



OPENING DOORS: A JOB PORTAL FOR PWDs AND INCLUSIVE EMPLOYERS

A Capstone Project submitted to the Faculty of the National University
College of Computing and Information Technologies in Partial
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Bachelor of Science in Information Technology

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RECOMMENDATION FOR ORAL EXAMINATION

The capstone attached hereto, entitled “**OPENING DOORS: A JOB PORTAL FOR PWDS AND INCLUSIVE EMPLOYERS**”, prepared, and submitted by MEKAELLA E. ADRID, SHAN MICHAEL M. BACCAY, MARIA CRISTINA G. BANARES, JEWEL CASSANDRA R. PAIRA in partial fulfillment of the requirements for the subject CAPSTONE PROJECT 0, has been accepted and recommended for ORAL EXAMINATION.

Mr. Michael C. Galo

Faculty In Charge

Date Signed

APPROVAL SHEET

The report attached hereto, entitled “**OPENING DOORS: A JOB PORTAL FOR PWDS AND INCLUSIVE EMPLOYERS**”, is hereby approved, and accepted in partial fulfillment of the requirements for the course of Capstone Project 0 by the Computing and Information Technology.

Panel Member Name and
Signature

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EXECUTIVE SUMMARY



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CHAPTER I

INTRODUCTION

1.1 Project Context

Individuals with disabilities often earn lower monthly wages than those without disabilities in many countries, leading to reduced purchasing power and a lower standard of living. This wage gap is partly due to the higher likelihood of disabled individuals working part-time, limiting their earnings and increasing their risk of poverty (Stoevska, 2022). The COVID-19 pandemic has added complexity to this issue by accelerating the use of digital tools in education, training, hiring, and job roles. While these technologies offer new opportunities to break down employment barriers—such as enabling remote work for those who need to shield themselves or face travel challenges—they can also create new hurdles when technologies are inaccessible or digital practices are poorly implemented (Vabulas, 2021).

The impact of these challenges is evident in the Philippines, where only 57% of persons with disabilities (PWDs) were employed in 2020, significantly lower than the national employment rate of 93.4% (TESDA). Widespread misconceptions, including beliefs that PWDs are incapable, have limited skills, or are too costly to employ, contribute to this employment gap (Mirasol, 2024). To address these barriers, employers could adopt alternative application methods, such as allowing job seekers to apply via phone calls or video submissions if written forms present difficulties.

In response to these challenges, Opening Doors: A Job Portal for PWDs and Inclusive Employers was conceptualized to address the need for diversity in hiring practices and to help reduce the unemployment rate among PWDs. The platform aims to connect PWDs with inclusive employers by offering tailored job



opportunities and promoting accessible recruitment processes. By bridging the gap between job seekers and forward-thinking companies, Opening Doors strives to create a more equitable and diverse workforce. This app offers a variety of features for both applicants and employers. Applicants can set up their profiles, search for jobs, track applications, and upload resumes. Employers can post job openings; filter candidates based on qualifications and communicate directly with potential hires. The platform also includes accessibility features such as text-to-speech and job-type filtering (Freelance, Part-Time, Full-Time) to make the job search more inclusive. This project aims to promote equal employment opportunities for Persons with Disabilities (PWDs), help employers build a diverse workforce, and enhance PWD job accessibility with technology.

1.2 Purpose and Description

The development of the **Opening Doors** job portal is expected to bring substantial benefits to Persons with Disabilities (PWDs), inclusive employers, and society at large. This platform aims to address social, economic, and technological needs for inclusivity by creating opportunities to harness the underutilized contributions PWDs bring to the workplace.

For PWDs, **Opening Doors** offers a dedicated platform where they can find job opportunities that align with their skills and abilities while ensuring that the application process is accessible and supportive. This can lead to increased employment rates, enhanced financial independence, and improved quality of life for PWDs.

For inclusive employers, the portal provides access to a diverse talent pool and tools to create fair and accessible recruitment practices. Embracing diversity often enhances organizational culture and improves brand reputation, attracting both



customers and top talent.

On a broader scale, society benefits from a reduction in unemployment rates among PWDs, which contributes to economic growth and social equity. By promoting inclusivity, **Opening Doors** helps break down stereotypes and fosters a more accepting and empathetic community.

1.3 Objectives

- To identify and categorize the specific needs, challenges, and competencies of PWDs in accessing meaningful employment opportunities.
- To provide a platform for inclusive employers to post job opportunities while ensuring accessibility and equitable hiring practices.
- To implement and measure user-friendly features that enhance accessibility, such as assistive technologies and inclusive design, promoting active participation by PWDs.
- To conduct targeted outreach campaigns to raise awareness among employers and PWDs about the portal and its potential to bridge the employment gap.
- To evaluate the platform's impact on PWD employment by tracking metrics such as job matches, employer satisfaction, and PWDs' job retention rates.

