

ANDROID MOBILE APPLICATION TO ADVERTISE JOB VACANCIES FOR THE DISABLED

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ABSTRACT

This paper proposes the development of a mobile application to advertise job vacancies for the disabled. The justification is based on the high number of people with disabilities in Brazil, who have some special needs, and who have the right to work. And also, to help companies comply with the legislation through a tool to advertise job vacancies. Developing an application is a current and innovative solution, since today more than 80% of the population has access to a smartphone. And it's an interaction and access technology that can be successfully applied to help the community solve a problem. Although work is fundamental in the life of a disabled person, companies claim that they have great difficulties in allocating these professionals in the workforce. The main difficulty exposed by employers is the lack of professional training for the disabled, and also the lack of interest in filling the vacancies. The Brazilian Institute for the Rights of Persons with Disabilities (IBDD) says that the big problem is that companies do not publicize vacancies for people with disabilities. Therefore, the purpose of this paper refers to the development of an application, designed, modeled and developed using Android, to assist in the process of posting job vacancies for the disabled.

Keywords: Mobile Application, Android, Advertising, Job Vacancies, Disabled.

APLICATIVO MÓVEL ANDROID PARA ANUNCIAR VAGAS DE EMPREGO PARA DEFICIENTES

RESUMO

Este trabalho propõe o desenvolvimento de um aplicativo mobile para divulgação de vagas de emprego para pessoas com deficiência. A justificativa se baseia no alto número de pessoas com deficiência no Brasil, que possuem alguma necessidade especial, e que têm direito ao trabalho. E também, auxiliar as empresas a se adequarem à legislação por meio de uma ferramenta para divulgação de vagas de emprego. Desenvolver um aplicativo é uma solução atual e inovadora, visto que hoje mais de 80% da população tem acesso a um smartphone. E é uma tecnologia de interação e acesso que pode ser aplicada com sucesso para ajudar a comunidade a resolver um problema. Embora o trabalho seja fundamental na vida de uma pessoa com deficiência, as empresas alegam que têm grandes dificuldades em alocar esses profissionais no mercado de trabalho. A principal dificuldade exposta pelos empregadores é a falta de capacitação profissional para as pessoas com deficiência, e também a falta de interesse em preencher as vagas. O Instituto Brasileiro dos Direitos da Pessoa com Deficiência (IBDD) afirma que o grande problema é que as empresas não divulgam vagas para pessoas com deficiência. Portanto, o objetivo deste trabalho refere-se ao desenvolvimento de um aplicativo, projetado, modelado e desenvolvido utilizando Android, para auxiliar no processo de divulgação de vagas de emprego para pessoas com deficiência.

Palavras-chave: Aplicativo móvel, Android, Publicidade, Vagas de emprego, Deficientes.

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1 INTRODUCTION

Throughout human history, there have been numerous technological changes and advances, whether in the harnessing of fire, the invention of the wheel, the construction of tools, or even, most importantly, the creation of the internet. These changes impact society's daily life and alter the way it relates to others. People evolve and incorporate innovation constantly (SILVA, 2009). Although the consolidation of the concept of citizenship is currently fully assured, people with special needs suffer from massive economic exclusion and difficulties in entering the job market.

It took a long time to recognize the need to value these people, their needs, and their unique characteristics. Regarding people with disabilities, society is overcoming prejudice to enable their effective inclusion. They will become an important part of their own destiny and no longer mere beneficiaries of social assistance policies. The right to come and go, to work, and to study is key to the inclusion of any citizen, and for this to be realized for people with disabilities, it is necessary to demand not only the State, but also families and society, to build a free, just, and supportive society through compensatory and effective public policies, with the support of businesses, which must prioritize respect for the social value of work when hiring and training people with special needs (FRIEDRICH, 2016).

The Quota Law requires every company with 100 or more employees to allocate 2% to 5% of its jobs (depending on the total number of employees) to people with disabilities. However, according to the Brazilian Human Resources Association (ABRH), a large percentage of companies hire people with disabilities solely to comply with the law, around 86%. Only 2% hire because they value diversity; 3% because they believe in the potential of these individuals; and 9% are interested in the candidate's profile, regardless of quotas or disability.

