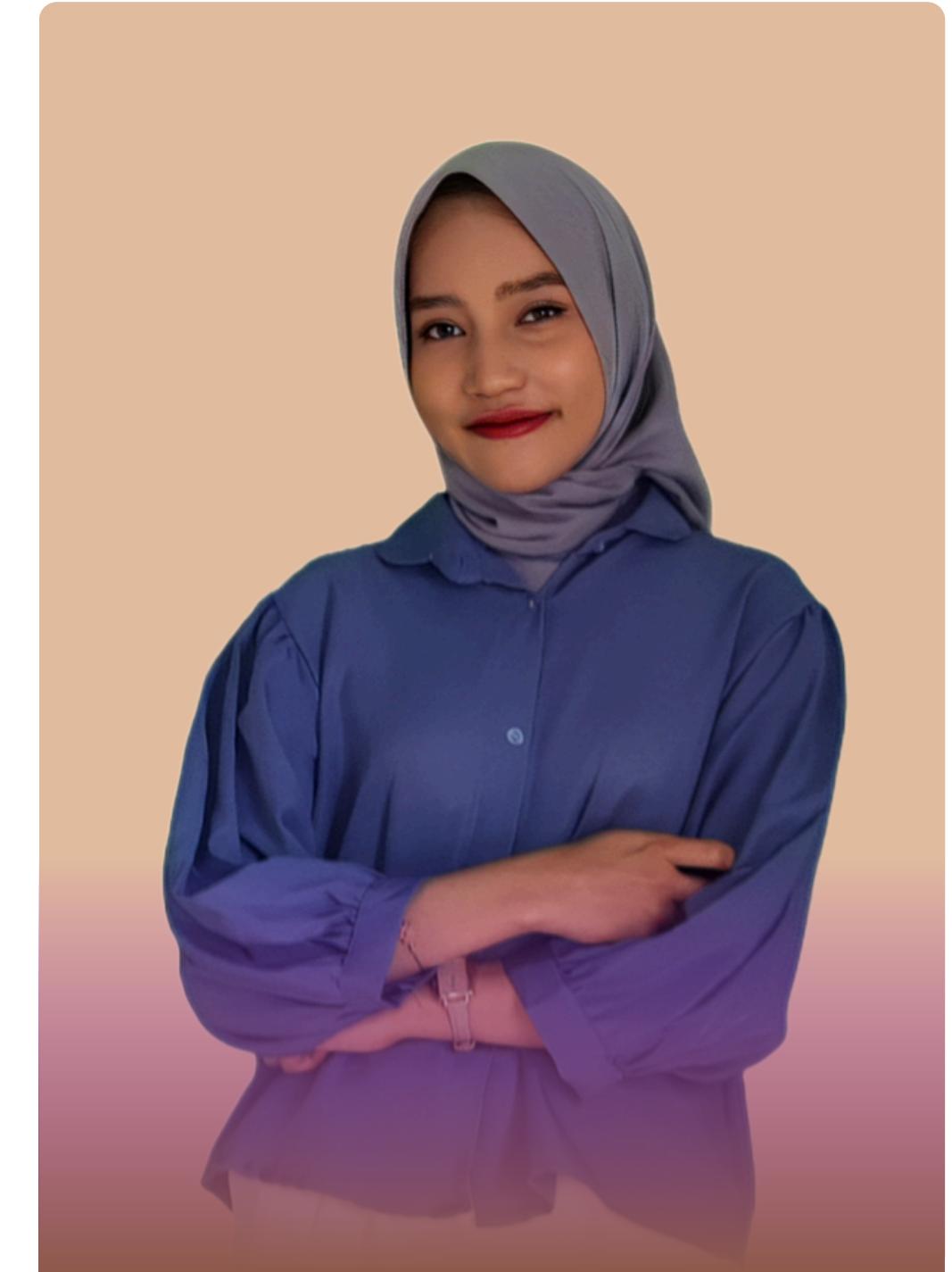


# PORTFOLIO

a sample of projects that i've been working on  
by : Devi Ayu Rachmawati

# hi, I'm Devi.

Postgraduate Student of Computer Science at Dian Nuswantoro University. I am interested in things that data. I have applied my skills in various projects. Personally, I want to be a data expert in the future. I am highly motivated to continuously develop myself with other skills and grow professionally. I am person who doesn't give up easily and will continue to learn new things.



# EDUCATION



SEP 2019 - MAR 2023

BACHELOR DEGREE IN  
INFORMATICS  
ENGINEERING  
GPA 3.87



AUG 2021 - DEC 2021

STUDENT MOBILITY IN  
5TH SEMESTER  
GPA 3.82

**ruang  
guru**

FEB 2022 - JUL 2022

STUDY INDEPENDENT  
KAMPUS MERDEKA IN 6TH  
SEMESTER WITH GPA 4.00  
AND TOP 5 FINAL  
PROJECTS DATA AND  
BUSINESS ANALYTICS



SEP 2023 - NOW

MASTER'S STUDENT IN  
INFORMATICS  
ENGINEERING

# EDUCATION



- Programming Languages : SQL, Python (Libraries : NumPy, pandas, scikit-learn, Matplotlib)
- Visualization Tool : Tableau
- Data Analytics : Exploratory Data Analysis, Descriptive Statistics, Visualization, Cluster Analysis, Sentiment Analysis, etc.
- Excel/Sheets
- Data Storytelling Skills
- Machine Learning and AI Modeling