1.4 Scope and Delimitations

The project requires to design, develop, and implement an accessible web-based system that connects job seekers with inclusive employers. The platform will include features such as:

- User-friendly job search and application functions
- Progress tracking and Digital Portfolio



- Accessibility features, such as text-to-speech

However, the project has several delimitations:

- It is limited to job seekers within specified disability categories, meaning not all types of disabilities may be fully accommodated.
- The scope of employer participation depends on outreach efforts and willingness to adopt inclusive hiring practices.
- The system's accessibility features are designed based on commonly recognized disability needs, but individual user experiences may still vary.

1.5 Technical Terms

1. **Accessibility Features** – Design elements that ensure digital platforms can be used by individuals with disabilities, such as text-to-speech
2. **Inclusive Employment** – The practice of hiring and supporting employees with diverse abilities, ensuring equal opportunities in the workplace.
3. **Diverse Workforce** – A labor force composed of individuals from various backgrounds, including differences in abilities, gender, ethnicity, age, and experiences, fostering inclusivity and innovation in the workplace.
4. **Job Accessibility** – The extent to which job opportunities, application processes, and workplace environments are designed to accommodate individuals with disabilities, ensuring equal employment opportunities.
5. **Wage Disparity** – The difference in earnings between individuals or groups due to factors such as disability status, gender, experience, or industry standards, often highlighting inequalities in compensation
6. **PWD (Persons with Disabilities)** – Individuals with physical, sensory, intellectual, or mental impairments that may limit their full and effective participation in society on an equal basis with others.



CHAPTER II

REVIEW OF RELATED LITERATURE

2.1 Related Literature

Digital Economy for Individuals with Disabilities

According to a study co-published by Fundación ONCE and the International Labour Organization (ILO), digital transformation has drastically changed job opportunities for people with disabilities. The study underlines how by removing traditional employment barriers, online job platforms, assistive technologies, and remote work opportunities have enabled higher workforce participation for persons with disabilities. Technology-driven hiring systems and digital recruitment platforms have the ability to create fair opportunities. The study emphasizes that although technology can improve employment prospects, it may also aggravate inequality for persons with disabilities lacking access to digital resources, training, or necessary accommodations (Olney & Donoso, 2022).

The report emphasizes how many job portals and digital platforms lack accessibility features, reducing their usefulness for those with disabilities. It underlines the need for inclusive digital infrastructure, corporate training on disability inclusion, and supportive policies to ensure fair access to employment possibilities as well as of disability inclusion. Investing in accessible technologies helps companies to use the abilities and potential of people with disabilities, as such supporting a more inclusive digital economy (Olney & Donoso, 2022).



Digital Technologies for the Social Inclusion of Individuals with Disabilities

Manzoor and Vimarlund (2018) explored several information and communication technology (ICT) tools meant to increase social inclusion of people with disabilities. Their study looked at current publications on digital innovations including job-matching systems meant for people with different disabilities, speech recognition software, and screen readers. The results show that even if these technologies greatly improve employment accessibility, the design of digital tools that meet different disability needs still lacks standardization. As such, many job seekers with disabilities still run across challenges using online employment sites.

In addition, it stated in the study is the fact that most employment-oriented digital tools are developed without direct contributions from people with disabilities, leading to usability and efficacy shortcomings. When creating job portals, the researchers counsel developers to work with people with disabilities to guarantee the efficient integration of accessibility elements including voice commands and simplified navigation. This aligns with the aim of creating an inclusive job-seeking experience that lets people with disabilities participate totally in the workforce (Manzoor & Vimarlund, 2018).

Inclusion of Individuals with Disabilities, Technological Advancements, and the Digital Economy within ASEAN

Marsan et al. (2021) explore how the digital transformation affects the inclusion



of people with disabilities into Southeast Asian labor markets. Digital technologies, especially in remote work environments, digital content creation, and information technology roles, are argued to be indispensable for enabling employment possibilities for persons with disabilities. According to the research, job possibilities for people with disabilities will rise as the world moves toward digitalization as long as suitable laws and workplace accommodations are followed. But it also warns that people with disabilities might be excluded from the benefits of the digital economy without accessibility policies.

The study highlights the need of enhancing inclusive education and workforce training initiatives to give people with disabilities (PWDs) digital competencies relevant for the evolving employment environment. It underlines how perceptions of employers should change to value the skills of people with disabilities instead of focusing on their limitations. By encouraging inclusive hiring methods and guaranteeing accessibility of digital job platforms, governments and the business sector can cooperate to close employment discrepancies for persons with disabilities (Marsan et al, 2021).

