

# THE SELECTION PROCESS MONITORING APPLICATION TO IMPROVE EMPLOYEE PERFORMANCE AT PT MEGA ADIYASA MANDIRI MALANG

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## Abstract

As a company engaged in providing human resource services, PT Mega Adiyasa Mandiri needs to improve the quality of the human resources it produces to become a superior company in this field. With the selection process that has been carried out so far. Thus PT Mega Adiyasa Mandiri needs to improve the optimization of selection activities. The data collection techniques used in this study are observation and interviews. The method used for making the selection process monitoring application is the pieces method. After the application development process is complete, a system trial will be carried out using the white box method. PT Mega Adiyasa Mandiri is a provider of human resources services that are superior, insightful and competent in various fields. The use of monitoring applications for the selection process makes a positive contribution to PT Mega Adiyasa Mandiri. Companies can have integrated data between prospective workers and users. Companies can easily obtain input from users regarding the performance of the human resources that have been used. In addition, this application also makes it easy for companies to ensure that prospective workers are of good quality

Keywords : *recruitmen, job performance, quality human resource*

## 1. INTRODUCTION

PT Mega Adiyasa Mandiri is a company engaged in the selection and placement of domestic workers. In realizing its mission to become a superior, insightful and competent provider of human resource services in various fields, the company needs to develop a selection process that can improve the quality of the human resources it produces. So far, the selection process has only been carried out conventionally by companies, so that the resulting human resource output has a quality that does not meet the standards required by the market. So far, the selection process carried out by PT Mega Adiyasa Mandiri consists of receiving application files, then applicants can take an aptitude test and interview with the HRD team. This process does not begin with administrative selection, so that all applicants have the same opportunity to take part in the selection stages of ability tests and interviews. This has caused many applicants who do not meet the qualifications to work at the Company as users of the selection of workers from PT Mega Adiyasa Mandiri. User companies face difficulties in determining the job description of human resources needed by the company and there is dissatisfaction felt by service users,

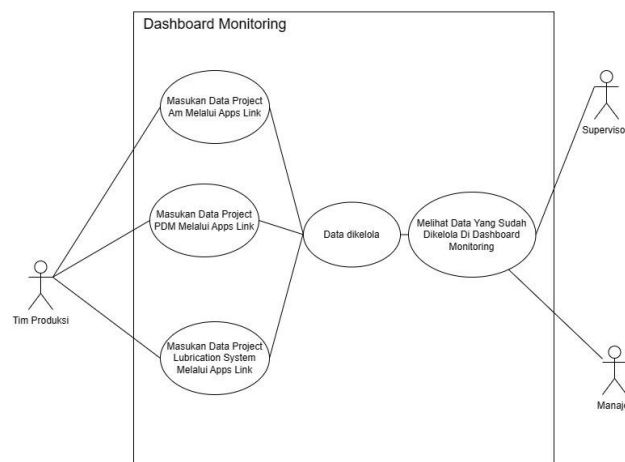
In this regard, PT Mega Adiyasa Mandiri needs a solution to overcome the gaps in the company's selection process. To overcome this problem, we need a monitoring method which can help identify the process of selecting human resources in the company. One method that can be used is the pieces method, which is a method that measures the level of efficiency and effectiveness of current system weaknesses so that improvements can be recommended for the new system. Danim (2018) states that the quality of Indonesian human resources that we want is distinguished on the basis of physical qualities (health, physical strength, skills and resilience) and non-physical qualities (independence, perseverance, honesty and morals). Meanwhile Rahardjo (2020) argues that the quality of human resources is not only determined by aspects of skill or physical strength, Ruky (2006: 16) says that the characteristics or characteristics of quality human resources are having full knowledge of their duties, responsibilities and authorities, having the necessary knowledge related to the full implementation of their duties, being able to carry out the tasks that

must be carried out because they have the necessary skills/skills, being productive, innovative/creative, willing to work with others, trustworthy, loyal, and so on.