# RELEVANT PROJECTS

SQL   PYTHON   TABLEAU

# PREDICTION STUDENTS GRADUATION USING CLASSIFICATION ANALYSIS (PYTHON)

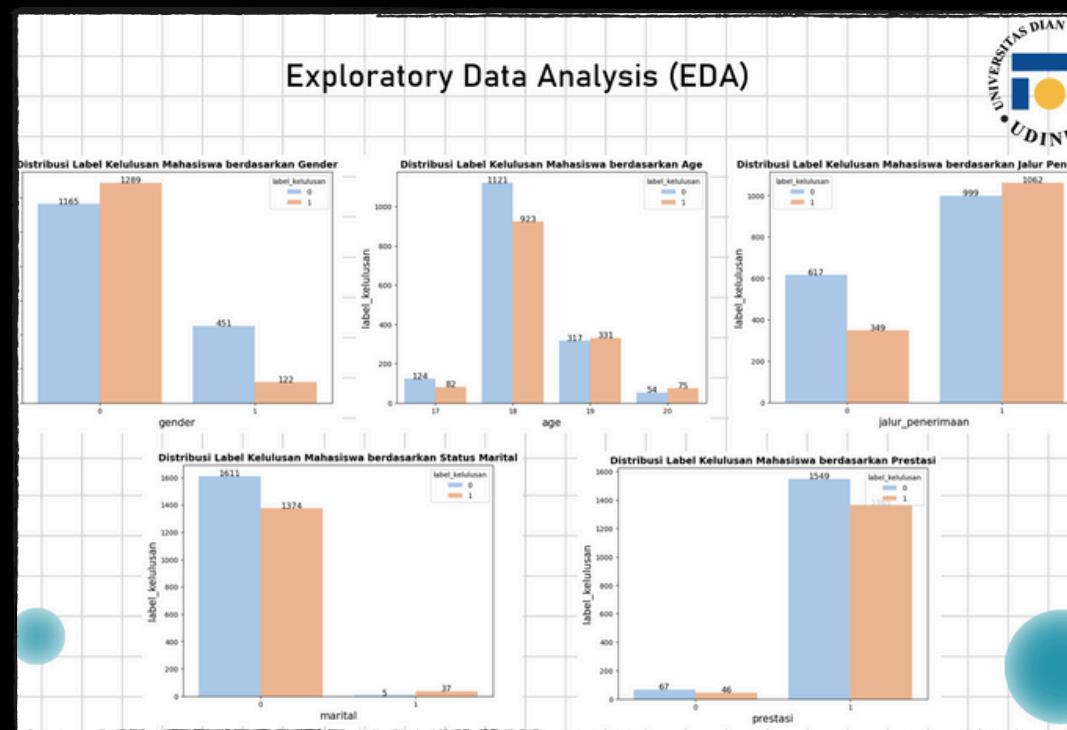
## Tujuan Penelitian



Mengetahui knowledge yang dihasilkan dari proses analisis data kelulusan mahasiswa program studi Teknik Informatika Univeristas Dian Nuswantoro.

Mengetahui cara untuk meningkatkan persentase kelulusan tepat waktu pada mahasiswa program studi Teknik Informatika Univeritas Dian Nuswantoro.

Mengetahui bagaimana mengimplementasikan algoritma Random Forest dalam menyelesaikan permasalahan dalam peningkatan kelulusan mahasiswa tepat waktu.



## Evaluation



Hasil *classification\_report* pada training set

	precision	recall	f1-score	support
TEPAT	0.93	0.94	0.94	1373
TERLAMBAT	0.93	0.92	0.93	1199
accuracy				2572
macro avg	0.93	0.93	0.93	2572
weighted avg	0.93	0.93	0.93	2572

Hasil *classification\_report* pada testing set

	precision	recall	f1-score	support
TEPAT	0.91	0.93	0.92	243
TERLAMBAT	0.92	0.90	0.91	212
accuracy				455
macro avg	0.91	0.91	0.91	455
weighted avg	0.91	0.91	0.91	455

## Deployment



Klasifikasi Kelulusan Mahasiswa (Web Apps)

Aplikasi berbasis Web untuk memprediksi kelayakan Mahasiswa Kelulusan Mahasiswa Teknik Informatika, UDINUS

INPUT USER

Gender	Age	
0 = Male, 1 = Female	usia saat melakukan pendaftaran	
0 = PWDH, 1 = Regular	Prestasi	
0 = Belum Menikah, 1 = Menikah	Jurusan Masuk	
IPS 1	IPS 2	IPS 3
IPS 4	IPS 5	IPS 6
IPS 7	IPS 8	
IPS 9	IPS 10	
IPS 11	IPS 12	

