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Semester 1,2024/2025





Faculty of Computing,Universiti Teknologi Malaysia

Design Thinking

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**Group:2**

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## **1.0 INTRODUCTION**

Disabled person is the person who have impairment of the body or mind that makes them more difficult to do daily activities rather than normal person. What is impairment? Impairment is an absence of significant body structure and function or mental function. This impairment can be divided to two categories that is structural impairment and functional impairment. Structural impairment is related with problems of external and internal component body. As example, nerve damage can impact person with multiple sclerosis. Meanwhile, functional impairment is loss of function either can be complete or partial loss. As we can observe, that pain that does not go away or joint that no longer move easily.

According to World Health Organization (WHO) there are three dimensions for disability which is impairment as stated in the first paragraph, activity limitation and participation restrictions. Types of disabilities that affect person in terms of vision, movement, thinking, remembering, learning, communicating, hearing, mental health and social relationship.

## **2.0 PROBLEM BACKGROUND**

In fact, disability people struggle to do certain activities same as normal people, we cannot deny that they still have some skills or talents that can be contributed to the development of nation in economy aspect. In Malaysia, there are one policy called One Percent Policy introduced in 1988 to help disability people to get job. Other than that, Malaysian government circulated General Order to allow and offer at least 1% of civil service positions for disabled people. However, there are still discrimination happen for them in of job finding that make hard for them to get any vacancy where only 0.33 percent successful. Moreover based on the result by the Organization of Economics CO-operation and Development reported that the average rate of workers with disabilities is 44% out of 75% of normal employees. Nevertheless, it has been found that disabled people's chance of getting job from other website such as [jobmalaysia.my](http://jobmalaysia.my) are low because they need to compete with normal candidates. This cause struggle for them to improve their economy levels and standard life.

In real situations, most of companies give reasons why they reject job applications from disability people is they do not provide facilities for disability group in workplace. Other than that, some of disability people already pass go for the interview but when in interview session employer express their face and body language that would not accept disability people as their employee. As community, we need to prevent these discriminations continue happen in our country but what is the best solutions to solve disability people get any job vacancy?

## 3.0 METHODOLOGY

### 3.1 Empathize Mode

#### 3.1.1 Observation

Based on our observations, we noticed that people with physical and mental disabilities face many challenges in finding jobs because of societal stigma. These barriers often leave them feeling undervalued and disconnected from meaningful work opportunities. Recognizing this, we felt a strong responsibility to create a solution that prioritizes inclusivity and addresses these systemic issues, ensuring everyone feels heard, valued, and supported in their job search journey.

#### 3.1.2 Engage

To understand the needs and challenges of potential users, we conducted interview with individual with disabilities. The conversation revealed that many disadvantage people struggled to find jobs that accommodated their unique needs. A lack of flexibility in work schedules, remote work options, and physical workplace accessibility were common problems. Based on this feedback, we designed our app with customizable job filters, so users can search for jobs that meet their specific needs.

#### 3.1.3 Immerse

We acknowledged that it might be difficult for people with disabilities to obtain inclusive employment options, which frequently results in their isolation. To better understand the difficulties faced by people with disabilities, we tried using current job search apps as though we were in their position. This showed us the need for a more inclusive and supportive job search app. This showed us the need for a user-friendly, supportive app designed specifically for disadvantaged job seekers.

### 3.2 Define Mode

All four members of this group have gone through analysis, investigation, and conversation to better understand the barriers people with disabilities face in finding jobs. We decided to focus on creating an app that helps people connect with inclusive and accessible job opportunities. Our goal is to provide ongoing support and practical tools to make the job search process easier for them.

### 3.3 Ideate Mode

We brainstorm ideas before designing and constructing the app. We have discussed about our apps' primary features. We wanted the app to help job seekers while also teaching employers about the benefits of hiring a diverse team. These benefits include more creativity, better problem-solving, and stronger teamwork. Our goal is to create a bridge between job seekers and employers, making workplaces more inclusive and supportive.

### 3.4 Prototype Mode

In this phase, we created a simple version of the app to show how it would work. The prototype included key features like customizable job filters, accessibility settings, and a community forum where users can connect and share experiences. The prototype remains a rough version to allow for flexibility in making improvements and exploring additional features based on user needs.

### 3.5 Test Mode

To refine our design, we tested the prototype with a group of people with disabilities to see how well it worked for them. We asked them about their experiences using the app to uncover any issues and improve its usability. This testing phase helps us identify areas that need adjustments, ensuring our app provides a comprehensive solution to meet users' needs effectively. This test mode was made on week 11 and the duration is in the one week. The targeted responds are 50 responds but we only get 22 responds.

