



Massive open online course (mooc) based desa skill application

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ABSTRACT

This research aims to build skills applications that can be used to collect skills data and improve the skills possessed by the community, while understanding concepts that can be done to improve digital community resource management and provide applications to analyze information exchange online. Sampling was carried out through intentional data collection techniques using questionnaires and tests. The Skill Village application is built using massive open online course (MOOC) technology, and complex problems are handled through complex computer simulation technology and massive open online course technology, a computer engineering education model that can adapt quickly. Implementing an online skills village information exchange application to support and improve the skills and management of community resources. Community resources that are well managed can reduce unemployment, so that the positive impact that is felt is an increase in people's income. Testing the Skill Village application was carried out using the *t*-test and gain test techniques, where the *t*-test was used to test hypotheses and the gain test was used to determine the significant results of the community's professional level.

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1. INTRODUCTION

The Industrial Revolution 4.0 witnessed a change in the educational paradigm, originating from the widespread use of Information and Communication Technology (ICT). With the proliferation of ICTs, online, open and flexible learning is being moved from the periphery to mainstream education (Putra et al., 2020) ICT improves the quality and delivery capacity of online educational content. Online networks are used as learning spaces that are distributed, flexible, accessible, and, most importantly, potentially open. Openness in education has evolved over time and has appeared in many forms. MOOCs) are the latest development of this open learning movement, which has attracted a lot of attention from both the academic and public spheres. The first course in this format was

offered in 2008 at the University of Manitoba and was titled Connectivism and Connective Knowledge. (Sati et al., 2021)

MOOCs are often criticized for their relatively low completion rates, as so far the completion rate has been the only relevant measure of quality. This paper will present the level of completion related to the community's initial intention to take part in the MOOC. (Matematika et al., 2020) To increase the level of completion, from the perspective of achieving goals, this paper proposes to utilize learning materials (module-approach) for MOOCs (Sam & Idrus, 2021) Modules are the application of learning materials in non-game scenarios with the aim of having an effect and solving problems. The purpose of this paper is to describe how learning materials can be included in MOOCs to enhance the achievement of user goals (Wulandari et al., 2022) More specifically this paper aims to identify learning materials that will enable MOOC users to implement their intentions through planning actions, based on implementation intention theory, i.e. avoiding behavioral intention gaps.

Well-managed community resources can increase income and reduce unemployment. After the implementation is built, it is tested against the development function of the application (Hidayat & IBBI Jalan Sei Deli No, n.d.) A job training application that can be used to gather information on community skills and get ideas for improving skills by implementing and analyzing digital community resource management. Sampling using focused data collection methods such as tests and questionnaires Creating specialized training programs using massive open online course (MOOC) technology, using advanced computer simulation techniques, massive open online course methods and rapidly adapting computer engineering training models to address complexity question (Rizki et al., 2022) Combine job training apps with online information sharing to encourage and improve community skills and resource management.

2. RESEARCH METHOD

Using a problem analysis approach, researchers conduct research that focuses on a series of field studies, situations, or individual and collective activities that develop over time in a particular context. It is also equipped with literature studies that support problem analysis (Alfiansyah & Supriyati, 2020) Problem analysis is useful in situations when very little is known about a particular topic or phenomenon. (Wibowo et al., 2014) In general, the purpose of problem analysis is to develop solutions that are relevant to the conditions that occur in the field, although it is often used to expand or modify existing problems. This study uses a type of qualitative research. Qualitative research aims to gain a general understanding of social reality from the perspective of participants through descriptive data. Understanding is not predetermined, but is obtained after conducting an analysis of the social reality which is the focus of the research, then a conclusion is drawn in the form of a general understanding of the facts (Riche & Johan, n.d.) Qualitative research focuses more on observation and natural settings. Researchers act as observers (Rakhmawati et al., 2021) He only makes categories of behavior, observes symptoms and records them in his observation book (Stefanus et al., n.d.) Qualitative research uses theory as a reference or guideline in conducting research, not testing theory as in quantitative research (Bakri & Mulyati, 2017) Data sources in this study consist of primary data and secondary data. Primary data obtained from the distribution of questionnaires directly to 60 employees. Answers from the questionnaire using a Likert scale, there are eight alternative answers set, namely strongly agree (8); strongly agree (7); agree (6); somewhat agree (5); disagree (4); disagree (3); strongly disagree (2); Totally disagree (1). Secondary data is a source of research data obtained indirectly through intermediary media (obtained from other parties) The development of human resources is highly expected by an institution, including at Puangrimaggalatung Sengkang University.

