in. If not, then they stay out.
		Iffah & Kok Kiong

11.	Prototype – Other information
	
	- Their logo above the dashboard
	- Blob
	    ○ To store pdf/files
	    ○ Find out size limitation
	- Next time just sketch the prototype, because the current one not nice
	
	Additional information: we forgot to put their logo into the wireframes, so in the next prototype we should include it in the top left corner, above the dashboard.
	
	We can use Blob to assist us in this project to store pdf and files. We can also use it to find out the size limitation.
	
	Also, next time we show a prototype, doing a sketch is enough because the current one is not nice.
		-

12.	ERD
	
	● Hiring manager
	    ○ Have their own table
	        ■ Can create another table
	        ■ Can just copy another table
	● Candidate
	    ○ e.g. status ID
	        ■ part of the code
	        ■ can be part of code type for easy reference
	    ○ e.g. status
	        ■ code description
	● Attachment
	    ○ all files
	    ○ foreign key
	        ■ if the table needs an attachment, the attachment is then a foreign key
	
	For the ERD, Hiring Managers can have their own table. We can create another table if we want to, but it would be easier to just copy an existing table.
	
	Candidate table has status ID, which is part of a code value and can be part of a code type for easy reference. The status will then be the code description.
	
	If the table needs an "attachment", then the attachment will be the foreign key.
		Brandon

13.	Next meeting ● Final prototype ● Prepare in PowerPoint In the next meeting with the clients, we will have to prepare the final prototype and prepare it in a PowerPoint slide.	-
14.	Next meeting will be on **12.30pm Tuesday, 19 May 2020, MS Teams**	-

18.9 Meeting with Mr Daryl Lim - Week 5, 19 May 2020

Date : Tuesday, 19 May 2020

Time : 12.30pm

Venue : Online – MS Teams

Meeting Objective: To update Mr Daryl, our supervisor, on our progress from Week 4.

Present :

Mr Daryl Lim	Senior Lecturer
Shaun Cheong Jia Yong	Leader
Brandon Lim Jin Zheng	Assistant Leader
Tan Kok Kiong	Member
Darien Lim Guo Dong	Member
Iffah Irsalina Binte Mohd Azmi	Member

Minuted by : Iffah Irsalina Binte Mohd Azmi

Vetted by : Brandon Lim Jin Zheng

	<u>Items Discussed</u>	**Action By**

1.	Feedback on our progress
	
	● Progress is slow, but can see the contribution
	● Our grades (as of now) would be a C
	    ○ Even with Mr Daryl being lenient
	    ○ Even after analyzing our documents
	● Some document's mistakes were not corrected
	    ○ Can be improved a lot
	● Should have started development work already
	    ○ What have we been doing for the past 4 weeks?
	        ■ ERD & Wireframes
	    ○ Need to buck up
	● Why do we need to do the project much faster & earlier?
	    ○ This is our 1st time doing it
	        ■ Not seasoned
	    ○ A lot of things we don't know
	    ○ Usually get stressed in Term 2
	    ○ Because we would know more things by then
	● Mr Daryl is just a supervisor
	    ○ Leader & Assistant Leader (Shaun & Brandon) to oversee situation
	        ■ if the others are feeling that the leader is not leading us anywhere, then step up
	            ● take initiative
	            ● don't suffer in silence
	● We have to prove to him that we can do it
	    ○ That we are good at development work
	    ○ To make him worry less about us
	● WEBA vs SDP
	    ○ Big difference
	        ■ WEBA had a lot prepared for us
	        ■ That's why now we need to be on the ball
		-

<table>
<tr><td></td><td>Our progress currently is not that good because of multiple reasons. We are more on the slower side and need to buck up to be on track. We are supposedly supposed to start the development work already, instead of what we have been doing for the past 4 weeks, which were ERD and Wireframes.

Why do we need to work much faster? It's because this is our first time doing this kind of project and we are not seasoned enough to be taking our time. We were also told that Term 2 will be more stressful than Term 1..

