

System Information Vacancy Work In Palembang City Based On Codeingiter Framework

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Article Info	ABSTRACT
<p>Keywords: Information Systems, Job vacancy, Codeigniter, Web Based Recruitment.</p>	<p>The rapid development of information technology has encouraged various sectors, including the world of work, to adapt to more modern and efficient systems. Accurate data management and the use of technology such as computers are now a must, especially amidst the demands of globalization and economic dynamics. In this context, websites emerge as relevant media for conveying information, including job vacancies. Currently, the challenges in finding jobs and meeting workforce needs are major problems experienced by many levels of society. Although the recruitment process has been digitized, there is still a gap between the number of vacancies available and qualified job seekers. To overcome this obstacle, the development of a web-based job vacancy information system is considered an effective solution. This system accelerates the dissemination of job vacancy information and facilitates access for job seekers and companies in the recruitment process. This study uses direct observation methods at the Palembang Multipurpose Building and literature studies from various literature for system development. This system is designed using the SDLC model, including the Waterfall and Agile methods, which ensure a structured and flexible development process. The results of this study indicate that the implementation of a web-based job vacancy information system can improve recruitment efficiency, provide wider access for job seekers in Palembang, and help companies get suitable candidates. This system is expected to be an effective means of connecting applicants with job opportunities more easily, quickly and efficiently.</p>
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INTRODUCTION

The rapid development of information technology has encouraged various sectors, including the employment sector, to utilize digital systems in their operational processes. In today's digital era, web technology is not only a communication tool, but also plays an important role in providing information quickly and widely (Agyztia Premana et al., 2020). Web-based information systems enable various parties, both companies and job seekers, to interact in one efficient platform, which was previously unattainable by traditional methods (Martin, 2020).

This research is also driven by the need to reduce the gap between the number of available job vacancies and job seekers, who often find it difficult to find opportunities that match their qualifications (PUTRA & PUTRA, 2018). The demand for systems that can speed up and simplify the search and processing of job vacancy information is increasing, especially in urban areas such as Palembang (Nugraha et al., 2020). This web-based job vacancy information system was developed using the Rapid Application Development (RAD) method, which provides flexibility and speed in responding to user needs (Zufria, 2013).

Job vacancy information systems emerge as an innovative and efficient solution to match career opportunities with job seekers. Along with technological advances, job vacancy information systems are not only digital windows that open wider access to various job opportunities, but also become a means of empowering individuals to manage and improve their career potential (Baenil Huda & Saepul Apriyanto, 2019).

The CodeIgniter framework was chosen as the main framework, due to its high flexibility and ease in developing web applications (Kusuma, 2021). In addition, the use of the Unified Modeling Language (UML) helps ensure the interconnectedness between components and the regularity of the system development process (Krisna et al., 2022). This study proposes a technology-based solution to create efficiency in searching and disseminating job vacancy information (Bukhori, 2023). The purpose of this study is to build a job vacancy information system that makes it easier for job seekers and companies to access and convey information efficiently in Palembang City.

No.	Researcher	Research Title	Research result
1	S. Muliawan, D. David	Design System Information Staff- ing Web Based At PT Bangun Cipta Anugrah Abadi	This research develops system information web -based us- ing the CodeIgniter framework to facilitate management va- cancy jobs and job applicants.
2	H. Widyastuti, IM Muttaqien	Design and Construction of a Web-Based Job Vacancy Information System Using the CodeIgniter Framework	System designed information utilize the CodeIgniter framework to manage information online job vacancies , speed up the recruitment process labor .

METHOD

The author uses the RAD (Rapid Application Development) method in this study as a system development model. The Rapid Application Development (RAD) method is an approach that prioritizes speed in system development, integrating various techniques and approaches that are different from conventional methods. RAD is designed to provide faster services with high-quality results, beyond what is usually produced through traditional development cycles (Puspita et al., 2024).

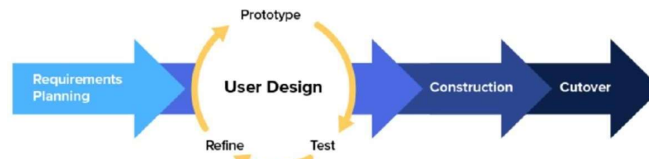


Figure 1 RAD (Rapid Application Development) Method

In its application, the Rapid Application Development (RAD) method has several main stages, namely requirement planning, user design, construction, and cutover. The requirement planning stage involves identifying user needs which aims to quickly define the objectives and main features of the system. The user design stage involves users directly in the design process through interactive prototypes, thus enabling the development of designs that are in accordance with user needs. Furthermore, the construction stage focuses on the development of system components and features iteratively and gradually. Finally, the cutover stage is the stage of full system implementation into the operational environment (Wicaksono & Suryawan, 2023). With this iterative and collaborative approach, RAD allows rapid adjustment to changing needs, resulting in a relevant, responsive, and high-quality system in a relatively short time (Parlika et al., 2023).