This study aims to describe the development of human resources in improving public services at the University of Puangrimaggalatung Sengkang. The role of training is very important as the basis for a new culture of improving employee performance during the Covid-19 period. Until now, the company's strategy to fight covid-19 to keep the company alive is to use digitalism.

Data analysis techniques use the normality test and gain test. The normality test is used to test whether the research data is normally distributed or not. The gain test is used to measure the increase in conceptual understanding and student character development. LMS is made through 4 stages as follows (Syafitri, 2016)

- design the system design, including template design, databases and flowcharts.
- coding with the PHP programming language.
- installation on the hosting server.
- complete teaching materials at LMS.

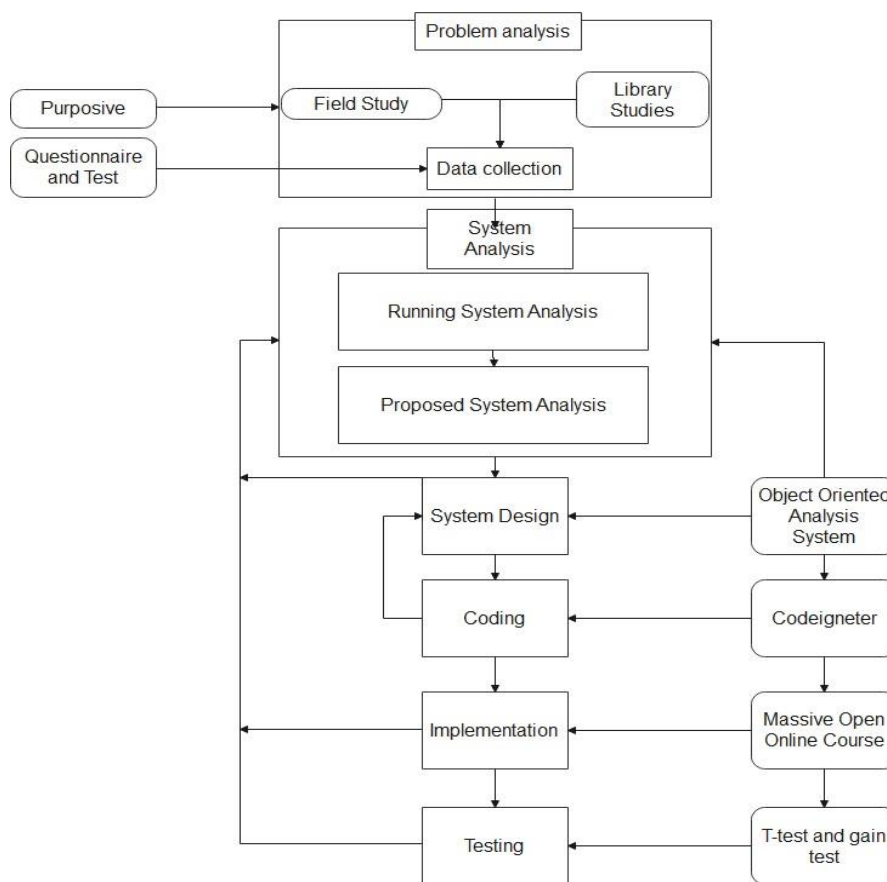


Figure 1. Research Procedure

Table 1. Table of Training Participants

No	Name	Age	Phone Number	Date
1	Arme Tinambunan	46-59	081263801006	03/03/2021
2	Sindi Klarita Br Tarigan	18-30	081269962857	03/03/2021
3	Wirin Donohot Vitalis Damanik	46-59	081396730154	03/03/2021
4	Ridwan Sinaga	31-45	081398231866	03/03/2021
5	Egawati Purba	31-45	082277134350	03/03/2021
6	Andorsen T. P Nainggolan	31-45	081260393562	03/03/2021
7	Melfrida Juliana Saragih	31-45	82215073671	03/03/2021
8	Derwan Purba	31-45	085277971424	03/03/2021
9	Rumsida Purba	46-59	081263821518	03/03/2021