To find out the various potentials and skills of each prospective employee, the company needs to carry out a selection process. Simamora (2017) explains that the selection process is created and adjusted to meet the staffing needs of a company or organization. The pieces method is a method that can be used to measure the level of efficiency and effectiveness of the selection process. This method measures the number of human resources received compared to the number of qualified human resources. Thus, this method can assist companies or industries in knowing the level of efficiency and effectiveness of the selection process used, so as to improve the selection process carried out. (Huda, 2019). Thus, the research background on monitoring the human resource selection process using the pieces method is to develop a monitoring system that can assist companies or industries in identifying and analyzing problems that arise in the selection process, so as to improve the efficiency and effectiveness of the output quality of human resources produced and their performance.

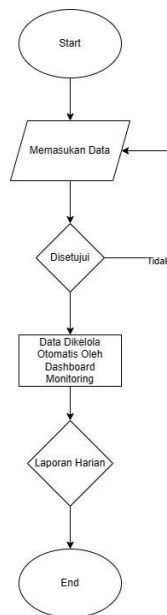
## 2. IMPLEMENTATION METHOD

The time used for this research was carried out over a period of 6 months, 1 month for data collection and 1 month for managing data which included presentation in report form. The place for conducting this research is in the company PT Mega Adiyasa Mandiri which is engaged in providing human resources. The data collection techniques used in this study are observation and interviews. In data collection, it begins with planning the data that the writer wants, after that the writer gets the data from the main data including observations and interviews and data.



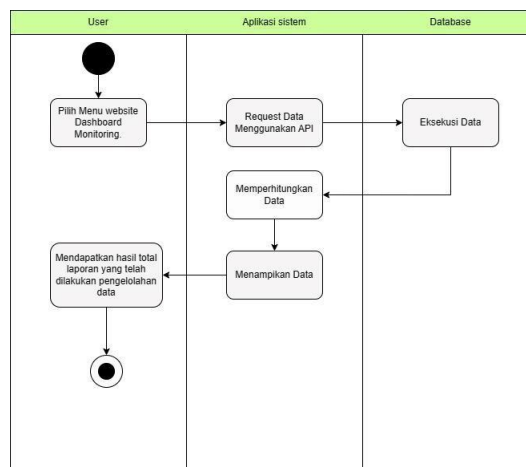
**Picture 1. Case Diagram**  
**Source: Data Proseses (2023)**

In Figure 1 is a use case diagram that will be used on the monitoring dashboard which has 3 users who use it, from this flow HRD enters data first, the managed data will automatically enter the monitoring dashboard and can be seen by the selection team, managers and supervisors. In Figure 2 is the dashboard monitoring flowchart, the flow begins with data input from the HRD team after that the data will be validated by the leadership, if the data is not approved, the HRD team must update the latest data. If the data has been approved, the data will be automatically managed on the monitoring dashboard and will be used daily reports by the HRD team.



**Picture 2. Dashboard Monitoring Flowchart**  
**Source: Data Prosses (2023)**

In Figure 3 is an activity diagram that connects data and visual dataWhen a user visits the website monitoring dashboard, it will request data using the API thenwill be responded to by the database server after getting the data the website will manage the data before displaying the data



**Picture 3. Monitoring Dashboard Activity Diagram**  
**Source: Data Prosses (2023)**

Testing the system on the monitoring applicationThis selection process will be carried out using the white box method by making surethat the performance of the data to be displayed can be done quickly and there are no errors in displaying the actual data.