With this method, developers are able to create initial prototypes quickly, so that user input can be immediately incorporated into the development process. In short, RAD supports rapid adaptation to changing needs or requirements, which effectively reduces the risk of project failure (Sumirat et al., 2023). In addition, RAD strongly emphasizes active user involvement, which increases the chances of their satisfaction because the final product is more in line with their needs and expectations (Pahlevi et al., 2024).

RESULTS AND DISCUSSION

Overview of the system currently running

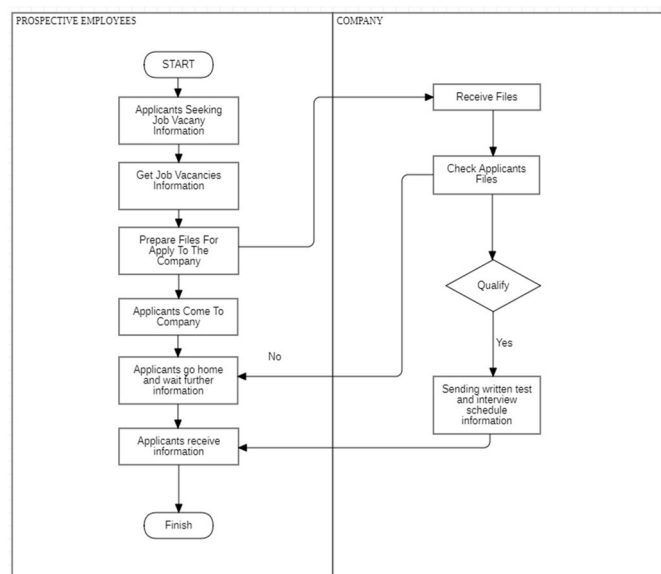


Figure 2 System that is running

The image above explains the process when prospective workers search for job vacancy information through newspapers, social media, and the internet. After getting the job vacancy information, applicants prepare files to apply to the company. After that, applicants come to the company and provide application files to the company. Then the applicants go home and wait for further information.

Overview of the proposed system

The proposed system overview is an overview of the applicant system that can access the job vacancy information website. Applicants can first search for job vacancy information according to the desired criteria. After finding the desired job vacancy, applicants must first log in to be able to apply for the job. After that, applicants create a cover letter to be sent to the company.