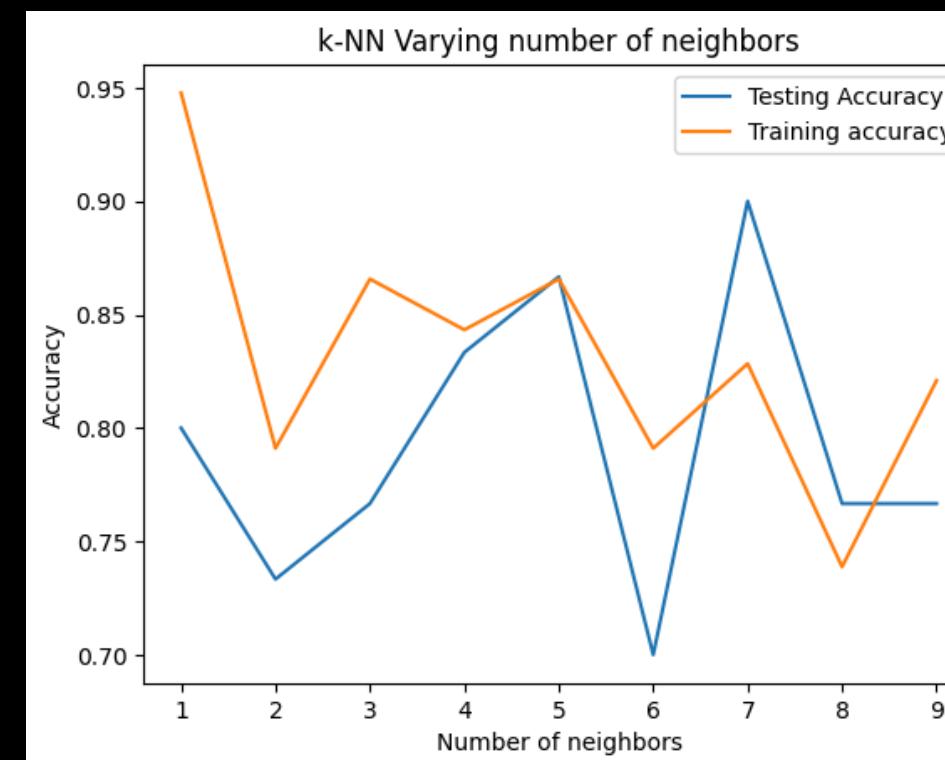
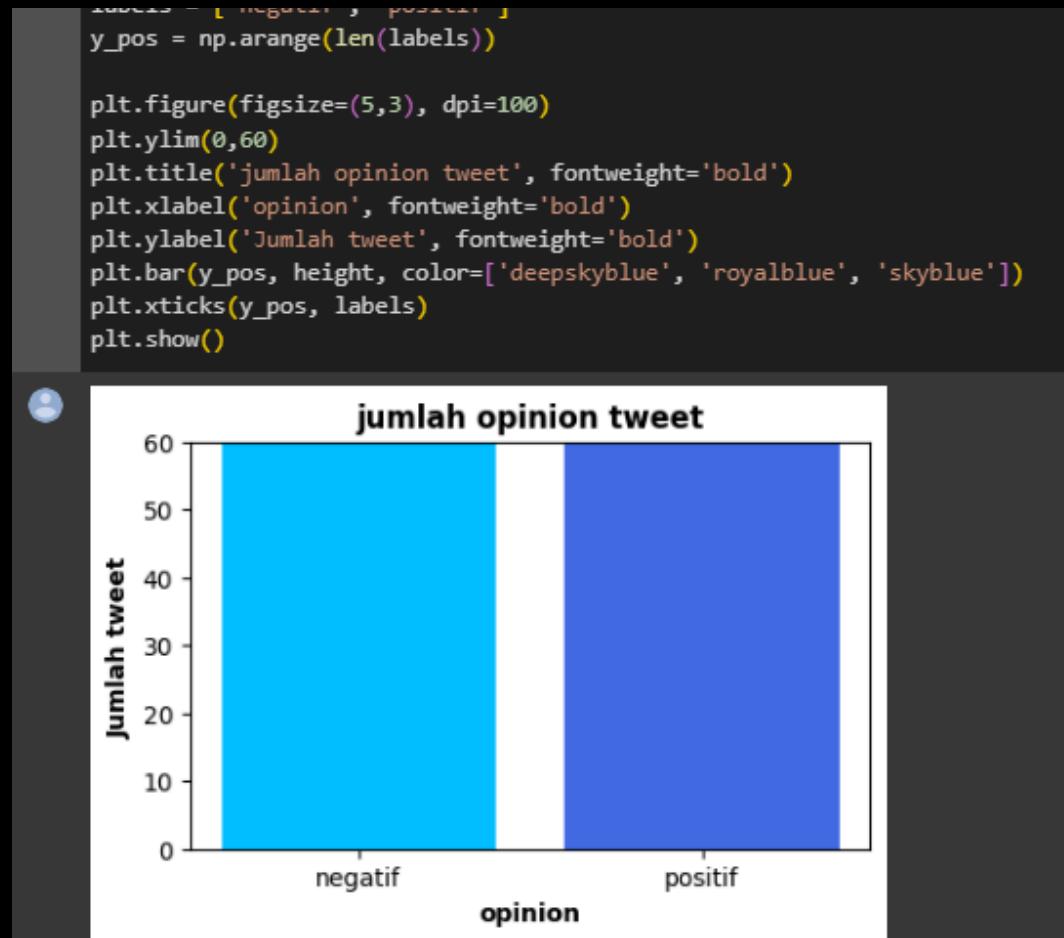
Upload your Excel file

Drag and drop file here  
Limit 200MB per file

Browse files

Building a classification model using the Random Forest algorithm to increase the percentage of timely graduation for students. The classification results using the Random Forest algorithm get an accuracy value of 93% for training data and 91% for testing data.