10	Gustina Haloho	≥60	081265812239	03/03/2021
11	Susandri Pratama	31-45	081397810520	03/03/2021
12	Rudol Saut Siregar	31-45	081263819463	03/03/2021
13	Bangun Siregar	46-59	081375138099	03/03/2021
14	Bona Fentura Sinaga	46-59	81376196743	03/03/2021
15	Salomawati Purba	46-59	085378255907	03/03/2021
16	Josmar Sihite	31-45	081263405414	03/03/2021
17	Elisye Selfrida Sinaga	46-59	081265965901	03/03/2021
18	Wasti Saragih	46-59	081260350319	03/03/2021
19	Dermawan Sipayung	31-45	081397897349	03/03/2021
20	Rasmawani Sinaga	31-45	81264285912	05/03/2021
21	Herdita Sinaga	31-45	082166553994	05/03/2021
22	Dasmariana Natalia Tondang	31-45	082267502702	05/03/2021
23	Fransisca Welnita Purba	31-45	08126531952	05/03/2021
24	Rudol Tuah Saragih	31-45	085261722964	05/03/2021
25	Desrina Ernawati Situmorang	31-45	081262068482	05/03/2021
26	Romauli Rajagukguk	31-45	081375844575	05/03/2021
27	Ratnawati Tambun	46-59	82113100572	05/03/2021
28	Antonius Sitindaon	31-45	085261564002	05/03/2021
29	Riama Girsang	31-45	082164868437	05/03/2021
30	Ricko Tampaty Sinaga	31-45	081396174543	22/03/2021
31	Rajoki Girsang	46-59	085207823220	22/03/2021
32	Roselli Purba	46-59	082261840692	22/03/2021
33	Rodiman Damanik	18-30	082277530909	22/03/2021
34	Horman Haloho	46-59	081265082599	22/03/2021
35	Martuahman Damanik	46-59	081263781973	22/03/2021
36	Rimson Purba	46-59	083111060916	22/03/2021
37	Elni Purba	18-30	082291057408	22/03/2021
38	Esra Lingga	18-30	082164590415	22/03/2021
39	Mariska Heloria Sinaga	31-45	085370702537	22/03/2021
40	Rafael Saragih	46-59	081396424187	22/03/2021
41	Santa Bonita Sinaga	31-45	081269664587	22/03/2021
42	Ramida Sinamo	18-30	082362293884	22/03/2021
43	Helpida Nurmawati Sipayung	31-45	085361873810	22/03/2021
44	Febria Renata Damanik	31-45	082164303079	22/03/2021
45	Esdina Saragih	46-59	085262122930	22/03/2021
46	Lamsaida Gorat	31-45	082165110860	22/03/2021
47	Vincen Purba	31-45	082299984299	22/03/2021
48	Julkifli Purba	46-59	082276489800	22/03/2021
49	Joni Hasiholan Purba	46-59	081375385512	22/03/2021
50	Charles Purba	31-45	085372779362	24/03/2021

3. RESULTS AND DISCUSSIONS

This study aims to create a professional training application that can be used to collect data on skills possessed by the community, while understanding the concept of adding skills to digital community resource management to be performed, and analyzing the application of online information exchange (Dwi Kartika & Priyadi, 2020) Sampling was conducted through targeted data collection techniques using questionnaires and tests (Listiawan, 2016) Job training applications using massive open online course (MOOC) technology solve complex problems through sophisticated computer simulations, massive open online course technology, and rapidly adaptable computer engineering training models (Sulistyaningsih et al., n.d.) Implement career training applications in online messaging to support and improve skills and community resource management. Well-managed community resources can reduce unemployment and increase people's incomes. Once created and deployed, the application is tested against its development functionality. Application testing is performed using t-tests to test hypotheses and intensive testing techniques to find significant results of community expertise (Septia Angriawan, n.d.) Create Job Training Apps Based on Massive Open Online Courses Implement job training apps to reduce unemployment and increase income through

proper management of community resources (Pendidikan & Konseling, n.d.) The implementation results of vocational training applications can improve people's skills, which will have an impact on reducing unemployment and increasing people's income. The display of the administrator page in the skill village application is shown in the image below:

a. Main page

The main page is the main page when accessing the address bar, from the main page and there are menus that can be accessed when accessing the skill village application