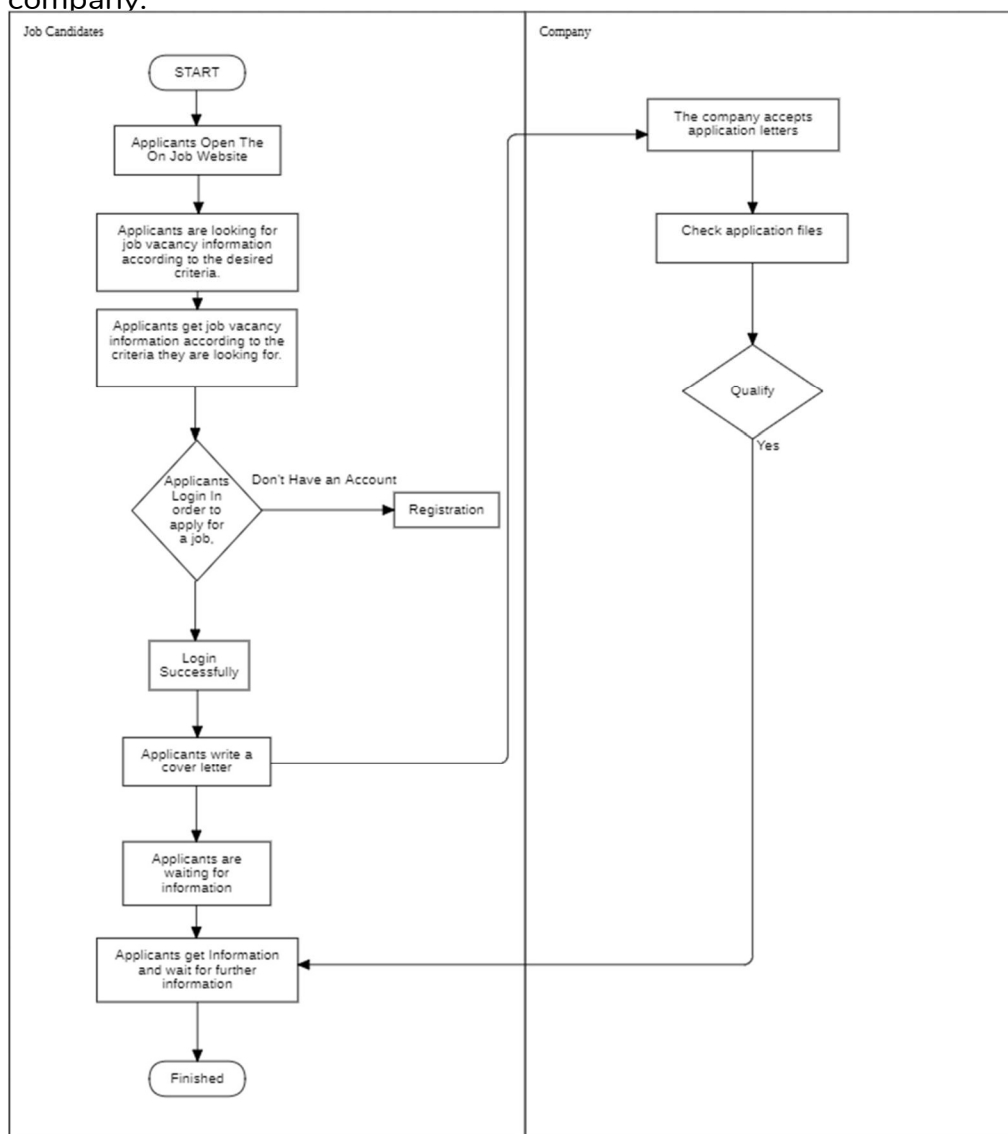


Figure 3 Proposed system

System Design

System design is a design process to design a system or improve an existing system so that the system becomes better and can do the job effectively and efficiently, a description of the system. In designing this website using the Unified Modeling Language (UML) (Rochman et al., 2018).

a. Flowchart

The flowchart of the job vacancy information system in Palembang City is as follows:

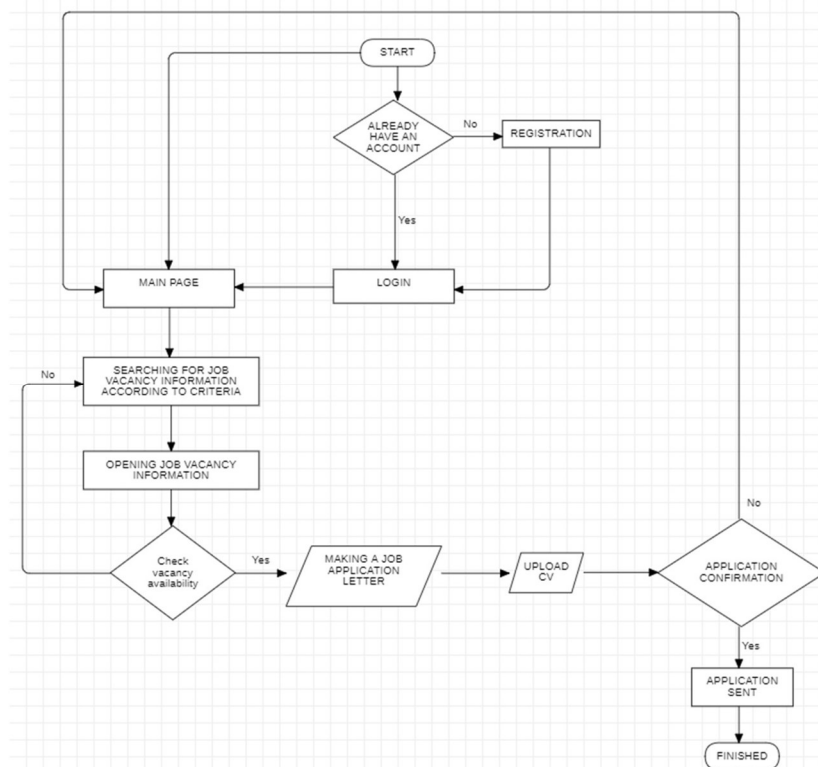


Figure 4 Flowchart

The image above explains the flowchart in the system design that the author created to determine the system flow.

- First, applicants can directly access the main page or log in first.
- After the user logs in, the applicant will be redirected back to the main page.
- Applicants can view and search for job vacancies according to their desired criteria.
- After searching for job vacancies, applicants check the availability of job vacancies.
- Next, applicants create an application letter and upload their CV.
- After that, the system will send a letter of application and CV to the company.