Workplace Inclusivity via Microsoft's Enabler Program

The Microsoft Philippines Communications Team (2021) emphasizes the effectiveness of its Enabler Program, which gives people with disabilities in the Asia-Pacific region training and job prospects. While simultaneously informing companies about inclusive hiring policies, the initiative gives people with disabilities (PWDs) vital digital competencies in cloud computing and artificial intelligence. The program has



effectively enabled the employment of many people with disabilities in technology-oriented roles, proving that, when used well, digital tools can create major employment opportunities. According to the studies, hiring people with disabilities helps businesses since it supports occupational diversity and creativity.

The report shows in spite of its success that employers' reluctance to change their hiring practices is a major barrier to occupational inclusivity. Many companies still rely on traditional hiring practices that might not be available to people with disabilities. The Microsoft Enabler Program addresses this problem by helping to change hiring practices to include alternative application forms, assistive technologies, and specialized training courses covering many disabilities. This case study emphasizes the need of building job portals with accessibility issues in order to solve employment inequalities for persons with disabilities (PWDs) (Microsoft, 2021).

Examining the Obstacles and Advantages of Hiring Individuals with Disabilities

According to Aichner et al. (2024), hiring people with disabilities offers a number of advantages including lower turnover rates, more employee motivation, and a better working environment. Their studies showed that most businesses did not have significant financial difficulties implementing workplace accommodations, so debunking the myth that hiring people with disabilities calls for large expenditures. Furthermore, companies who embraced inclusive employment policies noted higher employee satisfaction and loyalty, so supporting the ongoing benefits of workplace diversity.



Aichner et al. (2024) also stated challenges with inclusive employment, including the necessity of specialized office adjustments and the need of overcoming prejudices among current workers. They emphasized the need of creating a friendly workplace if one is to allow the efficient integration of persons with disabilities. Their research indicates that awareness campaigns and training courses can help companies create a more inclusive and accessible workplace, so helping employees as well as the particular businesses.

2.2 Related Studies

Persons with disabilities (PWDs) as a workforce in the Philippines

Pedron (2024) states that Persons with Disabilities (PWDs) in the Philippines still face significant challenges to employment even if awareness of workplace inclusiveness is rising. The study emphasizes that application differs greatly in many different fields even with laws like the Magna Carta for Disabled Persons. False ideas about their capacity and the expected expenses related to workplace adaptations make many companies reluctant to hire persons with disabilities. The study emphasizes how public and commercial sectors must increase their advocacy to create fair employment possibilities.

Pedron (2024) also states businesses to carry out projects aiming at the training and inclusion of people with disabilities into various workplace environments. Companies in the hotel and service sectors have shown positive results in assigning



people with disabilities to roles that complement their abilities. The study comes to the conclusion that tearing down employment barriers calls for a cooperative effort among several sectors whereby government and business entities work together to support an inclusive labor market.

Human Resource Management Practices Regarding Inclusive Employment for Persons With Disabilities (PWDs) in the Philippines

Cruz (2023) claims that in order to encourage inclusive employment for persons with disabilities (PWDs) in the Philippines, HRM is absolutely vital. Their study looks at how non-governmental organizations (NGRs) carry out human resource policies meant to assist workers with disabilities (PWD.). The results show that recruitment policies give skills and potential top priority over physical restrictions, ensuring that persons with disabilities get fair pay and benefits. Moreover, the research shows that workplace policies have to follow global norms in order to support persons with disabilities (PWDs) long-term employment stability.

Cruz (2023) emphasizes that maintaining an inclusive workplace calls for constant training for companies as well as for staff. Essential elements for companies to change to a more inclusive workforce are sensitivity training and easily available office facilities. According to the study, HR managers should aggressively support disability inclusion by developing policies that fit the particular needs of workers with disabilities, thus increasing the diversity and output of the workforce.



The Lived Experiences of the Persons with Disabilities (PWDs) in the Workplace

Absolor (2023) declares that the degree of accessibility and awareness in an organization determines how differently persons with disabilities experience their employment. Interviews and observations revealed in the study that while some people with disabilities (PWDs) get fair treatment, others still suffer prejudice and limited opportunities for professional development. Many workers with disabilities have reported problems with workplace accessibility and inadequate reasonable accommodations, compromising their capacity to perform effectively.

Absolor (2023) explores how often companies that actively implement inclusive policies produce positive workplace experiences. Workplaces stressing accessibility and sensitivity training usually show higher retention rates and job satisfaction among people with disabilities (PWD). The study comes to the conclusion that companies have to start a more proactive approach to ensure that every employee, regardless of ability, has equal chances for professional development and career advancement.