Certainly, here are the testing scenarios for each of the three testing aspects mentioned earlier:

1. Functional Testing of the Selection Process Monitoring Application:

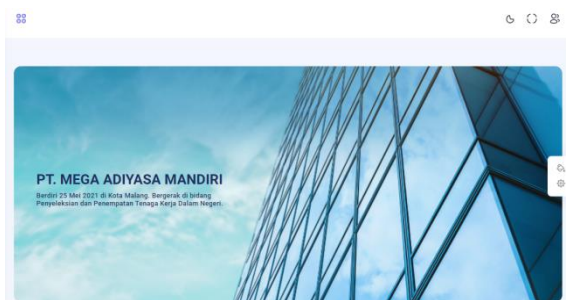
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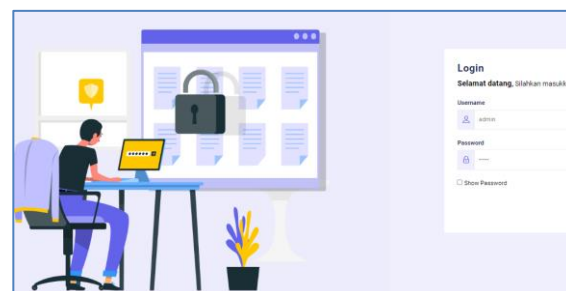
- a. Candidate Data Creation Test: Verify that users can successfully create candidate employee data through the application. Test with various inputs and ensure that the data is accurately stored.
  - b. Candidate Data Management Test: Attempt to modify, delete, or update existing candidate employee data. Ensure that these changes are accurately reflected within the application.
  - c. Selection History Test: Verify that users can view the selection history of candidate employees accurately. Test by reviewing previously entered selection data.
  - d. Notification Test: Test the application's ability to send notifications to users regarding selection progress. Ensure that notifications are sent correctly and contain relevant information.
2. Performance Testing:
- a. Response Time Test: Load the application with a significant amount of data and measure response times for various actions such as page loading, data search, or saving changes.
  - b. Maximum Load Test: Gradually increase the workload until reaching the maximum capacity the system can handle. Observe whether the application continues to function properly and maintains acceptable response times.
3. User Acceptance Testing (UAT):
- a. Usability Test: Involve multiple end users in interacting with the application. Observe whether they can easily navigate the application's interface and locate necessary features.
  - b. Key Feature Test: Assign tasks or usage scenarios to users and assess their ability to correctly utilize the application's features according to their needs.
  - c. User Feedback Test: Collect user feedback about their experience using the application. Inquire about their impressions, suggestions for improvements, and any features they feel might be lacking.

### 3. RESULTS AND DISCUSSION

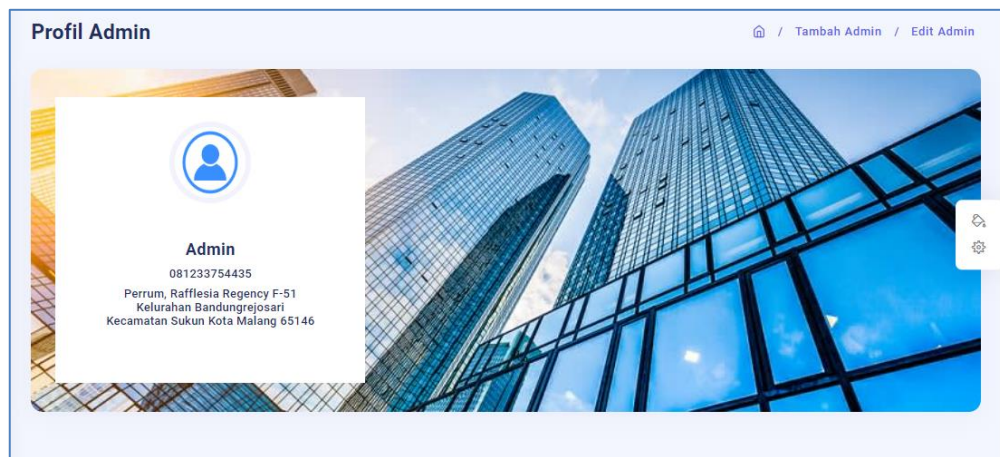
Making monitoring applications accessible to company admins and users (service users). Website-based applications via a web browser (IE or Mozilla Firefox or other) with url address. The following is the display of the application monitoring website for the admin. On the dashboard page there are several menus including login. Admin selects admin login on the login button. On this login page the admin must fill in the username and password. Then click the LOGIN button. The following shows the login page.