b. Use Case Diagram

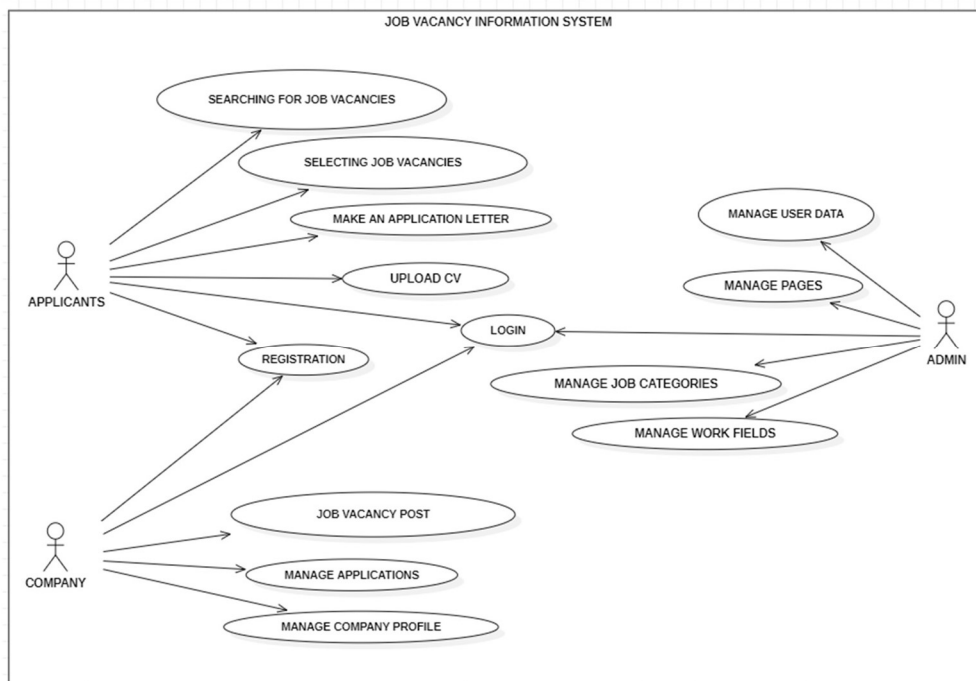


Figure 5 Usecase Diagram

The image above explains the use case diagram in the system design that the author created, where there are 3 actors who can access the system, including:

1. Applicants Applicants have access to login, register, search for job vacancies, select job vacancies, create application letters, and upload CVs.
2. Company Admin has access to login, register, post job vacancies, manage applications, and manage company profiles.
3. Admin Admin has login access, manage user data, manage web pages, manage job categories and manage job fields.

c. Activity Diagram

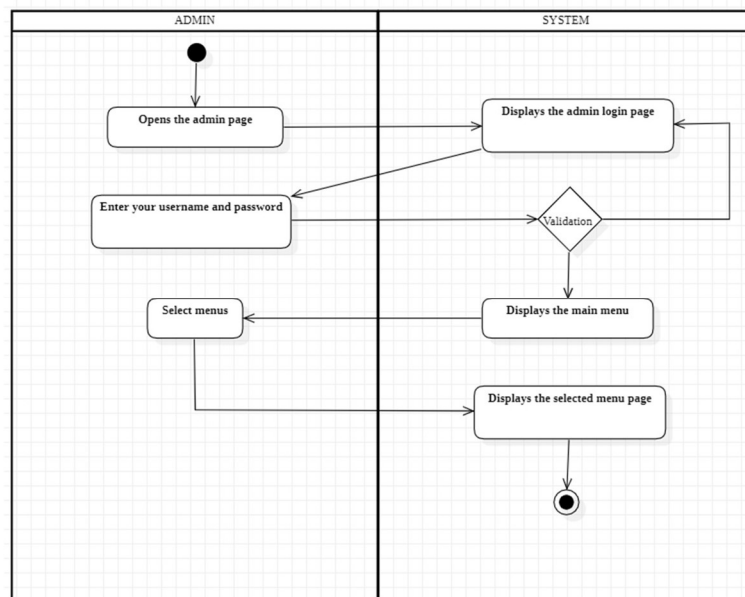


Figure 6 Admin activity diagram

The image above explains the activity diagram flow that is designed when the admin opens the website, the login menu will be displayed to access the admin's main page. There are many menus that can be accessed by the admin. The admin can choose the menu according to the admin's needs.

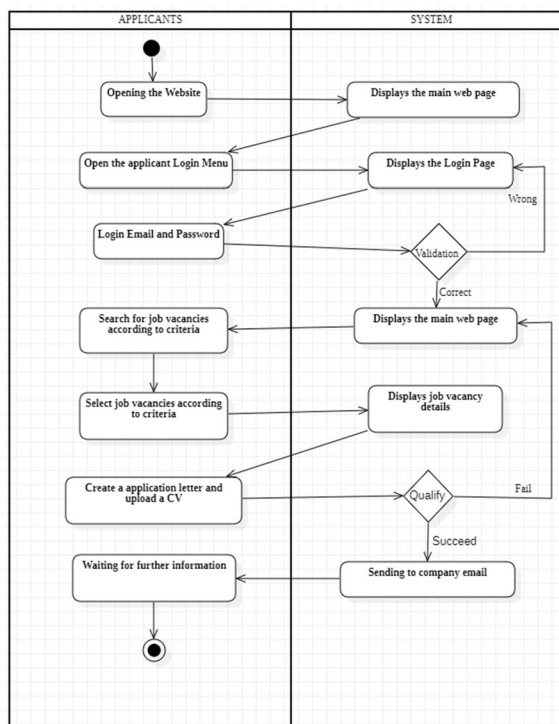


Figure 7 Activity diagram of applicant

The image above explains the flow of the activity diagram that is designed when applicants open the website, the main page will appear first and login which requires applicants to enter an email and password to be able to apply for a job. Applicants can search and select job vacancies according to the desired criteria. After selecting a job vacancy, applicants can see details about the job and see the availability of vacancies. After that, applicants create a job application letter and upload a CV, and applicants are waiting for further information.