# SENTIMENT ANALYSIS (PYTHON)



```
[ ] #Fit the model
knn.fit(X_train,y_train)

[ ] KNeighborsClassifier
KNeighborsClassifier(metric='euclidean', n_neighbors=4)
```

```
[ ] from sklearn.metrics import classification_report

akurasi = classification_report(y_test, y_pred_knn)
print(akurasi)
```

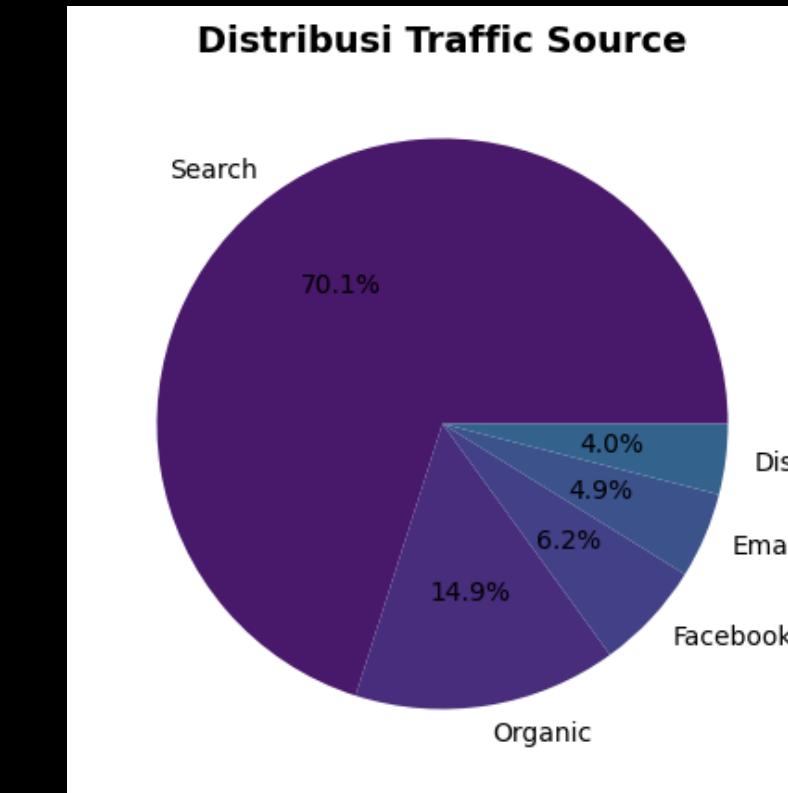
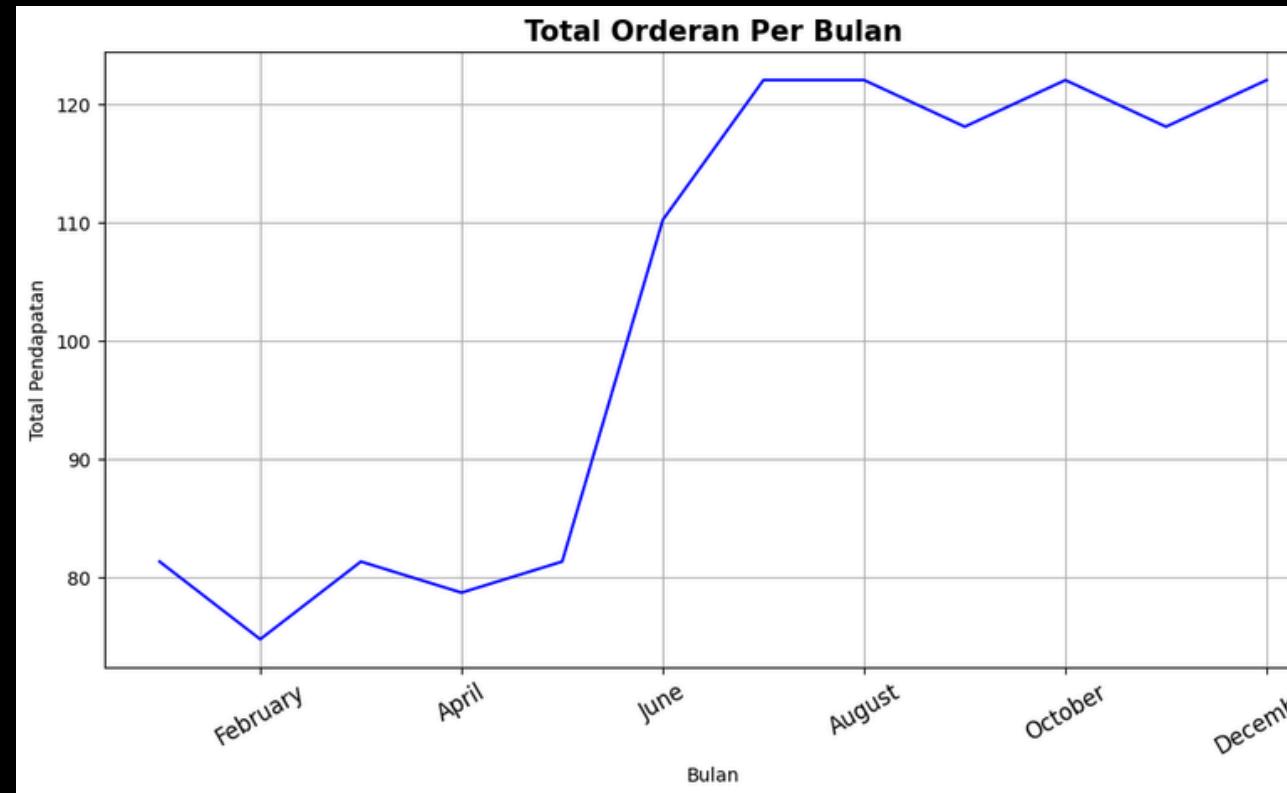
	precision	recall	f1-score	support
0	0.71	1.00	0.83	12
1	1.00	0.72	0.84	18
accuracy			0.83	30
macro avg	0.85	0.86	0.83	30
weighted avg	0.88	0.83	0.83	30