Another finding highlighted in the survey is that 60% of Human Resources (HR) professionals believe that people with disabilities experience prejudice in the workplace, whether from colleagues, managers, or clients. "The company that hires complies with the law, but people with disabilities are not accepted internally (SCHWARZ; HABER, 2009). Awareness regarding people's attitudes is needed."

According to data collected in 2019 by the Brazilian Institute of Geography and Statistics (IBGE), at least 45 million people have some type of disability, almost 25% of the country's population (IBGE, 2021). Another survey conducted by the Inter-Union Department of Statistics and Socioeconomic Studies (DIEESE), using data from the General Registry of Employed and Unemployed Persons (CAGED), indicates that 73,500 people with disabilities (PWDs) were laid off from formal employment between January and December 2020—meaning, during the pandemic, they were the first to be laid off.

Although work is essential in the lives of people with disabilities, companies claim they have great difficulty placing these professionals on their staff. The main difficulty employers point out is the lack of professional training for people with disabilities, as well as a lack of interest in filling these positions. The Brazilian Institute for the Rights of Persons with Disabilities (IBDD) states that the main problem is that companies fail to advertise job openings for people with disabilities.

In this sense, this article presents a solution to this problem by proposing the development of an Android mobile application to advertise job openings for people with disabilities. This application will help companies comply with legislation by providing a space for job postings. It will also help people with disabilities find advertised positions. This solves a problem and contributes significantly to society and accessibility.

Discussion on this topic is necessary because it addresses the importance of including people with disabilities in the job market, presenting both the challenges and the possibilities. For most companies, including people with disabilities in their workforce simply benefits from improving their institutional image (SCHWARZ; HABER 2009). Companies claim that there is no qualified workforce among people with disabilities, which makes it impossible for them to comply with the law and, consequently, not offer jobs to people with disabilities.

Current laws that protect people with disabilities, in their rights as persons with disabilities, state that every human being has the right to enjoy all the conditions necessary for the development of their talents, without being subjected to any type of discrimination. Therefore, people with disabilities must be supported and protected by current laws that ensure the right to effective employment within public or private

organizations. Brazil is one of the few countries with specific legislation for this purpose, but this legislation is rarely enforced.

In Brazil, there are approximately 45 million people with some type of disability. These people face prejudice, exclusion, and difficulties in accessing jobs. As previously mentioned, companies claim that these people lack the necessary qualifications. However, according to a survey conducted by the Brazilian Institute for the Rights of Persons with Disabilities (IBDD), the main problem is that companies fail to advertise job openings for people with disabilities. In other words, there is no space to advertise such positions, and thus no space for people with disabilities to search for them.

This justifies the proposal for this article, which aims to solve this problem from the perspective of both business owners and people with disabilities. It also aims to create a space where both can interact and meet, making access to job openings more efficient. Therefore, this work aims to contribute to this problem by proposing and developing an Android mobile application for advertising job openings. This application can be used by people with disabilities to search for vacancies and by companies to advertise them, contributing immensely to society and accessibility.

2. THEORETICAL FRAMEWORK

This section presents theoretical foundations that support the development of this research.

2.1 What is disability?

There are several definitions of the concept of disability.

According to Friedrich (2016), disability is the term used to define the absence or dysfunction of a psychic, physiological or anatomical structure. The expression “person with a disability” can be applied to refer to any person who experiences a disability continuously, who generally needs specialized care, whether for therapeutic purposes, such as physiotherapy or motor stimulation, or so that they can learn to deal with the disability and develop their potential.

It is a broad concept, which affects many parts of the human body.

[...] is a person who has some limitations of a physical, mental or sensory nature, and only this limitation makes him or her different from people considered “normal”; is, above all, a “person”, who has, among his or her personal attributes, a failure in some of the visual, motor, auditory, mental areas or in more than one of these areas; is one who presents a loss or decrease in capacity: intellectual (MD), motor (FD), auditory (AD), visual (DV) with a consequent failure in adapting to the demands of society. When there are two types of disability associated, it is defined as multiple disability; the disabled person is conceptualized as the person whose efficiency does not allow him or her to perform global or specific activities (FAGUNDES, 2008, p. 10).

Companies hiring people with disabilities should not be concerned with their disability, but rather with their ability to work. To integrate a disabled person into the job market, it is necessary to present them as a person with a disability capable of working and refer them to specialized training, respecting their physical, visual, auditory, or mental limitations.