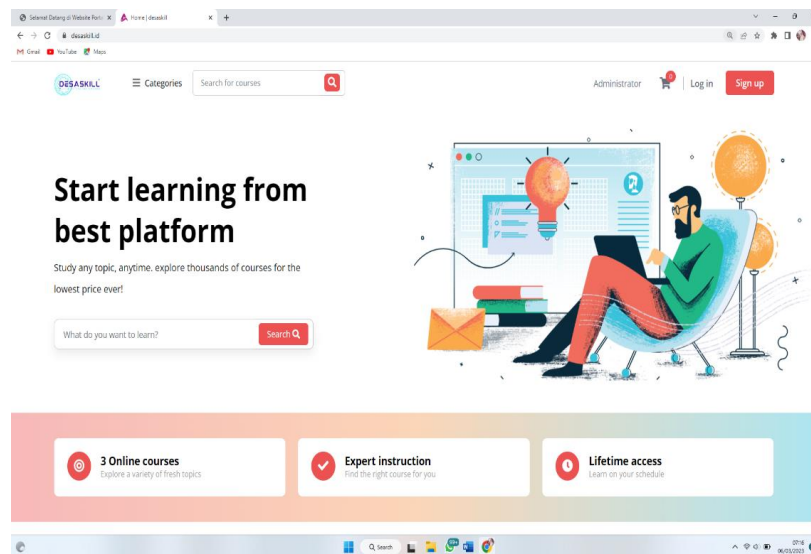


Figure 1 Display Main Menu

b. Login Page

Login Page is a page that displays login confirmation options for both users and administrators. Each user must enter the correct information when logging in. Information must match the information entered during registration.

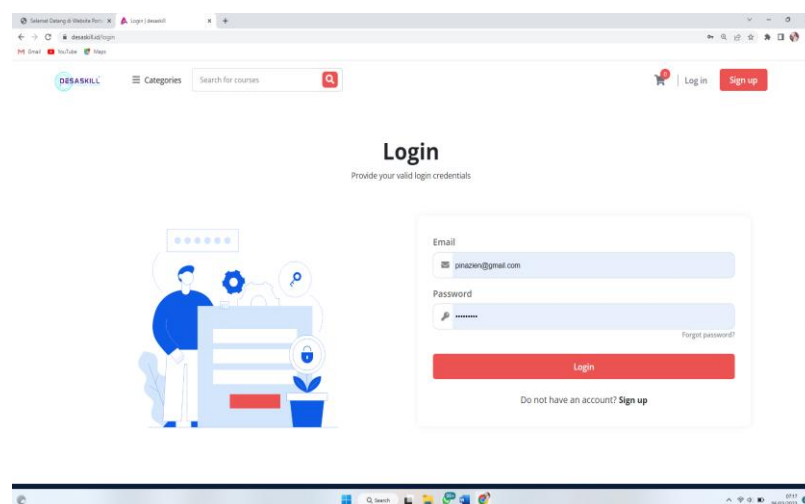


Figure 2 Display of the Login Page

c. Sign Up Page

The Sign Up page is a page that displays the Sign Up confirmation options for both the user and the user.

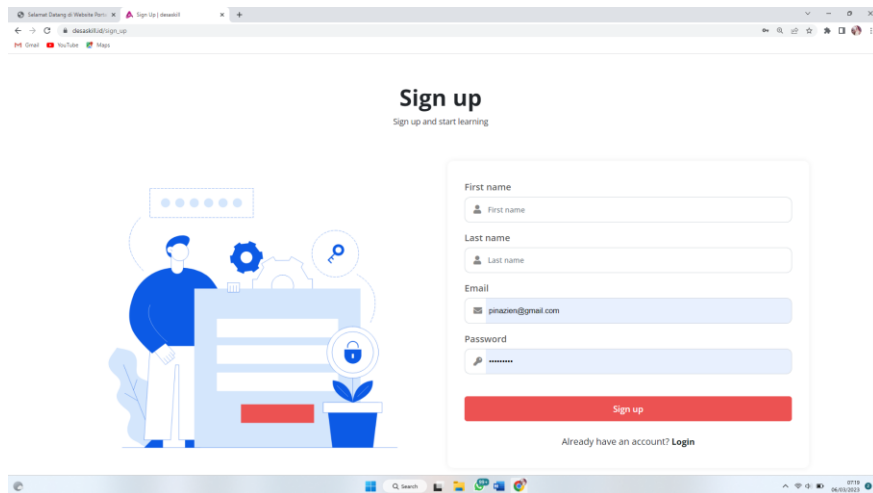


Figure 3 Display of the Sign Up Page

d. Shopping Cart Homepage

Home Shopping Cart page is a page provided for users to purchase courses and materials provided. Users can choose the course and material they want with free and paid options. However, during the first registration, all members are given free access to choose courses.