**Picture 1. Home Page**  
**Source: Data Proses (2023)**



**Picture 2. Login Page for Admin**  
**Source: Data Proses (2023)**



**Picture 3. Admin Profile**  
**Source: Data Proses (2023)**

Admin can add information related to employee data at PT Mega Adiyasa Mandiri. This data is entered so that it can become information for the user. The data entered is related to the biodata of the workers. The display of data input on the admin page is as follows:

**Tambah Admin**

FOTO  
 No file chosen

NAMA

NAMA PERUSAHAAN

BIDANG PERUSAHAAN

USERNAME

PASSWORD  
  
☐ Tampilkan Password

ALAMAT

NO HP

**Edit Admin**

NAMA

FOTO  
☐ Ceklis jika ingin mengubah foto  
 No file chosen

NAMA PERUSAHAAN

BIDANG PERUSAHAAN

ALAMAT

NOMER HP

**Picture 3. Data Input Page**  
**Source: Data Proses (2023)**




In addition, the admin can also access order data that has been made by the user. On the order data page, there is information on service orders that have been made by the user and information about the user is also available.

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Data Pesanan							
Show 10 entries		Search:					
No	ID Pesanan	Tanggal Pesan	Alamat	Jasa	Nama Pemesan	Nama Pekerja	Penilaian
1	14	15-05-2023	Surabaya	Cleaning Service	Fendi	Faris	90
2	15	15-05-2023	Surabaya	Driver	Fendi	Hamdi	Belum Dinilai
Showing 1 to 2 of 2 entries							Previous 1 Next

**Picture 4. User Orders**  
Source: Data Proses (2023)

Data User						
Show 10 entries		Search:				
No	Nama	Foto	Alamat	No HP	Nama Perusahaan	Bidang Perusahaan
1	Admin		Petrum, Rafflesia Regency F-51 Kelurahan Bandungrejoan Kecamatan Sukun Kota Malang 65140	081233754435	PT. MEGA ADIYASA MANDIRI	Penyedia Jasa
2	Mega M		Madura	087057542307	PT Bintang Mega	Keamanan
3	Cindy		kediri	089778904551	PT Gemilang	Rumah Tangga

**Picture 5. User Information**  
Source: Data Proses (2023)

Then, during the selection process, the admin can add questions that are used as tests for recruitment participants. The following is a page display for creating exam questions and examinee data.

Data Soal							
Tambah Soal							
Show 10 entries		Search:					
No	Soal	Jawaban a	Jawaban b	Jawaban c	Jawaban d	Kunci	Action
1	Semua penipu pandai bicara dan ramah. Tuan M tidak ramah, tetapi pandai bicara.	Tuan M seorang penipu yang pandai bicara	Tuan M seorang penipu yang tidak ramah	Tuan M seorang penipu yang pandai bicara dan tidak ramah	Tuan M bukan seorang penipu, meskipun pandai bicara	d	EDIT /
2	Topi: Kepala	Pintu: Kamar	Atap: Rumah	Sepatu: Kaus kaki	Gelang: Tangan	b	EDIT /
Showing 1 to 2 of 2 entries							Previous 1 Next