2.2 Quota Law for Entering the Labor Market

The employment of people with disabilities in Brazil is protected by Law 8.213/91, known as the quota law. Article 93, sections I to IV, clearly explains the proportion of employees a company has with the percentage of physically disabled workers it must hire:

Article 93. A company with 100 (one hundred) or more employees is obliged to fill 2% (two percent) to 5% (five percent) of its positions with rehabilitated beneficiaries or qualified people with disabilities, in the following proportion (Brazil, 2020, p. 1,514):

I - Up to 200 employees.....	2%;
II - from 201 to 500.....	3%;
III - from 501 to 1,000.....	4%;
IV - from 1,001 onwards.....	5%.

Although the law has been in effect for over 20 years, many companies fail to comply, citing a lack of qualified workers as one of the justifications. Assessing the

qualifications of people with special needs for work is no easy task, especially since part of an employee's qualifications are acquired through the course of their work within the company, in addition to the training they receive to perform their duties on the job.

“Companies become truly inclusive to the extent that their motivations are not restricted to compliance with the Quota Law, but rather are based on the belief that hiring people with disabilities and consequently meeting their special needs benefits everyone, including the companies themselves, and reflects concepts highly valued in the 21st Century” (SASSAKI, 2006, p. 44).

2.3 History behind the Implementation of the Quota Law

Historically, there has been an exclusionary, segregationist, and prejudiced view of people with disabilities. These deeply rooted concepts persist in many situations to this day. Individuals with disabilities lived on the margins of society, with few or no recognized rights.

In the 19th century, the first searches for social rights began to emerge with actions that came from governments and that aimed to guarantee, collectively, the rights to health, education, housing, work, leisure and culture for all (RIBEIRO, 2016).

However, it was only after the end of World War II that concerns about people with disabilities arose, given that, in addition to orphaned families and economic chaos, a large number of economically active but disabled individuals returned to their homes. It was during this period, according to Fagundes (2008), that assistive technologies and specialized techniques were developed, aiming to assist with the rehabilitation, readaptation, and reintegration of individuals with disabilities in all areas of life, from family life to the workplace.

According to Bahia (2006), the Getúlio Vargas administration (1930-1945) began to consider more effective participation of people with disabilities in society, with regard to education, rehabilitation, professionalization, and insertion into the labor market. This period saw the creation of the Consolidation of Labor Laws (CLT), when the first welfare policies for people with disabilities were implemented, supported by a centralized and interventionist state.

In the 1950s, with the government of Juscelino Kubitschek, Bahia (2006) emphasizes that Brazil entered a phase of “full” development, marked by the developmentalist boom, the implementation of the automobile industry, the arrival of multinationals, leading to the emergence of many jobs, which made it possible to reconcile them with the potential of people with some kind of disability.

Then, in the 1970s, movements defending the rights of people with disabilities emerged in Brazil. The concept of “equal opportunities” emerged. This concept was developed, disseminated, and vigorously defended by the movement itself.

In the 1990s, the “inclusion” paradigm emerged, starting to raise awareness in society of the need for a community that is accessible in its entirety, thus allowing everyone to exercise their rights and duties with the greatest possible autonomy, transforming the lives of people with disabilities and increasing their possibilities.

“Unlike in the past, when people with disabilities were considered a dead weight for society or, at best, cheap labor, today these people represent a considerable impact on the economy of any country, when they are working formally” (BAHIA, 2006, p. 76; ROMITA, 1991).

Despite significant progress, there is still a long way to go before the job market includes people with disabilities in a fair, equal manner, respecting differences and valuing their potential.

2.4 Unfeasibility of Applying the Quota Law

Few of these disabled people are able to enter the job market. Therefore, the government created a mechanism to try to solve the problem. It established quotas (Quota Law) for disabled people in companies with more than one hundred employees. Although these laws were created to expand job market access opportunities for people with disabilities, in practice, the process is not so simple.

Some business segments face enormous difficulties in complying with the legal requirement to hire people with disabilities, as the activity carried out by the company and the risks to which disabled people will be exposed in the performance of certain functions are never taken into consideration, as most of them lack the qualifications and preparation for insertion into the job market.