Mr Daryl is just our supervisor, he's not the one that is supposed to tell us what to do and when to do it. Our Leader and Assistant Leader (Shaun and Brandon) are the ones who are supposed to be leading us and oversee the situation. But if the other members are feeling that we are not being led anywhere, then they should step up and take initiative instead of suffering in silence.</td><td></td></tr>
<tr><td></td><td>Actions: Work faster, start on development</td><td></td></tr>
<tr><td>2.</td><td>Minutes of Meeting
Have slight improvement, but not critical
A lot of room for improvement
But it can be left as it is for now
Needs to be vetted
Should have at least 1 person to vet/endorse
Put the full name, not just their first name
also don’t put “client” as their role, put their designation instead
Should be sent to the client also
Mr Daryl told Iffah to focus on other things
Can ask Mr Daryl if she needs feedback on it
If she has time</td><td>Iffah</td></tr>
</table>

	The Minutes of Meeting have improved, but not that much. There is still a lot of room for improvement. The Minutes of Meeting should have at least 1 person to vet/endorse it. For the "Present" part, the person's full name should be used, not just their first name. For their roles, don't just put "client", their actual designations should be used instead. The Minutes of Meeting should be sent to the client as well! Mr Daryl has advised Iffah (the one in-charge for Minutes of Meeting) to prioritise other things instead. But if she has time, she can have a private call with Mr Daryl to ask him for feedback and advise on the Minutes of Meeting.	
	Actions: Improve on minutes of meeting/focus on other things first	
3.	Questions for Phase 1 Report ● What are we supposed to prepare for the Project Scope ○ Things that you need to do for the client ○ Things that you need to DO ■ Slides ■ Report ■ Rehearsal ■ Deliverables ■ Etc. ■ Arrange it so he can read and understand it easily	-
	When asked if we have any questions for the Phase 1 Report, we asked what are we supposed to prepare for the Project Scope? We were then answered that we had to prepare the things that we need to do for the client, the things that we need to do, such as slides, reports, rehearsals and deliverables. We then have to arrange these items neatly so that Mr Daryl can read and understand it easily.	
	Actions: Prepare items needed for project scope	

4.	Presentation
	
	- Report can be detailed
	- Slides can be detailed
	- But the time for presentation is limited
	    ○ 25 – 30 minutes
	- Need to rehearse well
	- Present too little/too much à penalised
	- Never talk too fast
	    ○ Because later audience cannot understand
	        ■ Presentation is delivering the content such that the audience can understand everything
	        ■ We WANT them to understand
	- Don't be late
	    ○ Come 30 minutes before the scheduled timing
	- Test the system (video & audio)
	- Don't give last minute surprises (technical difficulties)
	    ○ PowerPoint slides
	    ○ Internet Connection
	    ○ Audio
	    ○ Video
	- Resolve all problems
	    ○ Make sure it runs smoothly
	- Who is presenting?
	    ○ Project guide didn't state
	    ○ But not everybody needs to present
	        ■ Can have 1 or all 5 to present
	            ● Ideally, 1 or 2 people to present
	                ○ Lesser transitions
	                ○ Less disruptive
	    ○ Group decision to choose who to present
	- Presentation is a group assessment
		-

	For the presentation that will be happening on 29 May, we have to prepare well. The report and slides can be detailed, but the time for our presentation is limited. We only have at most 30 minutes to present our project. We can't present too much or too less, else we will be penalized. We can't talk too fast too, because we want the audience to understand our presentation. Hence, we need to prepare a lot and rehearse well. We can't be late, so we have to come 30 minutes before the scheduled timing. We also have to make sure there is nothing wrong with our PowerPoint slides, the Internet Connection, our Audio and Video. We have to make sure it runs smoothly. Since the Project Guide didn't state, we can decide if we want the entire team to present or not. Ideally, only 1 or 2 people is enough since there are fewer transitions and is less disruptive. The group has to discuss to decide this. This presentation is a group assessment.	
	Actions: Schedule a meeting at MS Teams	
5.	How to schedule a meeting in MS Teams ● MS Teams > Calendar > New Meeting ● To fill in: ○ Attendees ■ Group members, course chair, neutral judge, Mr Daryl ○ Time ○ Channel ● An email will be sent to them ○ send the link to Mr Daryl for back up ■ copy the link of the meeting and send it to Mr Daryl with the PowerPoint slides	Shaun