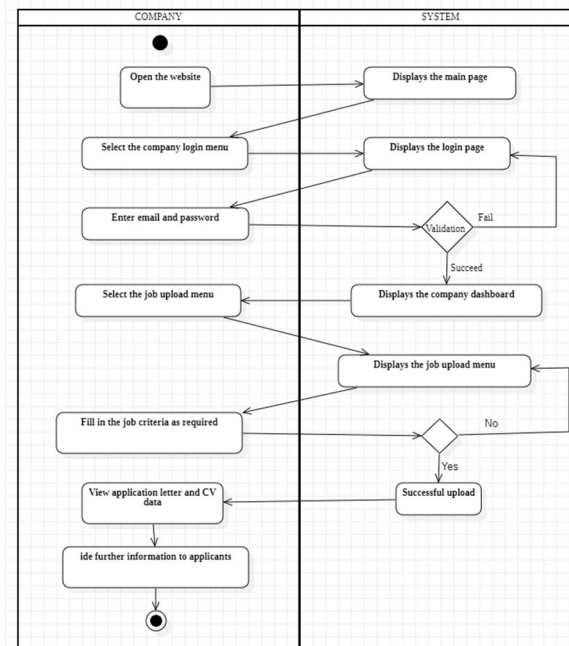


Figure 8 Company activity diagram

The image above explains the flow of activity diagrams designed when a company opens a website, the main menu will be displayed first, and the company selects the login menu which requires the company to enter an email and password to be able to upload job vacancies. Companies can upload jobs according to the required criteria. After uploading, the company can see the application letter and CV so that they can be checked and provide further information to applicants.

d. Class Diagram

Class diagram is one type of structure diagram in UML model. This diagram describes the structure, attributes, classes, relationships and methods very clearly of each object.