Fagundes (2008) explains that there is an obstacle imposed by legislation regarding the hiring of people with disabilities related to the provision, in article 93, paragraph 1, of Federal Law No. 8,213/91 (Quota Law), which states: The dismissal of a person with a disability or a rehabilitated Social Security beneficiary at the end of a fixed-term contract of more than 90 (ninety) days and the unjustified dismissal in an indefinite-term contract may only occur after the hiring of another worker with a disability or rehabilitated Social Security beneficiary. (Brazil, 2020, p. 1,514).

It follows that, even if the service is not being provided satisfactorily, the company should keep this employee on its staff until it finds another with a disability to replace him. This is a significant burden for the company, as not only will it not be able to effectively perform the service provided by that employee, but it will also have to provide a third employee to supplement the performance of that role. Furthermore, it will have to find another disabled person to replace the one being laid off. The new hire will require new searches, new interviews, new training, and even the development and training of this new employee.

Another problem, as Fagundes (2008) continues, is the issue that prevents people with disabilities from entering the job market: the receipt of the benefit granted by Social Security through Law No. 8.742/93, which becomes an obstacle for companies in filling quotas, as many of them do not want to give up this benefit, which is generally around the minimum wage. To be eligible for this benefit, the person with a disability must prove that their family's monthly per capita income is less than a quarter of the minimum wage. To be granted this benefit, they are also evaluated by Social Services and the INSS Medical Examiner to determine whether the disability prevents them from living independently and working.

Carreira (1996) also found in his study that a lack of awareness of the potential of people with disabilities, among other variables, was one of the major reasons companies prevented or hindered the hiring of this population. There is a need to invest in training employers to learn how to deal with this diversity. To this end, it would be important for them to demystify misconceptions about disability. One way would be to provide a space to discuss this issue, clarify doubts, and ask appropriate questions.

Many people with disabilities, due to a lack of information or mere ignorance of the law, believe that if they begin working, they will lose their right to receive the benefit. However, this is not true, according to some legal scholars, since social security legislation establishes that receipt of the benefit is conditional on the inability to work. The fact is that this provision, Law 8742/93, violates the fundamental rights of people with special needs, as the Federal Constitution, in its article 203, does not impose any restrictions in this regard. On the contrary, in its section V, "[...] the guarantee of a minimum monthly benefit wage to the person with a disability and to the elderly who prove that they do not have the means to provide for their own maintenance or to have it provided by their family, as provided by law." (BRAZIL, 2020, p. 68).

In this way, the Federal Constitution guarantees disabled people the right to social inclusion, which includes the right to work and the right to monthly benefits.

2.5 Importance of Government and Family Incentives

Some of the government's incentives include vocational training courses. Examples of these types of entities, collectively known as Sistema S, include the National Industrial Training Service (SENAI), the National Commercial Training Service (SENAC), the National Rural Training Service (SENAR), the National Transportation Training Service (SENAT), and the National Cooperative Service (SESCOOP). All of these offer mid-level technical courses that are part of the federal technical training program, which prioritizes professional qualifications. (BRASIL, 2012).

Another great example is the National Plan for the Rights of Persons with Disabilities – Living Without Limits, which offers technical and technological vocational training courses at secondary and technological levels with no limit on the number of places available to people with disabilities, who will have the necessary opportunities and accessibility.

Articles 428 and 433 of the Consolidation of Labor Laws (CLT), through Law 11.180/05, guarantee the formation of apprenticeship contracts without age limits for people with disabilities, encouraging and providing more opportunities to enter the job market or even improve their position in the company where they work. (BRASIL, 2020, p. 937-938).

Regarding family, it is the foundation of any living being. Based on this assumption, it's inevitable that we should mention the influence family has on the lives of people with disabilities. After all, family can have both a positive and negative impact. The topic of family can be divided into three parts: social, cultural, and economic.

And finally, the economic issue greatly influences the life of a person with a disability, since if they have a good economic situation, this will make it easier to enter college or any other course or activity that will add to their education.

2.6 Literature Review

Literature searches were conducted for related works presenting applications for advertising vacancies for people with disabilities; however, no works on this specific topic were found. Studies were identified that present applications for other purposes for people with disabilities, such as tourism (ROSA, 2020), city information (BARBOSA, 2017), among others.

Ferreira et al. (2022) presented the development of a mobile application to advertise job openings. Android software was used in the development, as did Oliveira et al. (2024).

This further reinforces the importance of developing this research, contributing to the community and solving this significant problem.