**Picture 6. Question Page**  
Source: Data Proses (2023)

**Data Peserta Ujian**

Show 10 entries

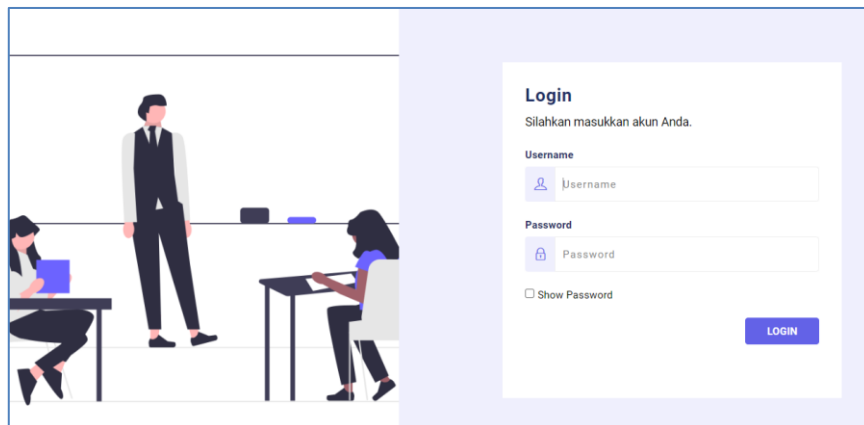
ID Ujian	Nama	Jenis Jasa	CV	Alamat	No Hp	Nilai	Action
19	nni	Driver	<a href="#">tes cv.pdf</a> Download	Malang	045578	50	<a href="#">🗑</a>
21	aa	Cleaning Service	<a href="#">tes cv.pdf</a> Download	aa	33	0	<a href="#">🗑</a>
23	gui	Man Power	<a href="#">tes cv.pdf</a> Download	gg	545	100	<a href="#">🗑</a>
25	yuri	Driver	<a href="#">tes cv.pdf</a> Download	cc	3545	50	<a href="#">🗑</a>
26	ing	Security	<a href="#">dokumen tambahan.pdf</a> Download	aa	879	0	<a href="#">🗑</a>
27	yen	Driver	<a href="#">BKP 2020_19631202007012006 by RanaPDF.com.pdf</a> Download	dd	679	0	<a href="#">🗑</a>
29	henu	Driver	<a href="#">VOCAB REVIEW_Mid Test Day ke 6.pdf</a> Download	g	789	0	<a href="#">🗑</a>

Showing 1 to 7 of 7 entries

Previous 1 Next

**Figure 7. Examinee Data**  
**Source: Data Prosses (2023)**

Furthermore, examinees can take part in a series of recruitment processes at PT Mega Adiyasa Mandiri by submitting the requirements that must be submitted and filling out the questions that have been provided. Exam participants are required to register and log in via the website url provided.



**Picture 8. Login Page for Examinee**  
**Source: Data Prosses (2023)**

**PT. MEGA ADIYASA MANDIRI** Logout

KERJAKAN SOAL PILIHAN GANDA DI BAWAH INI!

NAMA

JENIS JASA

CV  No file chosen  
Note: File CV dalam bentuk PDF

ALAMAT

NO HP

1. Semua penipu pandai bicara dan ramah. Tuan M tidak ramah, tetapi pandai bicara.  
☐ A. Tuan M seorang penipu yang pandai bicara  
☐ B. Tuan M seorang penipu yang tidak ramah  
☐ C. Tuan M seorang penipu yang pandai bicara dan tidak ramah  
☐ D. Tuan M bukan seorang penipu, meskipun pandai bicara