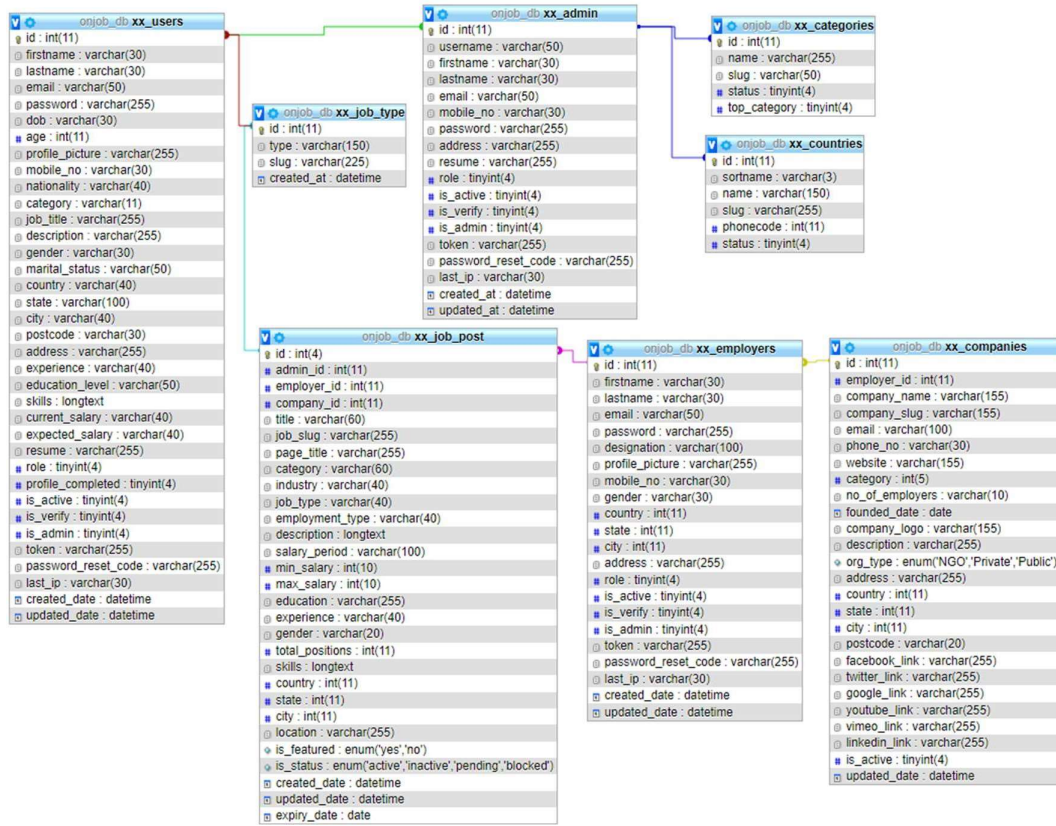


Figure 9 Class Diagram

e. Interface Implementation Home Page

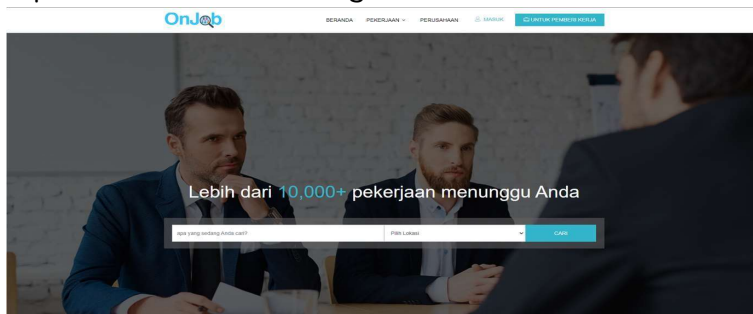


Figure 10 Main Page

Login Page

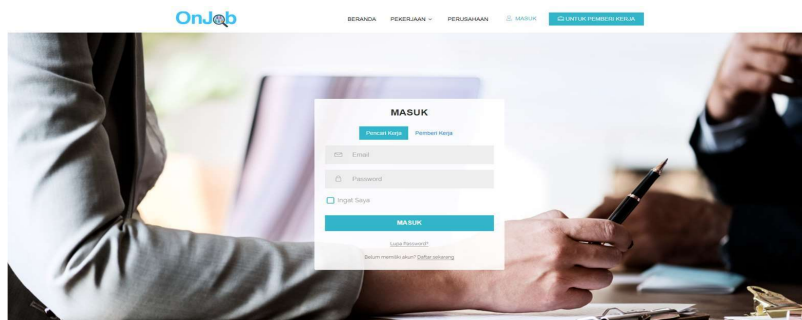


Figure 11 Login Page

Register Page

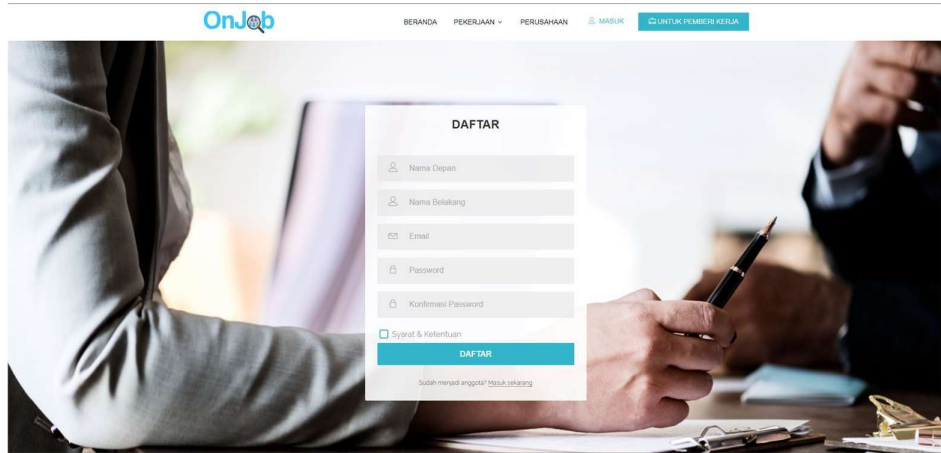


Figure 12 Register Page

Job Search Page

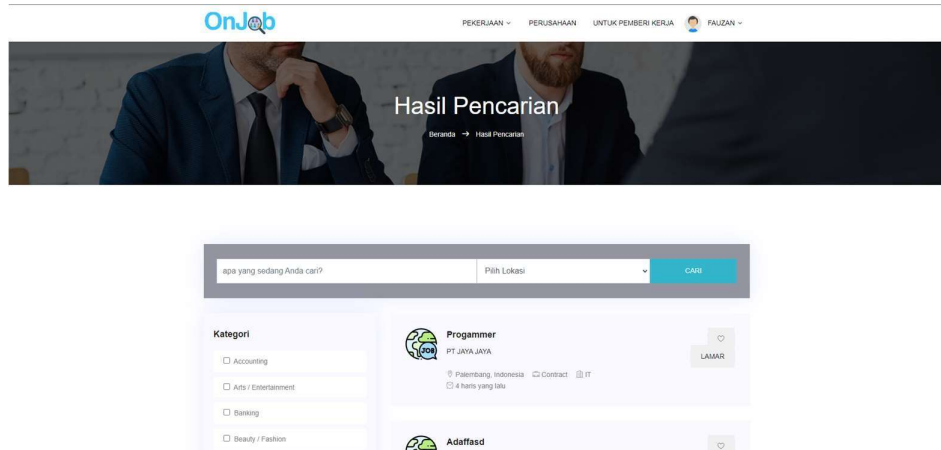


Figure 13 Search Job Page

Job Details Page

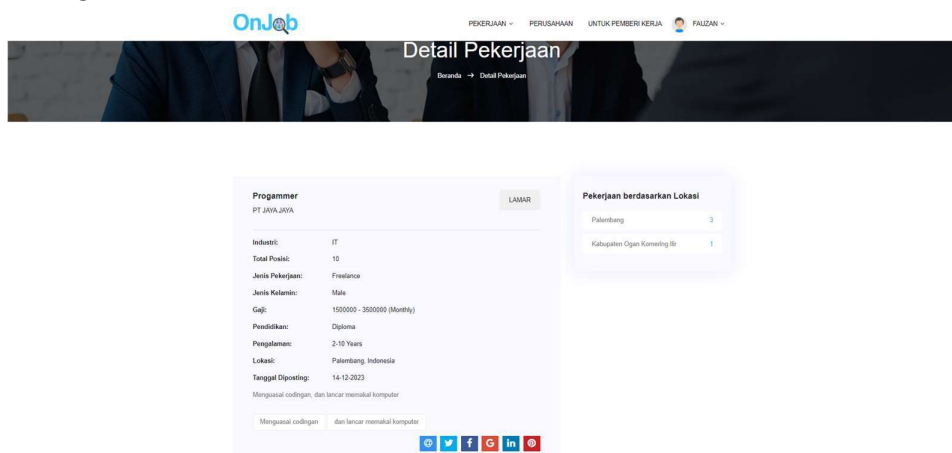


Figure 14 Job Details Page

Admin Login Page

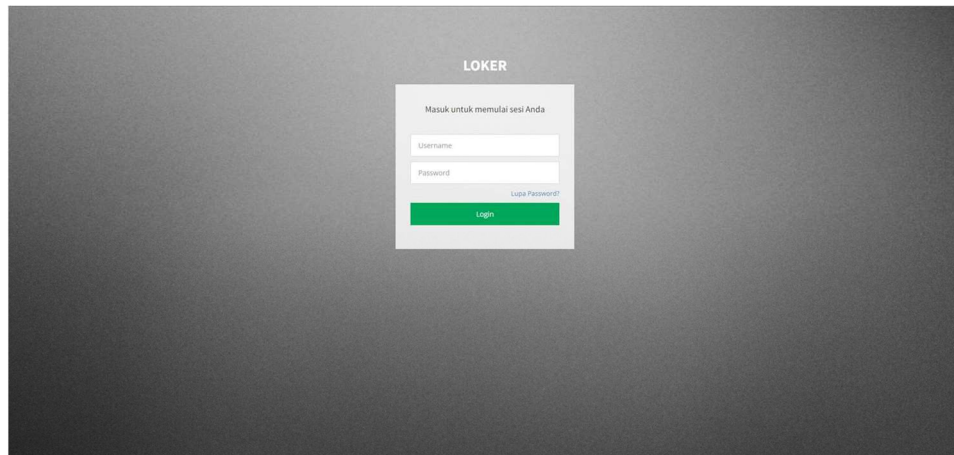


Figure 15 Admin Login Page

Dashboard Page