2.7 Android (App Inventor 2)

App Inventor 2 is an online visual programming environment that allows the development and management of software applications for devices powered by the Android operating system. It has the advantage of not requiring extensive programming knowledge, as it is quite educational and simple to program (CRUZ; LISBOA, 2014).

According to Souza (2018), the application uses block programming, and this is the main feature that allows the developer to program more easily. The application, in addition to being used for its ease of use, is widely used in the educational environment, as a tool to aid in the teaching and learning process of programming,

aiming to familiarize beginning students with the programming environment (SOUZA, 2018).

The system consists of two sections: App Inventor Designer and App Inventor Blocks Editor. The App Inventor Designer window is the project's home screen, where the user creates the interface for the application being developed by selecting components and adjusting their properties. The App Inventor Blocks Editor window is where the user associate's actions for each component of the application under development, where programming takes place (SILVA FILHO, 2018).

3. MOBILE APPLICATION DEVELOPMENT

The Android mobile application was developed using the App Inventor development interface, an online development platform provided by MIT (Massachusetts Institute of Technology). This platform allows for the creation of the application's visual interface and block-based programming. Figure 1(a) shows the online development interface, and Figure 1(b) shows a screenshot of the application interface developed.

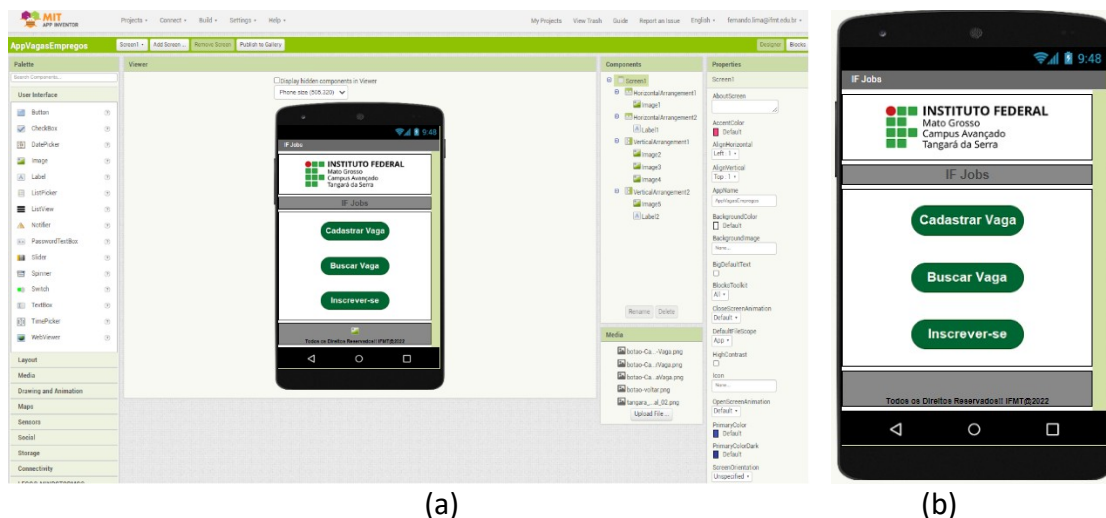


Figure 1 – Development interface in App Inventor.

After developing the app's interface, programming was performed using block components. Figure 2 illustrates an example of the programming used to connect to the database that stores the app's data. As illustrated, there is a set of four blocks, the first of which is responsible for performing some configurations when the app starts,

such as checking whether the connection is active and, if not, sending a message to the user, and also disabling the registration and query buttons.