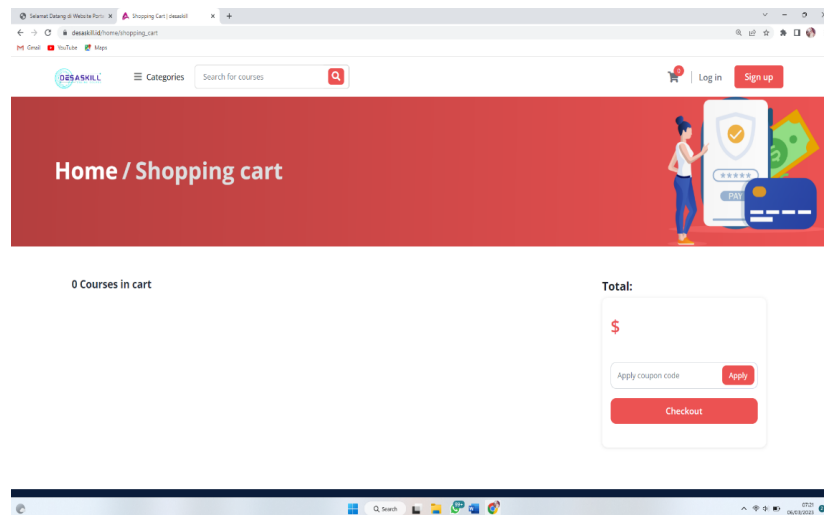


Figure 4 Shopping Cart Home Page

e. All Course page

The All Course page displays available course information and material related to information on increasing the skills the user wants.

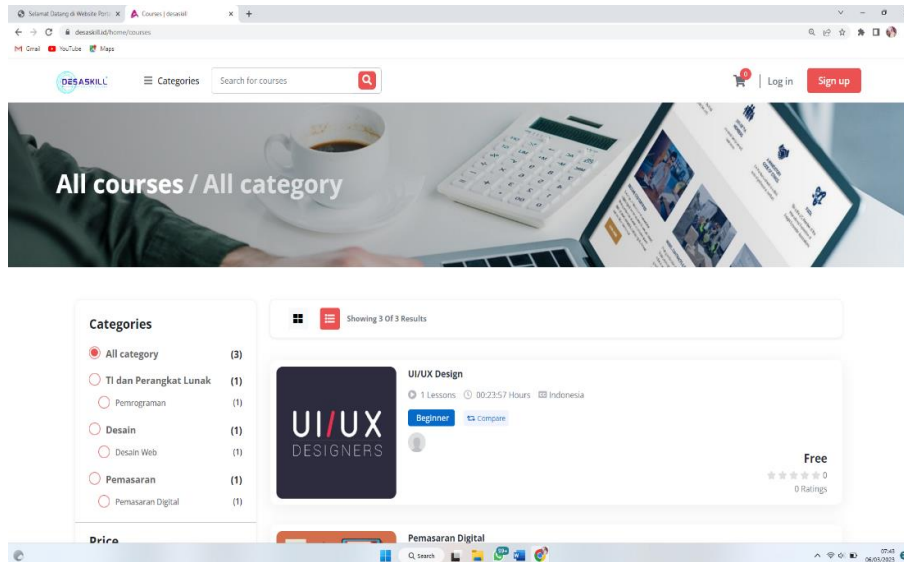


Figure 5 All Course page

There are many choices of course categories provided, which can be adjusted to the price, level, language and ratings of each option