	We have to schedule the meeting for the presentation ourselves through MS Teams. The Attendees will be the group members, the course chair, the neutral judge, and Mr Daryl, although not necessary but it doesn't matter. There will be a link provided for the meeting and that link has to be sent, along with the PowerPoint slide, to Mr Daryl for backup.	
	Actions: Rehearse for presentation	

6.	Submission
	
	● Friday (29 May) 2359h
	    ○ Submit report
	● Phase 1 (requirement analysis)
	    ○ If we work on this until week 7, something is wrong
	    ○ Should be done ideally by week 4
		-

	By 29 May 2359h, we have to submit the Phase 1 report. If we work on this until Week 7 (MST Week), then something is wrong. It was supposed to be done by Week 4 (ideally)	
	Actions: Submit Phase 1 report by **29 May 2020 2359h**	
7.	Next meeting will be on **4pm Friday, 22 May 2020, Zoom**	-

18.10 Meeting with Ang Mo Kio - Thye Hua Kwan Hospital - Week 5, 22 May 2020

Date : Friday, 22 May 2020

Time : 4.00pm

Venue : Online – Zoom

Meeting Objective: To update our clients from Ang Mo Kio – Thye Hua Kwan Hospital on progress for the past week (Week 4)

Present :

Agnes Tay Lee Leng	HR Representative
HR TEAM	HR Department
Wayne Lee Jiin Hwen	IT Representative
Chua Zhirong	IT Representative
Shaun Cheong Jia Yong	Leader
Brandon Lim Jin Zheng	Assistant Leader
Tan Kok Kiong	Member
Darien Lim Guo Dong	Member
Iffah Irsalina Binte Mohd Azmi	Member

Minuted by : Iffah Irsalina Binte Mohd Azmi

Vetted by : Brandon Lim Jin Zheng

	Items Discussed	**Action By**

<table>
<tr>
<td>1.</td>
<td>Excel Form – Candidate Summary Sheet

Should be a normal application form

Need a header that says “Candidate Summary Sheet”
Add the Hospital’s logo somewhere

Is it possible to make the form to be as close to the sample as possible?
How to get a signature?

Take a photo and upload?
Scan the signature and upload?

What if they don’t have a scanner?

They want to have control (dropdowns etc.) for:

Position Applied

should be dropdown of a list of jobs for the candidate to select from

Marital status

Do not need for number of children

Nationality
How the candidate knows about the job
Pass holding

but reduced to a shorter list

we will be given the list

Years of experience

Just key in the information
Do not need dropdown

Switch the positions for row 12 (residential) and row 13 (“for non-Singaporean/non-PRs…”)
</td>
<td>Shaun</td>
</tr>
<tr>
<td></td>
<td>A Candidate Summary Sheet has been made in Microsoft Excel so that it would be easier for our project. Some feedback has been given for the Excel Form.

In terms of appearance, the Excel Form should look like a normal application form, so a header that says, "Candidate Summary Sheet" and the Logo for the hospital is needed at the top. If it is possible, can it look as close to the sample as possible?

What if the candidate needs to put their signature? Do they scan a photo and upload it? Do they scan the signature? What if no scanner?