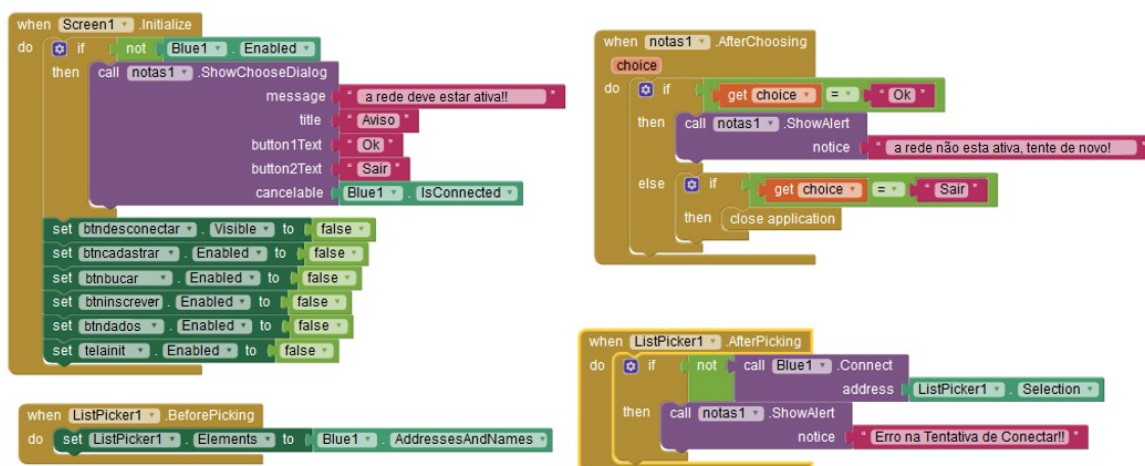


Figure 2 – connection interface programming.

4. RESULTS AND DISCUSSION

After programming and assembling the mobile application, several tests were performed to verify the system's functionality. Figures 3 and 4 illustrate the final application screens with data entered for testing.

Figure 3 shows the application's home screens, where entrepreneurs use the "Register a Job" button to access the second screen and register the job information. After registering a job in the application, it becomes available for consultation on the "Vacancy Search" screen shown in Figure 4. All screens have a back button to return to the application's main screen.

Figure 4 shows the job search screen, where people with disabilities can access all job openings registered by companies and check the requirements to apply for them. Each position is described, along with the activities the employee will perform, the salary and benefits, and the job requirements.

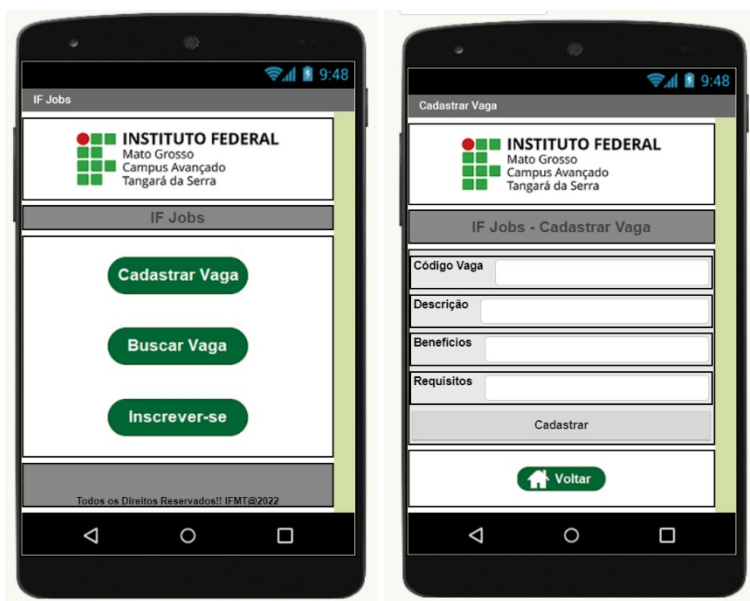


Figure 3 – Registration screens of the developed application.

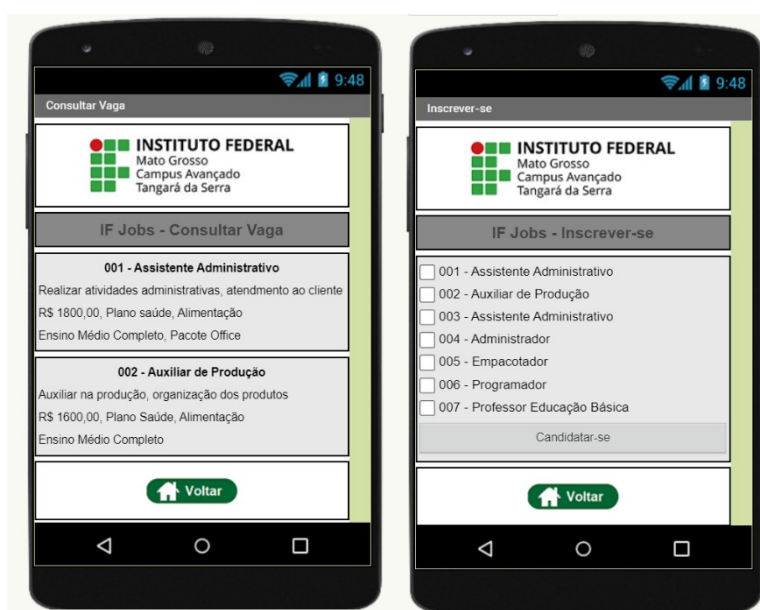


Figure 4 – Consultation and registration screen of the developed application.