### 3.5.1 Collection of Data

#### Gender

22 responses

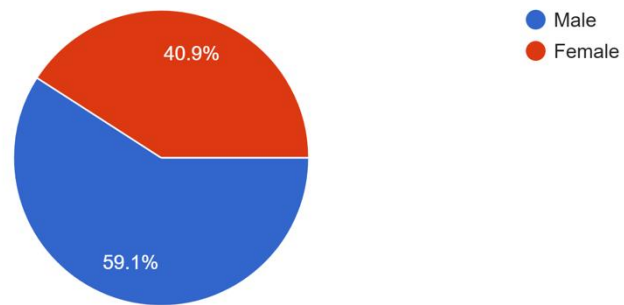


Figure 1

#### Age

22 responses

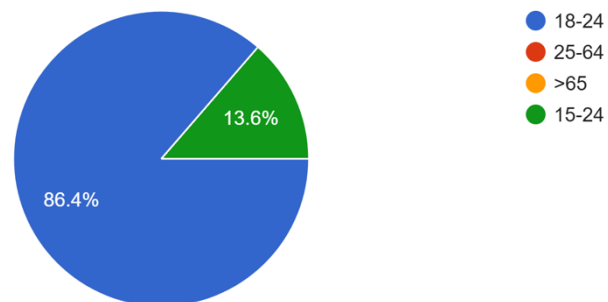


Figure 2

Which side are you?

22 responses

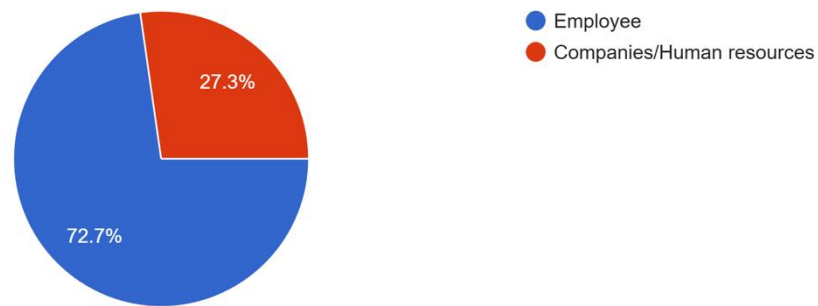


Figure 3

Does our app have all the features that you need to find a job?

17 responses

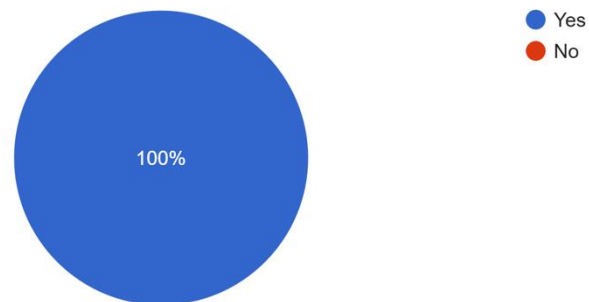


Figure 4

Does the user interface in our app is easy use?