Created a K-Nearest Neighbor Classification model with 83% accuracy using bag-of-words method to predict tweet sentiment about waste handling.

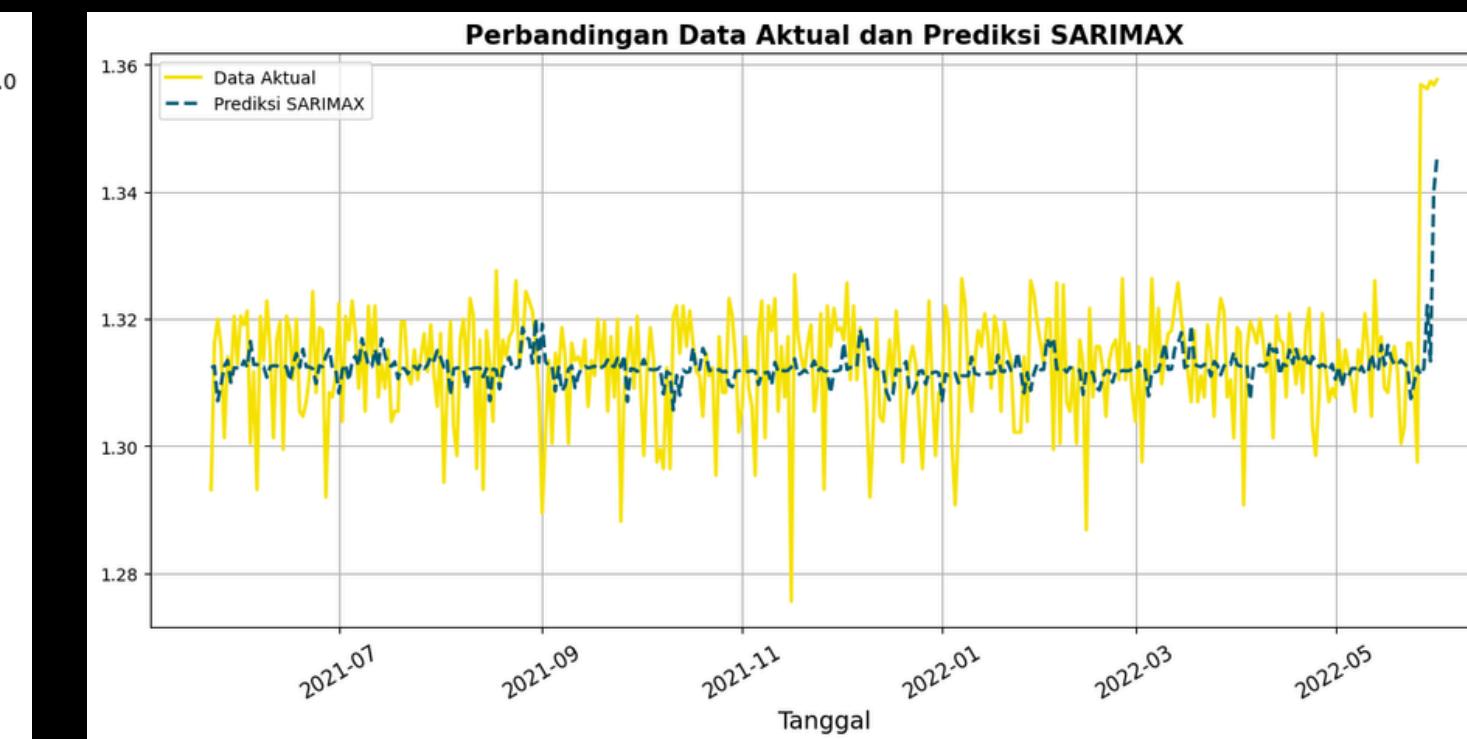
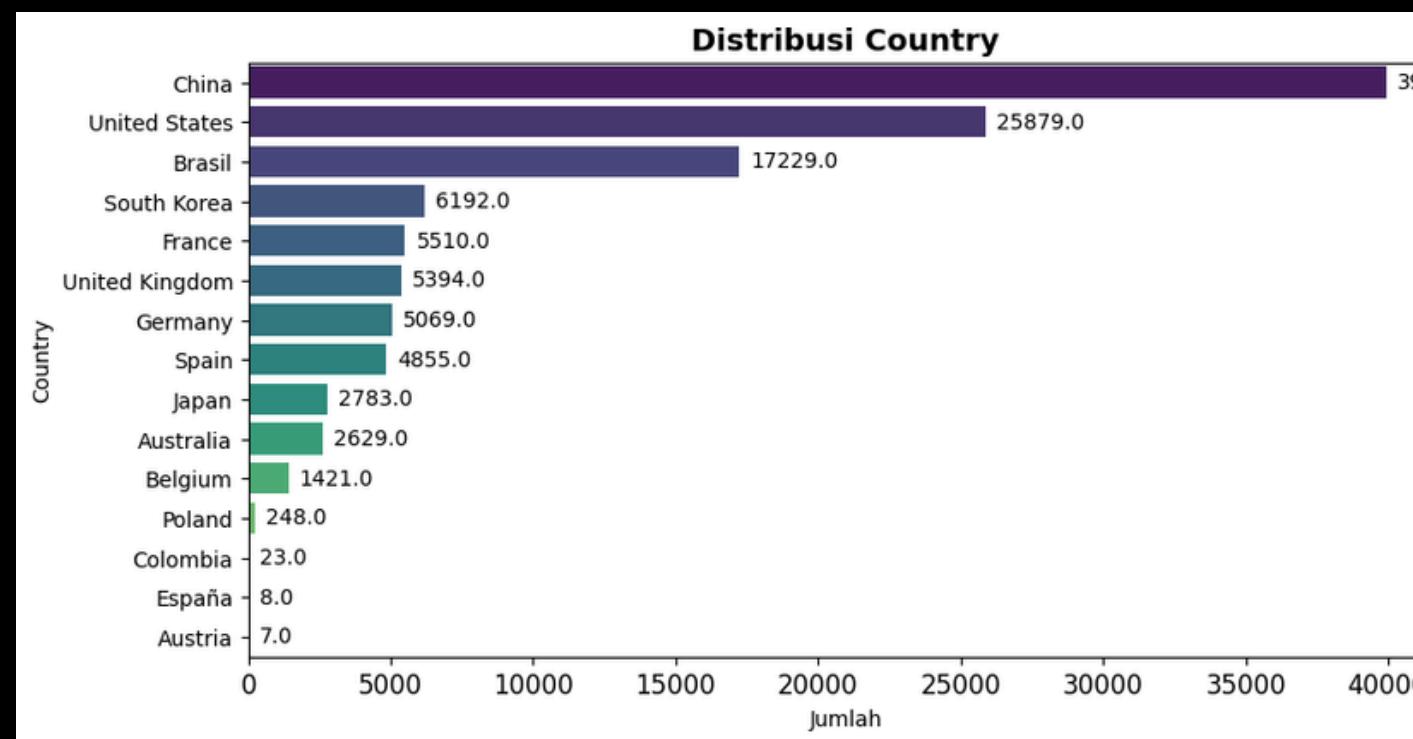
Steps performed :