Once the disabled person is interested in one of the advertised positions, they return to the home menu and go to the application page. On this screen, the candidate will find all the advertised positions and select the one they are interested in applying for. Once this is done, the system will automatically notify the employer that there is a candidate for the position with all the information filled out at the time of registration in the app. The candidate can then apply for as many positions as they wish.

After completing the research, when analyzing the prototype obtained, it was possible to conclude that the initially expected objectives were met, since the application performed its expected functions and met the expectations of the proposal.

4.1 Analysis and Discussion of Results

When conducting a qualitative analysis of the developed application, the questions addressed the positive and negative aspects of its practical application. The authors present the following findings as the results of the qualitative analysis:

Positive points:

- The mobile application is intuitive, simple and easy to use.
- The interface is efficient and offers instant control.

Negative Points:

- The data storage interface used by App Inventor does not allow for very large data storage. Therefore, for the practical application of this type, development with a professional database would be necessary.

Based on the results of the qualitative analysis, one suggestion for future implementation is the adoption of a professional database, which would provide encrypted and secure data storage. This action would bring significant improvements to the work, addressing the issues identified as negative.

4.2 Field Research: Testing the Application with People with Disabilities

After developing the app, the development team conducted field research at the Prof. Isoldi Storck Municipal Center for Special Education in Tangará da Serra, Mato Grosso do Sul, which provides services to the visually impaired, hearing impaired, and wheelchair users. The primary objective of this research was to collect data that guided the development of the app, with a view to testing and identifying improvements.

The field research was conducted to test the prototype, verify that it performed the initially expected functions, and assess how disabled individuals would evaluate the app's functionality. During this phase, individuals tested the app to search for

registered job openings and register for selection processes. All data entered into the app was fictitious and used specifically for testing. After testing the app, a questionnaire was administered with the following questions:

- Question 1: Is the app easy to use?
- Question 2: Did you have any difficulties using the application?
- Question 3: Would you use an application of this type in your daily life?
- Question 4: What is your rating for this app?
- Question 5: What recommendations do you have to make to improve the application?
- Question 6: Do you think you would have access to job openings through the app?

The questionnaire was administered to 11 people with disabilities, who tested the application and gave their assessment.

For question 1, all 11 people with disabilities responded that the app is easy to use. For question 2, respondents unanimously said they had no difficulty using the app. Regarding question 3, the interviewees also responded that they would use an application of this type in their daily lives, and that they hoped that it could actually be made available to help people with disabilities find job vacancies.

For question 4, a rating from zero to ten was requested for the application, with nine respondents giving a rating of ten and two giving a rating of nine.

For question 5, the most relevant feedback requested improvements to the interface's font size, the possibility of reading the actions for the visually impaired, and also that it be stated in the type of vacancy advertised whether the disabled person would be registered or not, as this would imply legal causes for some disabled people who receive disability retirement, and if they are registered, they lose the benefit.

Finally, in question 6, all the disabled people interviewed said yes, they would believe that the application could help in their search for a job in the job market.

Thus, through this field research, it was possible to understand the importance of creating this application and understand that this is a big step towards the inclusion of people with disabilities in the job market, guaranteeing their autonomy and right to choose.

5. CONCLUSION

This article presents the development of a mobile application to advertise job vacancies for people with disabilities, using the Android app inventor 2 tool, which presented excellent results for the prototype application developed.

This work was supported by the Prof. Isoldi Storck Special Education Center in Tangará da Serra, which provided students with disabilities from the institution with the opportunity to test the app and complete an evaluation questionnaire. This process was essential for evaluating the app from the perspective of users, who are the ultimate goal of this work.

Thus, it is concluded that the application proposed in this article is quite efficient and accurate, fulfilling the proposal very well, enabling a space where disabled people and employers can meet safely and solve a major social problem of inclusion of disabled people.