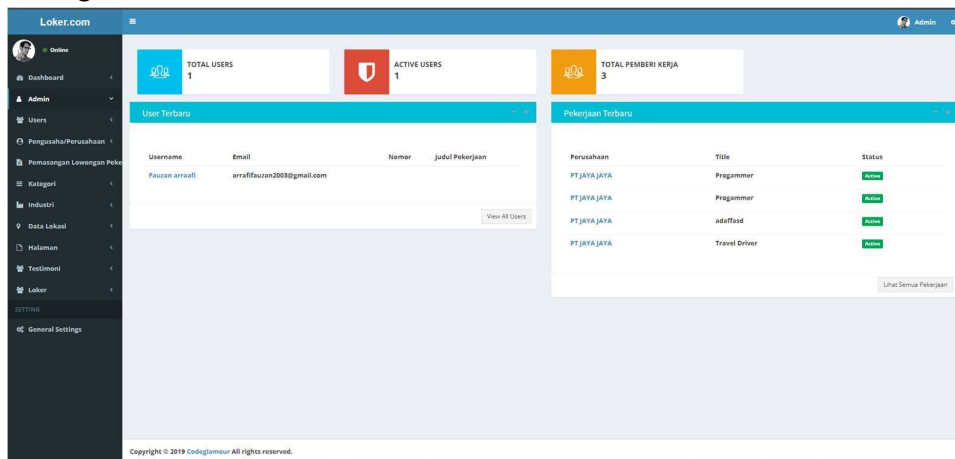


Figure 16 Dashboard Page

CONCLUSION

Based on the discussion and description of the research results in the previous chapters, several conclusions can be drawn as follows: With the existence of a job vacancy information system, it is hoped that the people of Palembang City can feel the positive impacts, including easier access to job opportunities, increased company involvement in recruitment, and increased time efficiency for both parties. This system can help bring employers and job seekers together, simplify the search process, and increase the efficiency of companies in responding to job requests.