17 responses

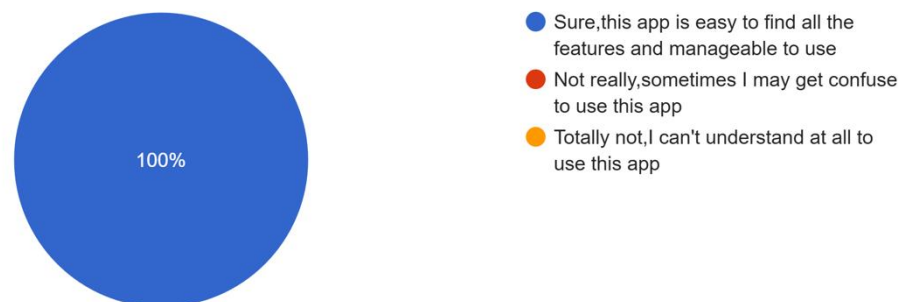


Figure 5

Does this app ease for you to communicate with companies

17 responses

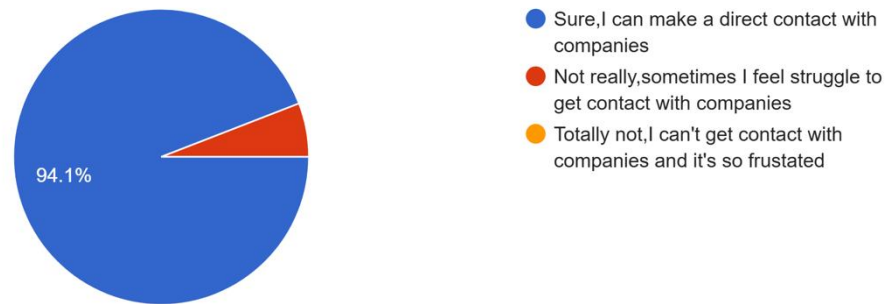


Figure 6

Scale of satisfaction using our app

17 responses

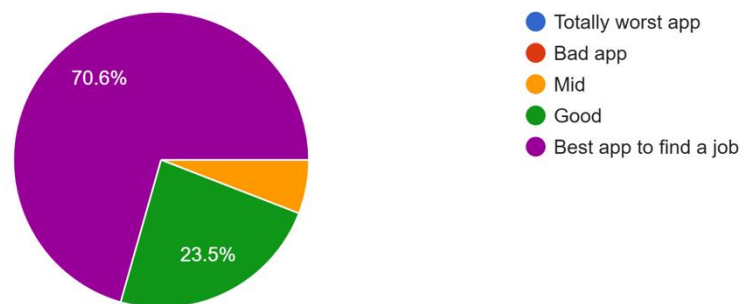


Figure 7

Does our app help you to filter out the best employee for your company?

17 responses



Figure 8



Does our app help your companies to promote job vacancies from your companies?

17 responses

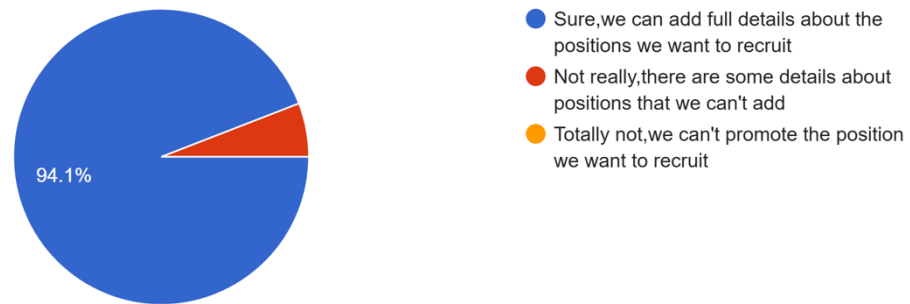


Figure 9

What are your suggestions to improve our app?