The questions that they wish to have control over/have dropdowns for are "Position Applied", "Marital status", "Nationality", "How do you know about this job", and "Pass holding". Meanwhile "Years of Experience" can just be a simple text box.</td>
<td></td>
</tr>
</table>

	Actions: ● Make the Excel form look more like a normal application form ● Figure out a way the candidate can upload their signature ● Create dropdowns for the stated sections	

2.	● Prototype – Dashboard
	● “Total opening/closing”
	    ○ change name to “Total Closed/Open Vacancies”
	● Want an overview of everyone
	    ○ Do not show “assigned opening = 7”
	        ■ instead, show everyone instead of total
	            ● show “assigned opening Person A: 4”
	            ● “assigned opening Person B:3” etc.
	● Graphs
	    ○ Add legends
	    ○ Vacancies
	        ■ Sections, not individual
	    ○ Make it bigger
	        ■ Or a double click to enlarge feature
		Kok Kiong

	For the dashboard, we need to change the "Total opening/closing" to "Total Closed/Open Vacancies". We also need to change some parts of the dashboard to show the overview of each person's work, not just the total, such as "Assigned Opening" and "TAT". For the graphs, legends should be added so that the graphs will not look cramped with words. The "Number of Vacancies" graph should be shown for sections, not individual areas. Also, figure out a way to make the graphs bigger, either resize it or have the user double click it to enlarge it.	
	Actions: ● Change "Total opening/closing" to "Total Closed/Open Vacancies" ● Change the dashboard such that it shows the overview of each person, not the total ● Add legends to graphs ● Change the Vacancy graph to show data for sections, not individual areas	

	● Figure out a way to make the graphs bigger	
3.	Prototype – Job Listing ● Job requirements ○ change to free text ● Fields are from the recruitment tracker	Kok Kiong
	In “Job Information”, the “Job requirements” are to be changed to free text and the fields are from the recruitment tracker.	
	Actions: “Job requirements” change to free text	

4.	Prototype – Candidates
	
	● Add “Upload [listing]” at 3.0 Candidate Database page
	    ○ Listing shows from which job
	● If status changes to “hired”, how to close a vacancy?
	    ○ The system will minus 1 from the total number of open vacancies for every “hired” there is for the department. When the total reaches ‘0’, the vacancy will close.
	● Where to update candidate status?
	    ○ Candidate Database > Candidate “Update”
	● Is there a character limit for “remarks”?
	    ○ We can set a limit if needed.
	● Candidate profile to show all fields that is in the character summary sheet so don’t need to refer [to another document]
	● Add candidate
	    ○ Remove excel upload
	        ■ It goes to the job listing
	    ○ To Include:
	        ■ Hiring manager
	        ■ Status
	        ■ HRBP
	            ● They will let us know
	        ■ Position Name
	        ■ Show evaluation form
		Kok Kiong

<table>
<tr><td></td><td>For the Candidate page, we should put the "Upload [listing]" feature there instead.

We can close the vacancy automatically when we change the status of candidates to "hired". There will be a counter for the number of vacancies open, and every "hired" there will deduct '1' from the counter. Once the counter hits '0', the vacancy will be closed.

A character limit might be needed for the "remarks" aspect.

The Candidate profile is to show all fields that are shown in the Character Summary Sheet so that the user does not need to refer to a different document.

The "Add Candidate" page should include the Hiring Manager, Status, HRBP, Position Name and the evaluation form. The "excel upload" function should be removed.</td><td></td></tr>
<tr><td></td><td>Actions:
Add "Upload" to Candidate Database page
Set a character limit for “remarks”
Candidate profile to show all fields in the Character Summary Sheet
Change "Add candidate" page to include Hiring Manager, Status, HRBP, Position Name, and Show evaluation form.
Remove "excel upload" from "Add candidate" page</td><td></td></tr>
</table>

<table>
<tr>
<td>5.</td>
<td>Prototype – Authorization

Authorization
change to administration
Access Rights

Only for admin
HRBPs are the users
Invite
change to “add [user]”
How to trigger email?
Change status à the email will be sent

Templates

change to email/form templates
Editable
Add “Subject” aspect
Content
Not just one big text field
More things should be added

</td>
<td>Kok Kiong & Iffah</td>
</tr>
<tr>
<td></td>
<td>For the Authorization page, firstly we should change the name to "Administration" instead.