2. Topi Kepala  
☐ A. Pintu Kamar  
☐ B. Atap Rumah  
☐ C. Sepatu Kasu kaki  
☐ D. Golang Tangan

**Picture 9. Test Page**

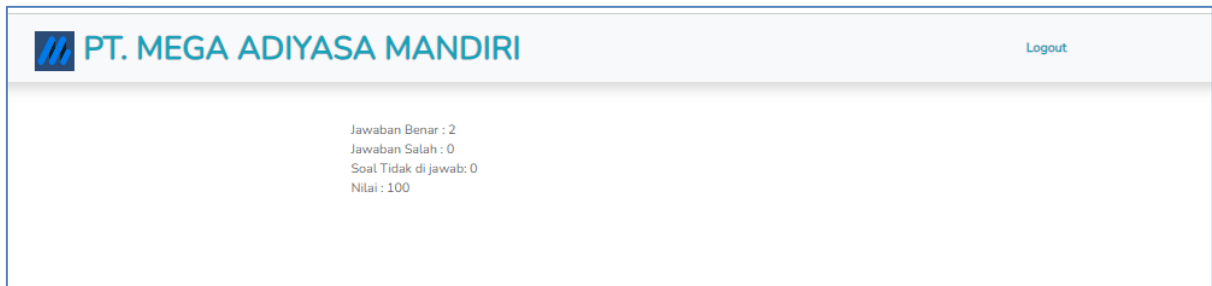


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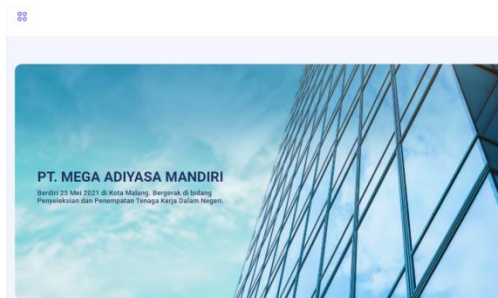
**Source: Data Proseses (2023)**

After attaching the required documents and filling out the questions that have been provided, examinees can see first hand the results of the test that has been carried out.



**Picture 10. Result Test Page**  
**Source: Data Proseses (2023)**

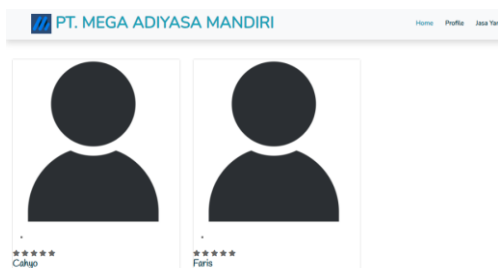
Apart from admins and test participants, PT Mega Adiyasa Mandiri service users can also access a monitoring website which acts as input for the company to continuously improve the quality of its human resources. The following shows the website page display for the user.



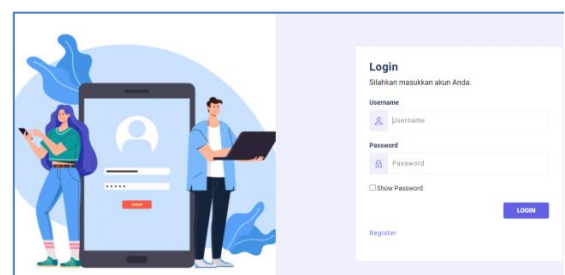
**Picture 11. Home Page**  
**Source: Data Proseses (2023)**



**Picture 12. Profile Page**  
**Source: Data Proseses (2023)**



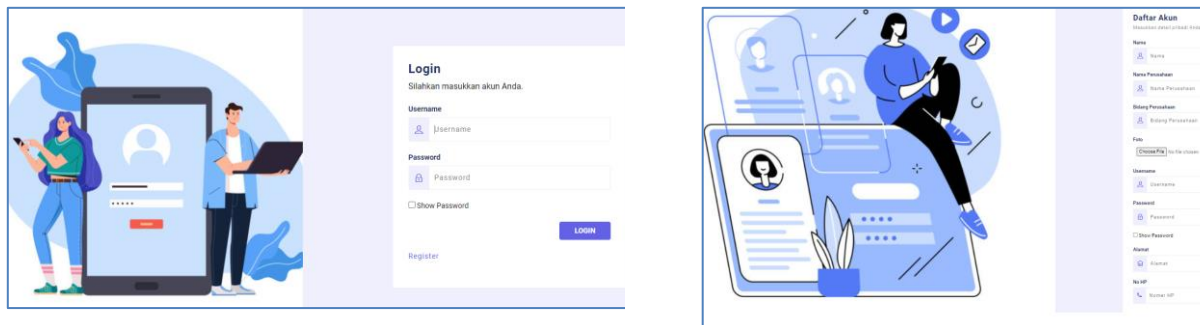
**Picture 13. Services Page**  
**Source: Data Proseses (2023)**