17 responses

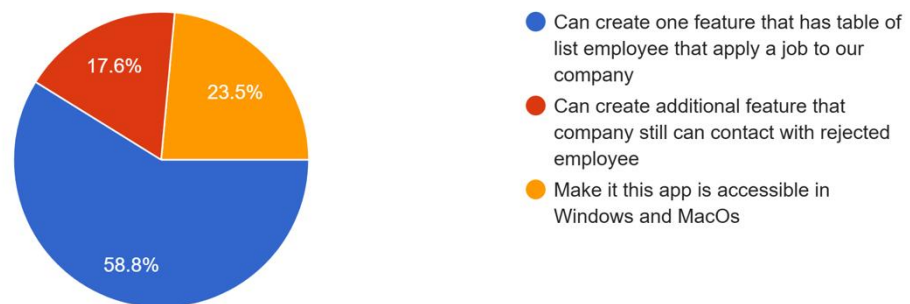


Figure 10

Scale of satisfaction

16 responses

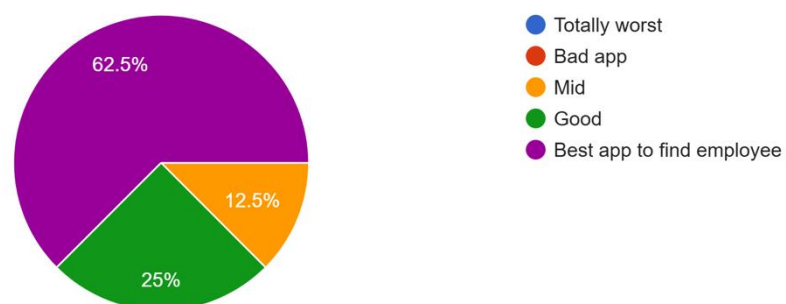

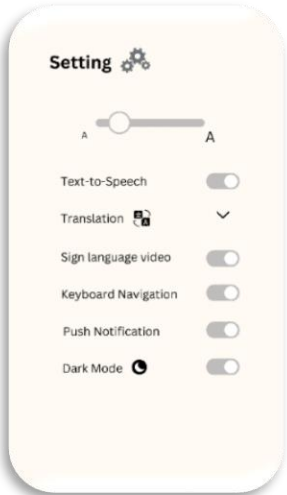




Figure 11




#### 4.0 FEATURES OF APP (JOBEQUALITY)

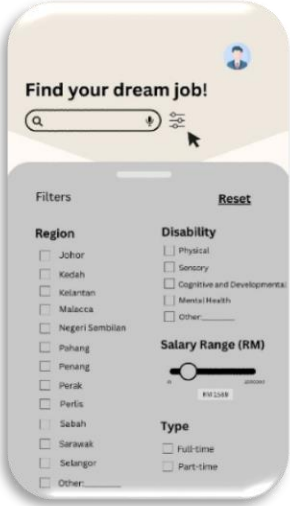
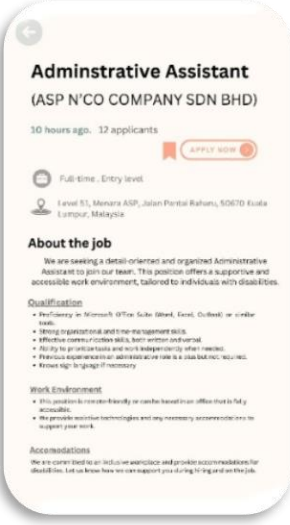

We created JobEquality, a clever application that helps people with disabilities find employment, in response to user problems. The employer can recruit the disabled person by publishing it in our apps, and they can get a job more easily by utilizing this application. Our app does more than merely display job openings because of this. It has a community function that lets users communicate, share experiences, and help one another.


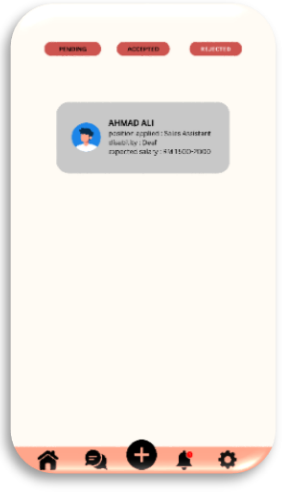
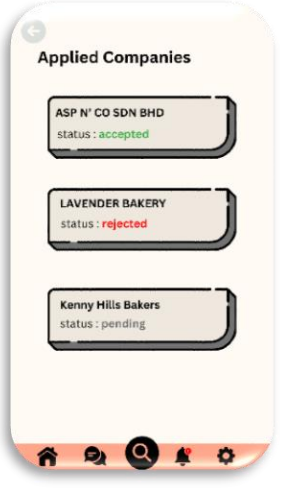
This is our features of the apps: [JobEquality](#)

Apps features	Explanation
	This page shown the logo of our application for the user easily to recognize our application. It make easier for user to use our application when they open our logo and to access any features in our application.
	This page shown the settings for the user to make their application more accessible and convient when they open our application. The features of this page is text to speech, translation, sign language video, keyboard navigation, push notification and dark mode.

	<p>This page display the registration of new user to using our application. This page also display the user login if they accidentally logout from their account. This page will gain the user information and to make it more easier for user access in the future.</p>
	<p>This page display for user to find a job or post a job. This application can be use by a both party such as disable people and company who want to hired them. This application make it more easier for disable people to find a work and easier for company to find a worker among them.</p>
	<p>This page for user to create their personal profile. They need to create a username , fill in the name, fill in the age, email and disability that they having right now. They also can put out the resume and oku card into the box has been made.</p>

 <p>The screen is titled "Create business profile" and features a blue circular icon with a building. Below the icon are five input fields labeled "Company Name", "Address", "Email", "Phone No", and "Region".</p>	<p>This is page for company that want to hired a disable people. They need to fill in the information that this page provided to make it more easier for the people want to look at their profile and what job that their offering for the users.</p>
 <p>The screen is titled "Add job description" and contains a list of input fields: "Job Title:", "Job Summary:", "Industry:", "Job Qualification:", "Salary:", and "Work Environment:". At the bottom is a navigation bar with icons for home, chat, add, notifications, and settings.</p>	<p>This page for company to fill in to display it to the user. This will make the user to pick the job that have been offered from the company and send the resume to them directly.</p>
 <p>The screen is titled "Find your dream job!" and includes a search bar with a magnifying glass icon. Below the search bar is a section titled "Most Viewed" with a flame icon. It lists three job categories: "Financial Accountant" (ALI BOOKMART SDN BHD, Skudai, Johor, Full timer), "Barista" (ZIP Coffee, Cheras, Selangor, Part timer), and "Sales Executive" (Megah Holdings Sdn Bhd, TTDI Kuala Lumpur, Full timer). At the bottom is a navigation bar with icons for home, chat, search, notifications, and settings.</p>	<p>This is features that the users wanting to find the dream job. It will make the users find their dream job more easily because we have separate it to the category that their want.</p>