Finally, the creation of this work not only brought scientific knowledge about the development of a mobile application, but also encouraged the creation of research in the social sphere of the region, with an emphasis on the development of technology aimed at accessibility and inclusion of people with disabilities.

6. REFERENCES

BAHIA, MS Social Responsibility and Diversity in Organizations: Hiring People with Disabilities. Rio de Janeiro: Qualitymark, 2006.

BARBOSA, H. et al. Agile methodologies for mobile application development. Pensar Tecnologia Magazine, [SL], v. 4, n. 2, Jun. 2017.

BRAZIL. MINISTRY OF LABOR AND EMPLOYMENT (MTE). The inclusion of people with disabilities in the labor market. Available at: <http://portal.mte.gov.br/data/files/FF8080812BCB2790012BCF9D75166284/inclusao_pessoas_defi12_07.pdf>. Accessed on: September 27, 2020.

_____. Portal Brasil. Sistema S is a strong ally of businesspeople in training workers. Available at: <<http://www.brasil.gov.br/educacao/2012/02/sistemas-e-estrutura-educacional-mantida-pela-industria>>. Accessed on: September 28, 2020.

_____. Special Secretariat for the Rights of Persons with Disabilities. Living without limits. Available at: <<http://www.pessoacomdeficiencia.gov.br/app/viver-sem limite>>. Accessed on: September 29, 2020.

CAREER. D. The integration of people with disabilities into the job market.

Available at: <www.fgvsp.br/academico/professores/Dorival_Carreira/Omercado.doc> Accessed on September 28, 2020.

CRUZ, AA; LISBOA, EF WebHome – Home automation using Raspberry Pi. Science and Technology Journal, [SI], v. 17, n. 31, Dec. 2014.

FAGUNDES, PS et al. The inclusion of disabled people in the labor market. 2008. 24 p. Academic work (Administration Course) – Faculdade Novos Horizontes, 2008.

FERREIRA, R. A., DOS SANTOS, D. B., DE SOUZA, S. S. F., & LIMA, F. P. DOS A. (2022). Desenvolvimento de um aplicativo móvel para divulgação de vagas de empregos para deficientes. Brazilian Journal of Development, 8(5), 40615–40632.

FRIEDRICH, RW People with disabilities in the labor market: difficulties in inclusion. XIII International Seminar on Social Demands and Public Policies in Contemporary Society, pg. 1-17, 2016.

IBGE. Available at: <<https://www.ibge.gov.br/>>. Accessed on: May 15, 2021.

OLIVEIRA, F. P.; HEEMANN, N. F.; BENNEMANN, C. B.; FARIA, J. G.; Fiirst, W. G.; Souza, S. S. F.; LIMA, F. P. A. Development of a website to advertise job vacancies for disabled people. Open Science Research XVI. 1ed.: Editora Científica Digital, 2024, v. 16, p. 164-185.

RIBEIRO, TS The inclusion of people with disabilities in the labor market and the ineffectiveness of the application of the quota law in private companies. In: Âmbito Jurídico, Rio Grande, XV, n. 101, Jun 2012.

ROMITA, AS Work of the Disabled: In JTB 17-812,1991.

ROSA, MR collaborative application with accessibility information to tourist services and sites: case study in Foz do Iguaçu/PR. Master's Dissertation, State University of Western Paraná (UNIOESTE), 105 p. 2020.

SASSAKI, RK Inclusion: Building a Society for All - 7th Edition. Rio de Janeiro: WVA, 2006.

SCHWARZ, A.; HABER, J. Quotas: how to overcome the challenges of hiring people with disabilities. São Paulo: I. Social, 2009.

SILVA, AMP Teaching-learning processes in the digital age. 2009. Available at: <<http://www.bocc.ubi.pt/pag/silva-adelina-processos-ensino-aprendizagem.pdf>>. Accessed on: April 15, 2020.

SILVA FILHO, SS Proposal of a microcontrolled system for data acquisition and automation of residential environments. 2018. 55f. Dissertation (Master's in Applied Computing) - State University of Feira de Santana, Feira de Santana, 2018.

SOUZA, WA An analysis of the use of the MIT app inventor 2 platform as a tool to assist in the programming teaching and learning process. 2018. Available at: <<http://repositorioinstitucional.uea.edu.br/handle/riuea/995>>. Accessed on: May 19, 2019.