The Access Rights page is only for admins, the HRBPs are the users. The Invite feature should be changed to "Add" user instead.

The Templates page should change the name to "Email/Form Templates" instead. The forms should also be editable. We need to add a "Subject" aspect and other things as well when creating a new template since it is not only one big rich text field.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Actions:

Change Authorization to Administration
Access Rights' "invite" change to "add"
Templates change to "Email/Form Templates"
Add "Subject" aspect
Think of other aspects to put in the Content when creating a new template

</td>
<td></td>
</tr>
</table>

6.	Prototype – Reports
	
	● Generate report
	    ○ What kind?
	        ■ E.g. total no. of positions closed
	        ■ TAT
	            ● Click button to see avg TAT of HRBP
	● Edit question
	    ○ Move to administration page
		Iffah

	For the Reports page, we need to figure out how we could generate data into a report in the form of excel spreadsheets. We also need to move the "Edit question" feature to the administration page.	
	Actions: ● Figure out how to generate report with data that will be given ● Move "Edit question" to Administration page	
7.	Others ● Should kickstart already ● Identify who is more technical	-
	We need to start focusing more on the development work rather on the front end.	
	Actions: Start on development work	
8.	Next meeting will be on **12.30pm Tuesday, 26 May 2020, MS Teams**	-

19. Monitoring report

19.1 Week 1

Group No: 11	Date: 25/04/2020(dd/mmm/yyyy)
Supervisor Name: Mr Daryl Lim	
Project Title: Recruitment Tracker	
Project Leader Name: Shaun Cheong Jia Yong	Signature: shaun cheong

1. Student weekly performance summary

Adm. No.	Name	Progress[1]	Remarks
1. P1828964	Shaun Cheong Jia Yong	A	
2. P1737411	Brandon Lim Jin Zheng	A	
3. P1727696	Tan Kok Kiong	A	
4. P1727414	Darien Lim Guo Dong	A	
5. P1828795	Iffah Irsalina Binte Mohd Azmi	A	

[1] State whether: A=On Schedule B=Ahead Schedule for no. of days C=Behind Schedule for no. of days

2. Weekly Scrum.

Week No:01		Date: 24/04/2020(dd/mmm/yyyy)
Members	Project Progress	Description
Name1/Admin No. P1828964	Last week's Progress (What he has accomplished since last meeting?)	Nil
	This week deliverables (What he is going to do before the next meeting?)	Research existing Websites and Prepare questions
	Obstacles (What obstacles are in the way?)	Nil
Name2/Admin No. P1737411	Last Week's Progress (What he has accomplished since last meeting?)	Nil
	This week deliverables (What he is going to do before the next meeting?)	Further research on database structure
	Obstacles (What obstacles are in the way?)	Nil

Name3/Admin No. P1727696	Last week's Progress (What he has accomplished since last meeting?)	Nil
	This week deliverables (What he is going to do before the next meeting?)	Research existing websites and note down possible features.
	Obstacles (What obstacles are in the way?)	Nil
Name4/Admin No. P1727414	Last Week's Progress (What he has accomplished since last meeting?)	Nil
	This week deliverables (What he is going to do before the next meeting?)	Further research on database structure
	Obstacles (What obstacles are in the way?)	Nil
Name5/Admin No. P1828795	Last week's Progress (What he has accomplished since last meeting?)	Nil
	This week deliverables (What he is going to do before the next meeting?)	Research existing websites and note down possible features.
	Obstacles (What obstacles are in the way?)	Nil

19.2 Week 2

Group No: 11	Date: 02/05/2020(dd/mmm/yyyy)
Supervisor Name: Mr Daryl Lim	
Project Title: Recruitment Tracker	
Project Leader Name: Shaun Cheong Jia Yong	Signature: shaun cheong