- 1.Text Normalization
- 2.Tokenization
- 3.Stemming
- 4.Bag-of-Words
- 5.K-NN Classification

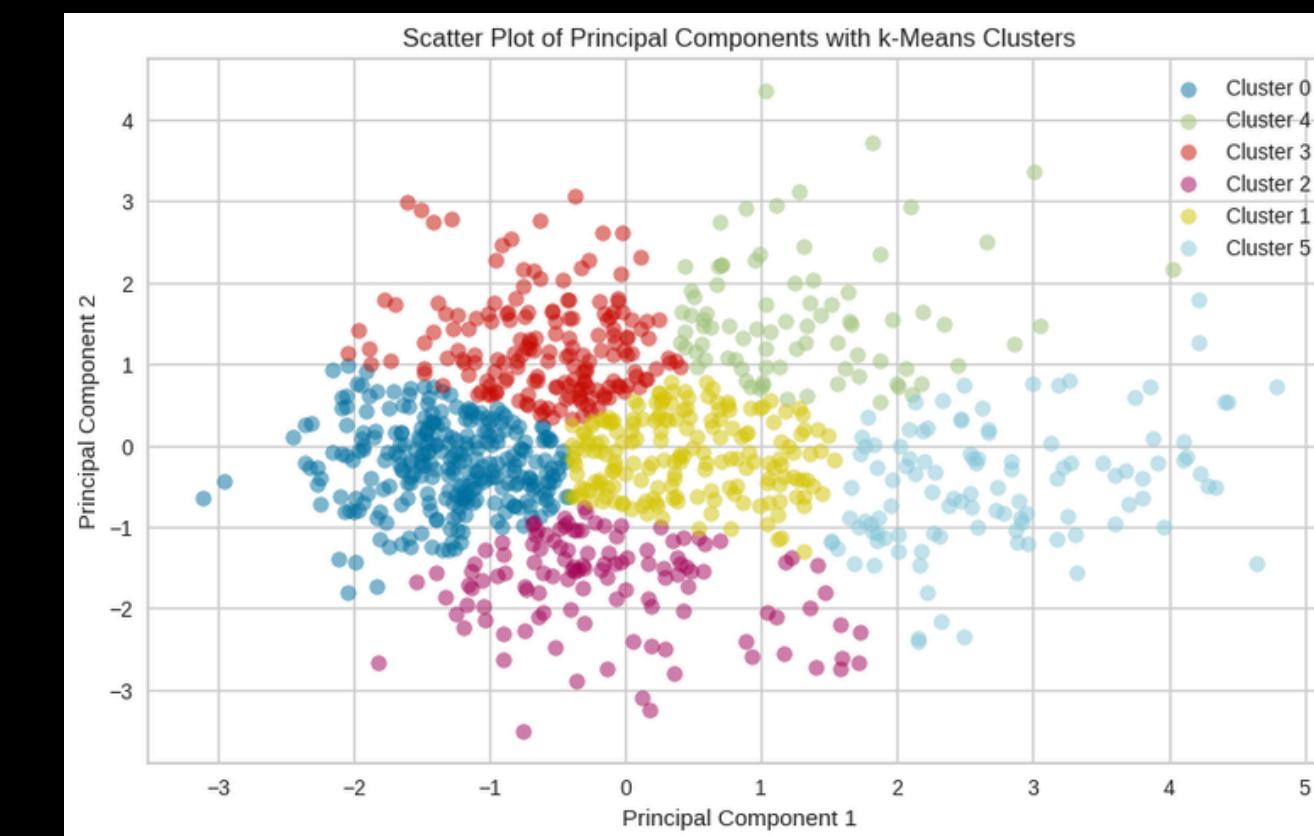
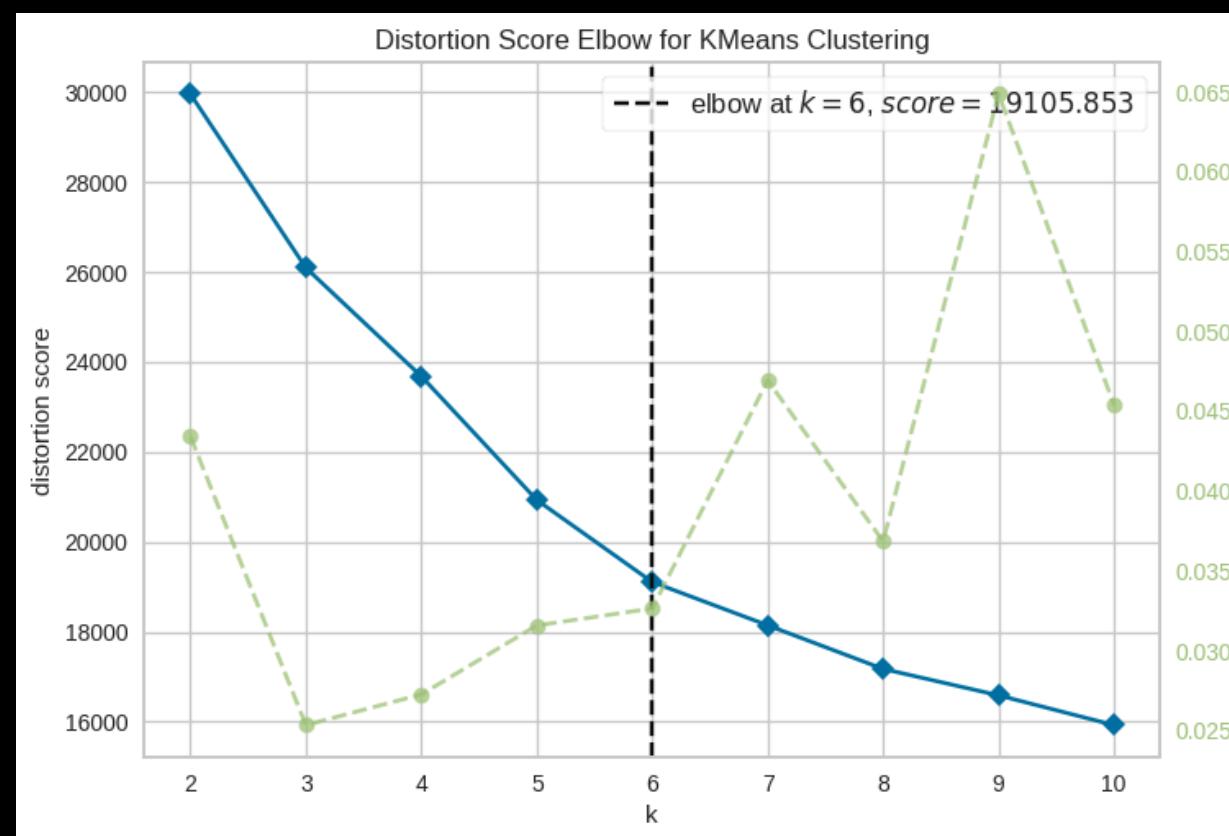