Disabilities and Employment: An Analysis of Employment Opportunities for Persons with Disabilities in Major Industries in the Province of Cavite

Saquin (2023) shows that industries vary in their employment prospects for persons with disabilities (PWDs) in Cavite; some sectors show more openness to their hiring than others. The study looked at many businesses and found that people with disabilities find more welcome in sectors including manufacturing, retail, and customer



service than in others. Assessing the employability of people with disabilities in the area mostly relies on educational attainment, job experience, and skill level.

Saquin (2023) emphasizes how important government incentives are in inspiring businesses to hire people with disabilities. Subsidies and tax breaks for companies that employ people with disabilities have shown success in improving job rates. According to the study, more awareness campaigns are required to inform businesses on these incentives and the benefits of keeping a diverse workforce. Improving employment opportunities for people with disabilities calls for changes in employer attitudes as well as policy execution.

Job Performance and Organizational Environment of Public Sector Employees with Disabilities

Velasco (2024) claims that employees with disabilities working in public sector organizations' job performance is much influenced by their organizational environment. Their studies focused on local government agencies (LGUs) and found that workers with disabilities who get enough support and accommodations perform rather like their able-bodied colleagues. Job satisfaction and output are raised by elements including office accessibility, assistive technology, and a supporting management team.

According to Velasco (2024), Policies allowing persons with disabilities should be institutionalized to ensure ongoing inclusion. Many local governments have started using disability-sensitive policies; still, execution and consistency remain difficult tasks.



The study recommends governments to apply clear policies and monitoring systems to evaluate the development of programs aiming at inclusive employment. Organizations can maximize the skills of PWD staff members and promote a more fair workplace by building a supportive working culture.



CHAPTER III TECHNICAL BACKGROUND

3.1 Details of the Technology to be Used

This section outlines the technologies used in developing **Opening Doors: A Job Portal for PWDs and Inclusive Employers**.

Programming Languages & Frameworks:

- **PHP** – Handles backend development and database interactions.
- **HTML, CSS, JavaScript** – Used for the frontend and user interface of the web version.
- **Flutter (Dart)** – Used for cross-platform mobile app development to ensure compatibility with both Android and iOS.

Database Management System:

- **MySQL** – Stores user accounts, job postings, applications, employer details, and other relevant data.

Development Tools:

- **XAMPP** – Provides a local development environment for the web-based implementation.
- **VS Code or Android Studio** – Used for writing and debugging Flutter applications.



3.2 Project Technical Description

Opening Doors: A Job Portal for PWDs and Inclusive Employers is a dedicated platform where they can find job opportunities that align with their skills and abilities while ensuring that the application process is accessible and supportive providing tools that cater to diverse needs. The platform includes key accessibility features such as text-to-speech support, job-type filtering, and simplified UI settings to enhance user experience.

The project aims to develop a web-based and mobile-friendly job portal with the following functionalities:

- **Job Seeker Features:** Profile creation, job search, resume upload, application tracking, and accessibility options.
- **Employer Features:** Job posting, candidate filtering, direct communication with applicants, and inclusive hiring resources.
- **Accessibility Enhancements:** Text-to-speech and accessible navigation

Procedures and Implementation

The development and implementation of **Opening Doors** follow a structured approach:

Requirement Analysis:

- Conduct surveys and interviews PDAO
- Research accessibility guidelines and inclusive hiring practices.



Components, Functions, and Uses

The Opening Doors job portal consists of the following core components:

1. User Management

- Function: Allows job seekers and employers to create and manage accounts.
- Use: Provides authentication, user profiles, and role-based access control.

2. Job Search and Application

- Function: Enables users to search and apply for jobs based on qualifications and preferences.
- Use: Helps PWDs find suitable employment opportunities and track applications.

3. Employer Job Posting and Filtering

- Function: Employers can post job openings, filter applications, and communicate with candidates.
- Use: Allows companies to identify and recruit diverse talent efficiently.

4. Accessibility Features

- Function: Provides text-to-speech, and simplified UI settings and navigation.
- Use: Enhances usability for job seekers with different



disabilities.

5. Security and Data Privacy

- Function: Implements authentication and compliance with data protection laws.
- Use: Ensures secure user data storage and prevents unauthorized access.



CHAPTER IV

METHODOLOGY, RESULTS AND DISCUSSION

4.1 Requirement Analysis and Documentation

4.2 Design of Software, Systems, Product, and/or Processes

4.3 Development and Testing

4.4 Description of the Prototype

4.5 Implementation Plan

4.6 Implementation Results



CHAPTER V
SUMMARY AND RECOMMENDATIONS

5.1 Summary

5.2 Recommendations



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