1. Student weekly performance summary

Adm. No.	Name	Progress[1]	Remarks
1. P1828964	Shaun Cheong Jia Yong	C	Yet to finalise features with client
2. P1737411	Brandon Lim Jin Zheng	A	Completed first draft of ERD Diagram
3. P1727696	Tan Kok Kiong	A	Draft 2 wire frames (Login, Logout, Dashboard)
4. P1727414	Darien Lim Guo Dong	A	Completed first draft of ERD Diagram
5. P1828795	Iffah Irsalina Binte Mohd Azmi	A	Draft 2 wire frames (Login, Logout, Dashboard)

[1] State whether: A=On Schedule B=Ahead Schedule for no. of days C=Behind Schedule for no. of days

2. Weekly Scrum.

Week No:01		Date: 02/05/2020(dd/mmm/yyyy)
Members	Project Progress	Description
Name1/Admin No. P1828964	Last week's Progress (What he has accomplished since last meeting?)	Reviewed first draft wire frames and ERD, created GitHub.
	This week deliverables (What he is going to do before the next meeting?)	Contacted the client to arrange meeting and prepared questions.
	Obstacles (What obstacles are in the way?)	Client meeting on Friday had to be postponed due to May Day.
Name2/Admin No. P1737411	Last Week's Progress (What he has accomplished since last meeting?)	Further research on database structure
	This week deliverables (What he is going to do before the next meeting?)	First draft of ERD Diagram and sent to IT department for review.

	Obstacles (What obstacles are in the way?)	As the features are yet to be finalised and instructions from HR and IT department contradicts, contacting HR department is required.
Name3/Admin No. P1727696	Last week's Progress (What he has accomplished since last meeting?)	Research existing websites and note down possible features.
	This week deliverables (What he is going to do before the next meeting?)	First draft of wireframes. (Dashboards, Login, Log out, Potential Employee)
	Obstacles (What obstacles are in the way?)	Color Choice and coming up with new ideas
Name4/Admin No. P1727414	Last Week's Progress (What he has accomplished since last meeting?)	Further research on database structure
	This week deliverables (What he is going to do before the next meeting?)	First draft of ERD Diagram and sent to IT department for review.
	Obstacles (What obstacles are in the way?)	As the features are yet to be finalised and instructions from HR and IT department contradicts, contacting HR department is required
Name5/Admin No. P1828795	Last week's Progress (What he has accomplished since last meeting?)	Research existing websites and note down possible features.
	This week deliverables (What he is going to do before the next meeting?)	First draft of wireframes. (Dashboards, Login, Log out, Potential Employee)
	Obstacles (What obstacles are in the way?)	NIL

19.3 Week 3

Group No: 11	Date: 09/05/2020(dd/mmm/yyyy)
Supervisor Name: Mr Daryl Lim	
Project Title: Recruitment Tracker	
Project Leader Name: Shaun Cheong Jia Yong	Signature: shaun cheong

1. Student weekly performance summary

Adm. No.	Name	Progress[1]	Remarks
1. P1828964	Shaun Cheong Jia Yong	A	Finalised features and prepared report documents draft
2. P1737411	Brandon Lim Jin Zheng	A	Completed ERD Draft 3 (Equal work distribution with Darien)
3. P1727696	Tan Kok Kiong	A	Updated Dashboard page, Design Authorization wire frames.
4. P1727414	Darien Lim Guo Dong	A	Completed ERD Draft 3 (Equal work distribution with Brandon)
5. P1828795	Iffah Irsalina Binte Mohd Azmi	A	Templates Page, Prepared meeting minutes,

[1] State whether: A=On Schedule B=Ahead Schedule for no. of days C=Behind Schedule for no. of days