	<p>This page display the category of disability of the users, region that the user want to be working, salary demand that the user want based to their experience and type of work either full-time or part-time.</p>
	<p>This page will shown the user for details of the company that will offer the job and the requirement they need in the applicant. This will make thing easy for user to think to apply the job or not with based on their experience of their skills and fields.</p>
	<p>This page will shown in the company application for the people that they will be hires either they want to accept or reject the applicant.</p>

	<p>This page will shown the company application for the people who has been accepted to their company. This will be notified to another user to which is their resume has been accepted from the company.</p>
	<p>This page will shown the company application for the people who has been rejected to their company. This will be notified to another user to which is their resume has been rejected from the company.</p>
	<p>This page displays a summary of the companies the user has applied to along with status of each application. The design helps users track the progress of their applications clearly and efficiently.</p>

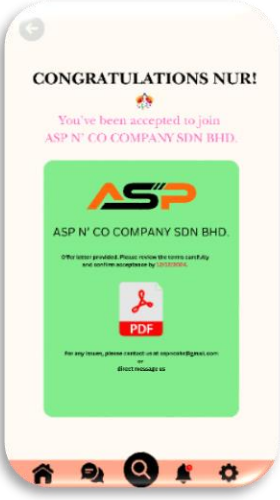
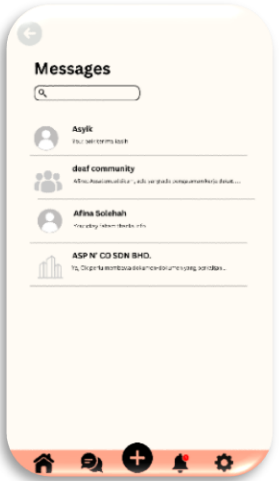
	<p>This page shown to be a confirmation or success page, notifying the user about their acceptance into a company or organization . There is function that company will provide a offer letter and informs the user about the next steps clearly and concisely.</p>
	<p>This is messaging interface, designed for users to view and interact with their message threads. There is function in the page such as the search bar, profile icon, user group names, message previews and unread indicators. This will make the user to easily access the page.</p>

Table 1. Features of the application

Video Link : <https://youtu.be/ImJYWudIeSU?feature=shared>

## 4.1 Comparison

The following table provides a comparison of JobEquality with two existing job platforms, LinkedIn and Inclusively, highlighting their target users, accessibility features, community support, job matching approaches, and unique attributes.

Feature	JobEquality	LinkedIn in	Inclusively inclusively
Target Users	People with disabilities	Everyone	People with disabilities and employers
Accessibility	Easy filters and tools for access	Basic features, not disability-focused	Tools for disabled users
Community Support	Peer connections and experience sharing	None	Coaching but no peer community
Job Matching Approach	Tailored searches based on user needs	General filters for all users	Matches users to inclusive jobs
Uniqueness	Focuses on accessibility	Big platform for all jobs	Helps employers be more inclusive

Table 2. Comparison of JobEquality with Existing Job Platforms

## 4.2 Summary of Literature Review

Based on our research, we got the article about project making job finding website for disabled people published on 1st March 2023 and the title is Job Finder Website for Disabled People. This article was made by reachers from Universiti Teknologi MARA (UiTM) which is Wan Amalina Wan Hariri, Surityati Razali and Ermira Shafika Mokhtar. The article is in the link below:

[https://www.academia.edu/118404745/Job\\_Finder\\_Website\\_for\\_Disabled\\_People\\_Requirements\\_Elicitation](https://www.academia.edu/118404745/Job_Finder_Website_for_Disabled_People_Requirements_Elicitation)

## 5.0 CONCLUSION

To conclude, we as human need to support each other including supporting disability person. Can not deny that, there are discrimination on disability people when they want to find a job. Disability people also have their own rights to show their ability or skills that can be useful in career aspect. In effect of this, we as a group come with solution by creating one application as a medium between disability people and companies. This application called JobEquality where Employment Free of Prejudice. This app have features that disability people put their resume, find position and company that they want and from companies side can filter or choose the best applicants. By creating JobEquality, we hope to make it easier for people with disabilities to find jobs and show their talents. This app is not just about job searching, also reducing discrimination and building a bridge between job seekers and employers. We believe everyone deserves the chance to work and contribute to society.