**Picture 14. Login Page**  
**Source: Data Proseses (2023)**

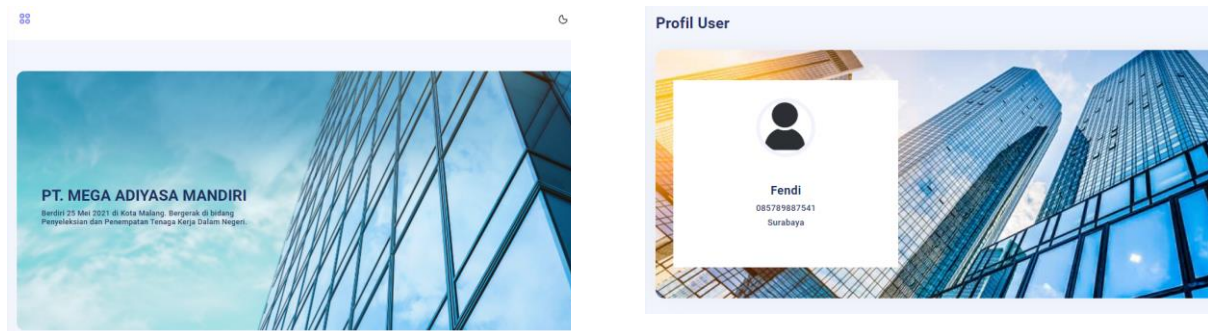
For users, if you don't have an account, enter the login menu then select login user, but for admins there is no need to register, point the cursor and click the login button.





**Picture 15. Register Form**  
**Source: Data Proses (2023)**

Enter Name, Company Name, Company Field, Photo, Username, Password, Address, and Mobile Number. After entering correctly, click the REGISTER button or press the Enter key on the keyboard. After the user logs in, it will go to the Dashboards page.



**Picture 16. User Pages**  
**Source: Data Proses (2023)**

There is a user identity such as name, photo, mobile number, and address. On the services submenu, there are service options to choose from. If the user wants to see worker details then click on the name. Then a page like the one below will appear. There is a buy and return button. If the user wants to order then click the order button.

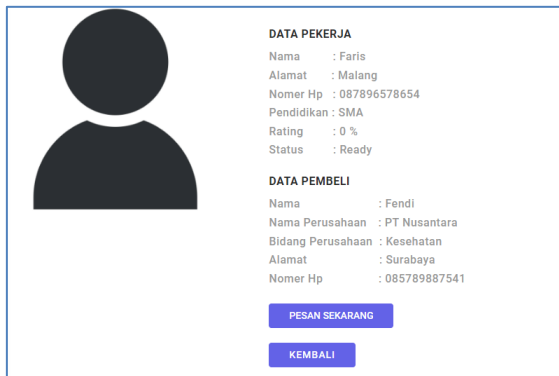


**Picture 17. Services**  
**Source: Data Proses (2023)**

If the user wants to order a service, click the order button on the detail page. After clicking the order button, a page like the one below will appear.

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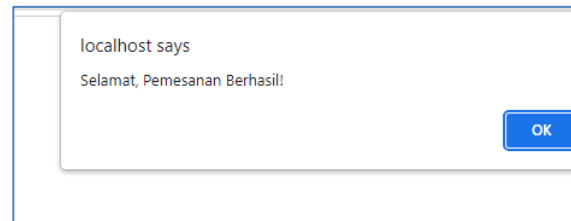


**DATA PEKERJA**  
 Nama : Faris  
 Alamat : Malang  
 Nomer Hp : 087896578654  
 Pendidikan : SMA  
 Rating : 0 %  
 Status : Ready