2. Weekly Scrum.

Week No:03		Date: 09/05/2020(dd/mmm/yyyy)
Members	Project Progress	Description
Name1/Admin No. P1828964	Last week's Progress (What he has accomplished since last meeting?)	Contacted the client to arrange meeting and prepared questions.
	This week deliverables (What he is going to do before the next meeting?)	Complete report documents and deliverables, Gantt Chart.
	Obstacles (What obstacles are in the way?)	First time working on several documents such as risk assessment.
Name2/Admin No. P1737411	Last Week's Progress (What he has accomplished since last meeting?)	First draft of ERD Diagram and sent to IT department for review.
	This week deliverables (What he is going to do before the next meeting?)	Work on third draft of ERD Diagram and send to IT department for review

	Obstacles (What obstacles are in the way?)	Deciding on which tables are necessary and which are not. Also the attributes as well.
Name3/Admin No. P1727696	Last week's Progress (What he has accomplished since last meeting?)	First draft of wireframes. (Dashboards, Login, Log out, Potential Employee)
	This week deliverables (What he is going to do before the next meeting?)	Wireframe for Authorization, Update Dashboard and candidates page. Annotations
	Obstacles (What obstacles are in the way?)	NIL
Name4/Admin No. P1727414	Last Week's Progress (What he has accomplished since last meeting?)	First draft of ERD Diagram and sent to IT department for review.
	This week deliverables (What he is going to do before the next meeting?)	Work on third draft of ERD Diagram and send to IT department for review
	Obstacles (What obstacles are in the way?)	Deciding on which tables are necessary and which are not. Also the attributes as well.
Name5/Admin No. P1828795	Last week's Progress (What he has accomplished since last meeting?)	First draft of wireframes. (Dashboards, Login, Log out, Potential Employee)
	This week deliverables (What he is going to do before the next meeting?)	Wireframe for Templates and work on adobe XD
	Obstacles (What obstacles are in the way?)	NIL

19.4 Week 4

Group No: 11	Date: 15/05/2020(dd/mmm/yyyy)
Supervisor Name: Mr Daryl Lim	
Project Title: Recruitment Tracker	
Project Leader Name: Shaun Cheong Jia Yong	Signature: shaun cheong

1. Student weekly performance summary

Adm. No.	Name	Progress[1]	Remarks
1. P1828964	Shaun Cheong Jia Yong	A	Discussed and completed Draft 2 of deliverables. (Aims and objectives, routine, risk assessment report)
2. P1737411	Brandon Lim Jin Zheng	A	Completed ERD Draft 4 to include additional features and complete list of columns after discussion with Zhi Rong. (Equal work distribution with Darien) (Lead)
3. P1727696	Tan Kok Kiong	A	Updated Dashboard in adobe Xd based on Agnes feedback and Zhi Rong explaination. (Dashboards, Job Description, Candidate)
4. P1727414	Darien Lim Guo Dong	A	Completed ERD Draft 4 to include additional features and complete list of columns after discussion with Zhi Rong. (Equal work distribution with Brandon) Lead research on LDAP server and client.
5. P1828795	Iffah Irsalina Binte Mohd Azmi	A	Prepared minutes of meeting with Mr Daryl and Agnes, Updated Dashboard in adobe Xd based on Agnes feedback and Zhi Rong explaination.(Templates, Report)

[1] State whether: A=On Schedule B=Ahead Schedule for no. of days C=Behind Schedule for no. of days