REFERENCE

Agyztia Premana, Gian Fitalisma, Andi Yulianto, M. Badruz Zaman, & MA Wiryo. (2020). Utilization of Information Technology in Economic Growth in the Era of Disruption 4.0. *Journal of Economic and Management (JECMA)* , 2 (2), 1–6. <https://doi.org/10.46772/jecma.v1i01.219>

- Baenil Huda, & Saepul Apriyanto. (2019). APPLICATION OF JOB VACANCY INFORMATION SYSTEM BASED ON ANDROID AND WEB MONITORING (Research conducted in Karawang Regency). *Buana Ilmu* , 4 (1), 11–24. <https://doi.org/10.36805/bi.v4i1.808>
- Bukhori, AI (2023). *Application of the Simple Additive Weighting (Saw) Method on Lq45 Stock Index Prices Below 1000 to Support Beginner Investor Decisions* .
- Krisna, W., Muhammad, HJ, & Ambadar, N. (2022). Design and Construction of Academic Information Systems Using the Codeigniter Framework at Muhammadiyah University of Purworejo. *Journal of Intelligent Systems* , 5 (2), 107–116. <https://doi.org/10.37396/jsc.v5i2.187>
- Kusuma, MY (2021). Implementation of System Usability Scale (Sus) on Diploma Archiving Application Using Flutter and Rest Api (Case Study: Open University). *Repository.Uinjkt.Ac.Id* . <https://repository.uinjkt.ac.id/dspace/handle/123456789/65715>
- Martin. (2020). Design and Construction of a WEB-Based Property Sales and Rental Information System in Batam City. *Comasie Journal* , 01 (03), 83–92.
- Muliawan, S. (2024). *Design of Web-Based Personnel Information System at PT Bangun Cipta Anugrah Abadi* . 145–151.
- Nugraha, SP, Tullah, R., & Dzulhaq, MI (2020). Web-Based School Academic Information System Curriculum 2013. *Global Sisfotek Journal* , 7(1), 1–5.
- Pahlevi, O., Amrin, & Handrianto, Y. (2024). Development of Personal Finance Management Information System Using Rapid Application Development Approach. *RESOLUTION : Informatics Engineering and Information Technology* , 4 (5), 485–493. <https://djournals.com/resolusi/article/view/1883>
- Parlika, R., Afifudin, M., Pradana, IA, Wiratama, YDW, & Holis, MN (2023). Literature Study of Rapid Application Development Model Efficiency in Software Development (2014- 2022). *Positive: Journal of Information Systems and Technology* , 8(2), 64–73. <http://mcastud.com/student-project-development-gol>
- Puspita, NA, Haryono, W., & Octaviano, A. (2024). *Implementation of the Rapid Application Development (RAD) Method in the Design and Construction of Web-Based Toy Sales and Product Data Information Applications (Case Study of Yuutoys Toy Store)* . 2(6), 915–934.
- PUTRA, DWT, & PUTRA, JJ (2018). Design of Job Vacancy Search Information System. *Jurnal Teknoif* , 6 (1), 48–54. <https://doi.org/10.21063/jtif.2018.v6.1.48-54>
- Rochman, A., Sidik, A., & Nazahah, N. (2018). *Afd7C7B3-196E-4Cf3-Ad90-546F1D1B9C7a* . 8 (1).
- Sumirat, LP, Cahyono, D., Kristyawan, Y., & Kacung, S. (2023). *FUNDAMENTALS OF SOFTWARE ENGINEERING* .
- Wicaksono, AB, & Suryawan, SH (2023). Implementation of the Rapid Application Development Method in the Development of a Web Digital Library at the Atma Husada Mahakamid Mental Hospital 2 12 Muhammadiyah University of East Kalimantan. *Nanggroe : Journal of Scholarly Service* , 36 (9), 36–45. <https://doi.org/10.5281/zenodo.10360484>

- Widyastuti, H., & Muttaqien, IM (2019). Design and Construction of a Web-Based Job Vacancy Information System Using the Codeigniter Framework. *Gaung Informatika* , 12 (2), 2086–4221.
- Zufria, I. (2013). UML (Unified Modeling Language) Based Modeling with Object Orientation Technique Strategy User Centered Design (UCD) in Educational Administration System UML (Unified Modeling Language) Based Modeling with. *Journal of Science & Technology* , 1 (1), 1–16.