**DATA PEMBELI**  
 Nama : Fendi  
 Nama Perusahaan : PT Nusantara  
 Bidang Perusahaan : Kesehatan  
 Alamat : Surabaya  
 Nomer Hp : 085789887541

PESAN SEKARANG  
 KEMBALI

**Picture 18. Order Form**  
 Source: Data Proses (2023)

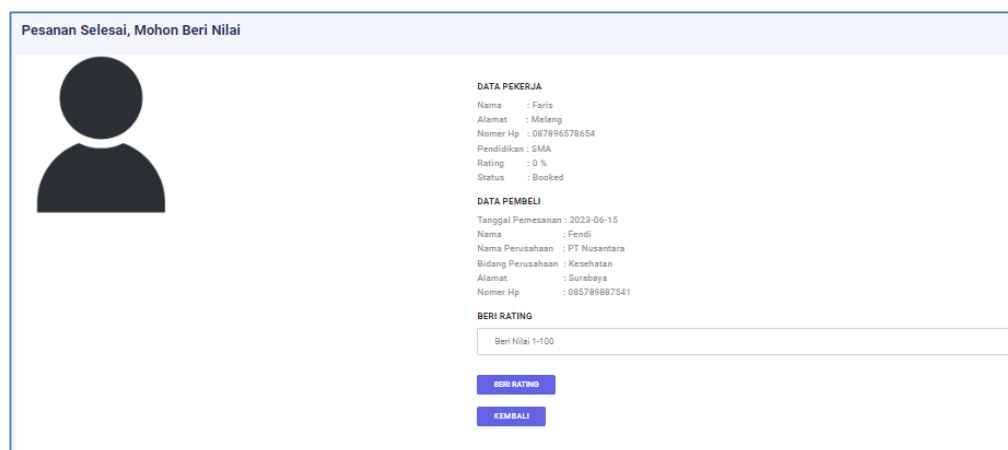


localhost says  
 Selamat, Pemesanan Berhasil!

OK

**Picture 19. Order Notification**  
 Source: Data Proses (2023)

After ordering and using the human resource services provided by PT Mega Adiyasa Mandiri, the user can provide an assessment of the performance of the human resources that have been ordered. Rating by entering a value of 1-100 (You may give an assessment after the service is finished by clicking the rating button). The order page is shown as follows:



**DATA PEKERJA**  
 Nama : Faris  
 Alamat : Malang  
 Nomer Hp : 087896578654  
 Pendidikan : SMA  
 Rating : 0 %  
 Status : Booked

**DATA PEMBELI**  
 Tanggal Pemesanan : 2023-06-15  
 Nama : Fendi  
 Nama Perusahaan : PT Nusantara  
 Bidang Perusahaan : Kesehatan  
 Alamat : Surabaya  
 Nomer Hp : 085789887541

**BERI RATING**  
 Berikan Nilai 1-100

BERI RATING  
 KEMBALI

**Picture 20. Scoring Page**  
 Source: Data Proses (2023)

Data Pesanan Selesai

Show 10 entries

No	ID Pesanan	Tanggal Pesan	Nama User	Alamat	Jasa	Nama Pekerja	Penilaian
1	14	15-06-2023	Fendi	Surabaya	Cleaning Service	Faris	90

Showing 1 to 1 of 1 entries

Previous 1 Next

**Picture 21. Rating Result**  
 Source: Data Proses (2023)

With this facility, companies can receive input from users related to the performance of their human resources. With an objective assessment from users, the company can determine the right steps to improve the performance and quality of its human resources.

#### 4. CONCLUSION

PT Mega Adiyasa Mandiri is a human resource service provider company that is superior, insightful and competent in various fields. The use of monitoring applications for the selection process makes a positive contribution to PT Mega Adiyasa Mandiri. Companies can have integrated data between prospective workers and users. Companies can easily obtain input from users regarding the performance of the human resources that have been used. In addition, this application also makes it easy for companies to ensure that prospective workers are of good quality

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