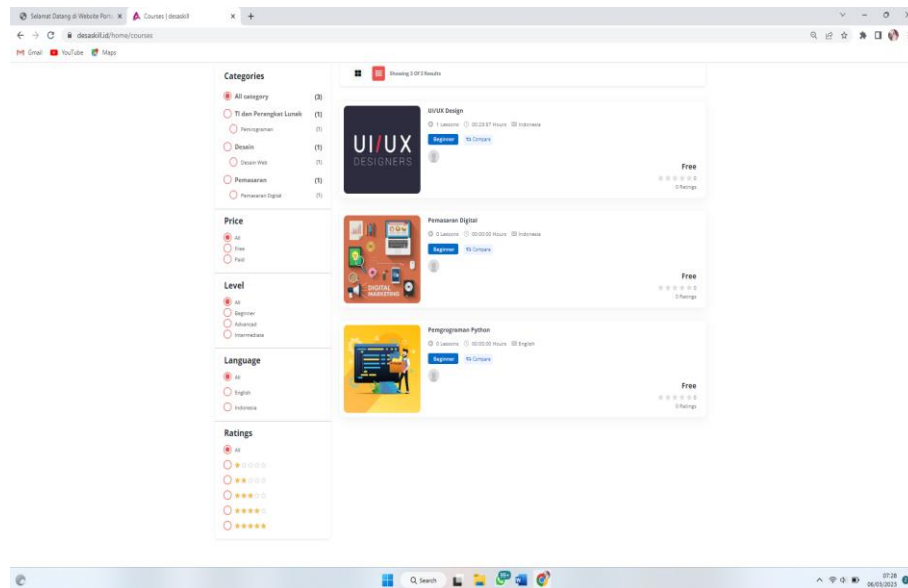


Figure 6 All Course page

f. Contact Us page

The Contact Us page is a page that is used to send messages or input to the skill village application and the contact us page displays social media information that is directly connected.

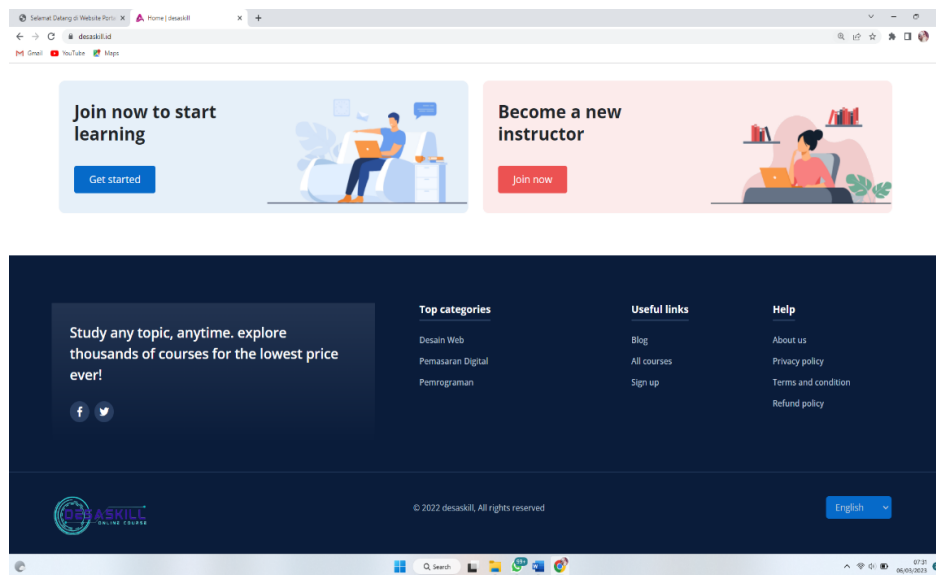


Figure 7 Contact Us page

4. CONCLUSION

MOOCs are often criticized for their relatively low completion rates, as so far the completion rate has been the only relevant measure of quality. This paper will present the level of completion related to the community's initial intention to take part in the MOOC. To increase the level of completion, from the perspective of achieving goals, this paper proposes to utilize learning materials (module-approach) for MOOCs. Modules are the application of learning materials in non-game scenarios with the aim of having an effect and solving problems. The purpose of this paper is to describe how learning materials can be included in MOOCs to enhance the achievement of user goals. More specifically this paper aims to identify learning materials that will enable MOOC users to implement their intentions through planning actions, based on implementation intention theory, i.e. avoiding behavioral intention gaps. Well-managed community resources can increase income and reduce unemployment. After the implementation is built, it is tested against the development function of the application. A job training application that can be used to gather information on community skills and get ideas for improving skills by implementing and analyzing digital community resource management. Sampling using focused data collection methods such as tests and questionnaires Creating specialized training programs using massive open online course (MOOC) technology, using advanced computer simulation techniques, massive open online course methods and rapidly adapting computer engineering training models to address complexity question (Rizki et al., 2022) Combine job training apps with online information sharing to encourage and improve community skills and resource management. In future research it is hoped that the development of information systems can adapt to current needs, so that they can be in accordance with the wishes of the user.

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A job training application that can be used to gather information about community skills and understand ideas for improving skills through the implementation and analysis of digital community resource management.

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