## 6.0 REFLECTION



Reflection from Asyik, by doing this project, I'm learned how to divide a big problem into small separated problem. Other than that, I am get to know on how to do for each process in problem solving. Not forget to mention that, we get involed to get opinion from people that face the problem we solved which we need to have good communication skills to make sure we get the opinion and really understand the problem. Futhermore, this project enchance we to think critically and creative to find the best solution. Lastly, by doing this project in group it polish our capability and strength to work together.

Reflection from Alisya, by doing this App about how to find a job for disable people make my eyes open to new things that I need to discovered. It makes me want to help more disable people in this world. Other than that, I also learn about how to solve the problem and think a solution to solved it. I also learn a new thing about getting opinion from other people and make their problem into something that we need to solve that the thing becoming a most efficient way. After that, we can think out of the box of how we need to solve this problem until we have a great solution. Lastly, by doing this project I have built a good connection with my team members.

Reflection from Alia, while designing a job-finding app for disabilities people, i have reflected deeply on inclusivity and accessibility of those who potentially to be our user. At the start of our project, we had conducted several research to understand more about the challenge that faced by our target users and this process definetly helps to define our project goals more. Working closely with my teammates, we combined diverse skills and perspectives to create a platform that connects users to jobs while addressing their unique needs. This developed my teamwork skills and also this project enhanced my problem solving skills more. Personally, this project greatly improved my comprehension of accessibility issues and motivated me to address similar initiatives in the future with more empathy and purpose.

Reflection from Hui Zhen, while designing the app "JobEquality" to help disadvantaged people find jobs has been a meaningful experience. Our team successfully used technology to address the needs of disadvantaged groups. Throughout this project, I learned how important to understand what users need and to create solutions that address their challenges. I also discovered the value of teamwork, thinking outside the box, and solving problems creatively. This experience has inspired me to keep improving my technology skills, stay updated with new ideas, and focus on creating solutions that are helpful and easy to use. It has motivated me to use technology to make a positive impact on the world in the future.

## 7.0 REFERENCES

- Upaya, J. P. O. K. (2024, September 25). *Sokongan pekerjaan bagi orang kurang upaya di Malaysia*. Utusan Malaysia. <https://www.utusan.com.my/pilihan-utusan/2024/09/sokongan-pekerjaan-bagi-orang-kurang-upaya-di-malaysia/>
- Shahira, N. (2024, June 25). 10,766 OKU sertai sektor pekerjaan, 3,717 daripadanya di perkhidmatan awam sejak 2022. Buletin TV3. <https://www.buletintv3.my/nasional/10766-oku-sertai-sektor-pekerjaan-3717-daripadanya-di-perkhidmatan-awam-sejak-2022/>
- Kruse, D., Schur, L., Johnson-Marcus, H. A., Gilbert, L., Di Lallo, A., Gao, W., & Su, H. (2024). Assistive technology's potential to improve employment of people with disabilities. *Journal of Occupational Rehabilitation*, 1-17.
- Inclusively. (2024, December 17). *Workplace Personalization | HR Employee Software | Inclusively*. <https://www.inclusively.com/>
- About LinkedIn. (n.d.). About LinkedIn. <https://about.linkedin.com/>

## 8.0 APPENDICS



Task \ Week	4	5	6	7	9	10	11	12
<b>Planning and Research</b>								
<b>Empathize</b>								
<b>Define</b>								
<b>Ideate</b>								
<b>Prototype</b>								
<b>Test</b>								
<b>Writing Report</b>								
<b>Video Production</b>								

**Gantt Chart**

## TASKS DISTRIBUTION

Name	Task
Mohamad Asyik Illahi Bin Nasruddin	1. Report - Introduction, Problem Background, Reflection, Conclusion. 2. Interviewer for interview session. 3. Make Google Form for collection data.
Alisya Humayraa Bt Mohd Khairani	1.Report - Features of Apps, Reflection, Conclusion 2. Find a person to be interview
Nur Alia Aishah Bt Nazri Sakri	1.Report- Reflection 2.Designing the Prototype 3.Video Production
Lee Hui Zhen	1. Report – Methodology (Empathize Mode, Define Mode, Ideate Mode, Prototype Mode, Test Mode), Comparison, Conclusion, Reflection, Gantt Chart