2. Weekly Scrum.

Week No:04		Date: 15/05/2020(dd/mmm/yyyy)
Members	Project Progress	Description
Name1/Admin No. P1828964	Last week's Progress (What he has accomplished since last meeting?)	Complete report documents and deliverables, Gantt Chart Draft 1 and phase one scrum documents
	This week deliverables (What he is going to do before the next meeting?)	Re-do report documents and file naming conventions based on Mr Daryl's feedback. Begin slides for presentation with client for final wireframes.
	Obstacles (What obstacles are in the way?)	NIL
Name2/Admin No. P1737411	Last Week's Progress (What he has accomplished since last meeting?)	Work on third draft of ERD Diagram and send to IT department for review Equal participation with Darien
	This week deliverables (What he is going to do before the next meeting?)	Finalise ERD draft with all fields and checked with Zhi Rong.
	Obstacles (What obstacles are in the way?)	Meeting with client on Friday leaves little time to ask further questions due to weekend.
Name3/Admin No. P1727696	Last week's Progress (What he has accomplished since last meeting?)	Wireframe for Authorization, Update Dashboard and candidates page. Annotations
	This week deliverables (What he is going to do before the next meeting?)	Sketch and redo wire frames based on additional instructions from IT department and design create, update page for candidate.
	Obstacles (What obstacles are in the way?)	NIL
Name4/Admin No. P1727414	Last Week's Progress (What he has accomplished since last meeting?)	Work on third draft of ERD Diagram and send to IT department for review. Equal participation with Brandon
	This week deliverables (What he is going to do before the next meeting?)	Finalise ERD draft with all fields and checked with Zhi Rong. Research on LDAP Server and Client Background for Phase 01 Report.
	Obstacles (What obstacles are in the way?)	Meeting with client on Friday leaves little time to ask further questions due to weekend.
Name5/Admin No. P1828795	Last week's Progress (What he has accomplished since last meeting?)	Wireframe for Templates and work on adobe XD
	This week deliverables (What he is going to do before the next meeting?)	Sketch and redo wire frames based on additional instructions from IT department, Meeting of minutes
	Obstacles (What obstacles are in the way?)	NIL

19.5 Week 5

Group No: 11	Date: 22/05/2020(dd/mmm/yyyy)
Supervisor Name: Mr Daryl Lim	
Project Title: Recruitment Tracker	
Project Leader Name: Shaun Cheong Jia Yong	Signature: shaun cheong

1. Student weekly performance summary

Adm. No.	Name	Progress[1]	Remarks
1. P1828964	Shaun Cheong Jia Yong	C	Havent begun slides
2. P1737411	Brandon Lim Jin Zheng	C	Working on Report
3. P1727696	Tan Kok Kiong	C	Working on Report and sketches for wireframes
4. P1727414	Darien Lim Guo Dong	C	Working on Report
5. P1828795	Iffah Irsalina Binte Mohd Azmi	C	Working on Report and sketches for wireframes

[1] State whether: A=On Schedule B=Ahead Schedule for no. of days C=Behind Schedule for no. of days

2. Weekly Scrum.

Week No:05		Date: 22/05/2020(dd/mmm/yyyy)
Members	Project Progress	Description
Name1/Admin No. P1828964	Last week's Progress (What he has accomplished since last meeting?)	Report Documents (Detailed TimeLine, Burndown chart)
	This week deliverables (What he is going to do before the next meeting?)	Scrum documents and Report materials
	Obstacles (What obstacles are in the way?)	Delayed scrum documents
Name2/Admin No. P1737411	Last Week's Progress (What he has accomplished since last meeting?)	Finalise ERD draft with all fields and checked with Zhi Rong.
	This week deliverables (What he is going to do before the next meeting?)	Phase one Report
	Obstacles (What obstacles are in the way?)	NIL
Name3/Admin No. P1727696	Last week's Progress (What he has accomplished since last meeting?)	Sketch and redo wire frames based on additional instructions from IT department and design create, update page for candidate.
	This week deliverables (What he is going to do before the next meeting?)	Wireframe Sketches and Report
	Obstacles (What obstacles are in the way?)	Slow feedback from client
Name4/Admin No. P1727414	Last Week's Progress (What he has accomplished since last meeting?)	Finalise ERD draft with all fields and checked with Zhi Rong.
	This week deliverables (What he is going to do before the next meeting?)	Phase one Report
	Obstacles (What obstacles are in the way?)	NIL
Name5/Admin No. P1828795	Last week's Progress (What he has accomplished since last meeting?)	Sketch and redo wire frames based on additional instructions from IT department, Meeting of minutes
	This week deliverables (What he is going to do before the next meeting?)	Wireframe Sketches and Report
	Obstacles (What obstacles are in the way?)	Slow feedback from client

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