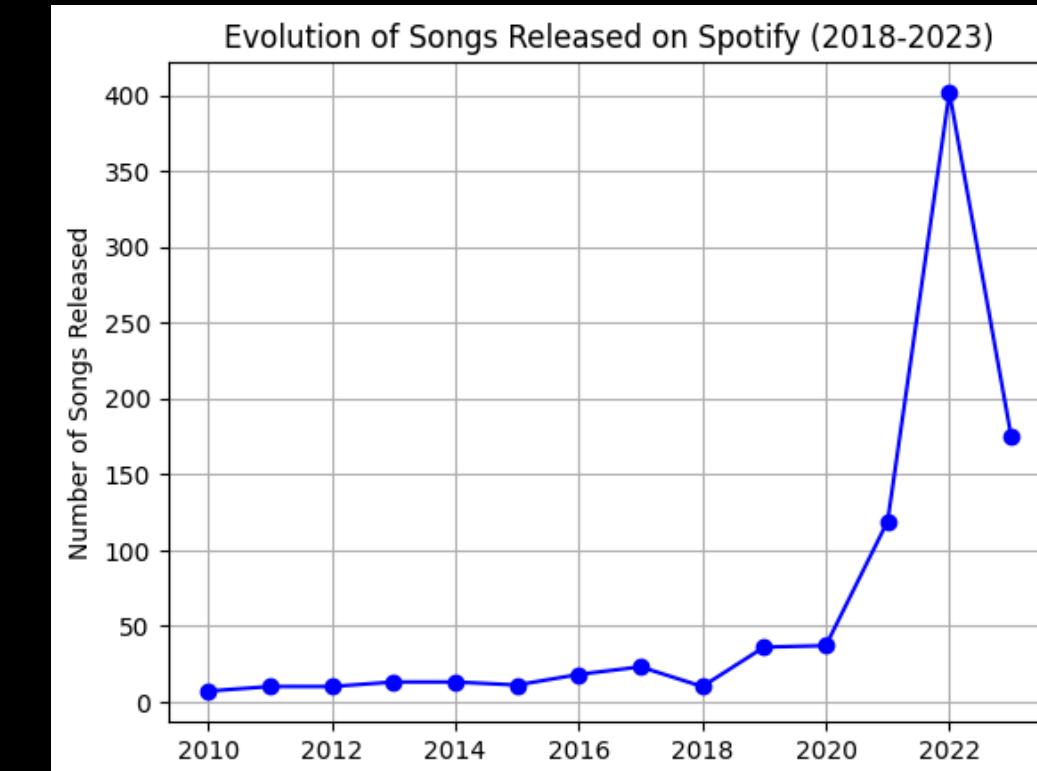
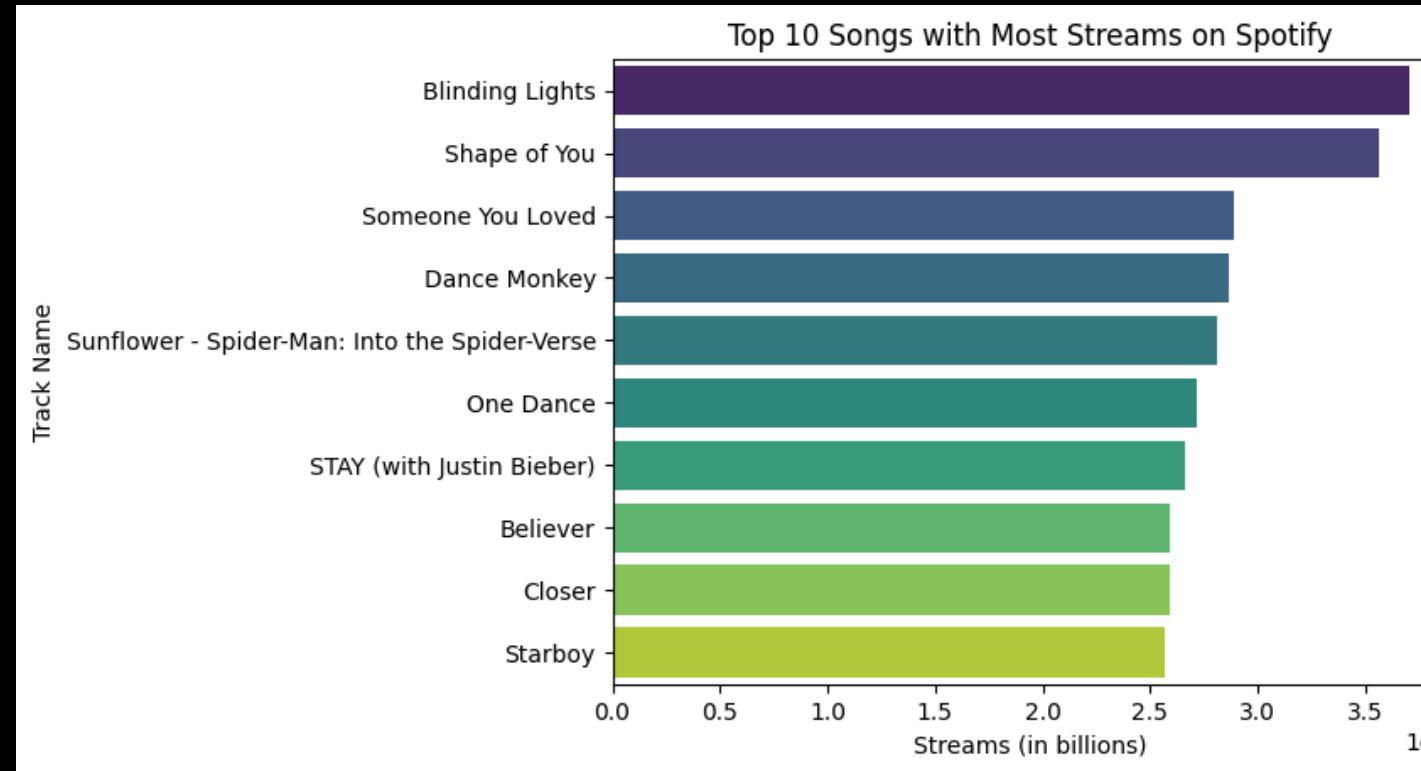
# FORECASTING ANALYSIS (PYTHON)



The company plans to expand its market. The company conducts research using sales forecasts to find out whether expansion is feasible or not and to find a suitable place for expansion (if feasible).



# CLUSTERING ANALYSIS (PYTHON)



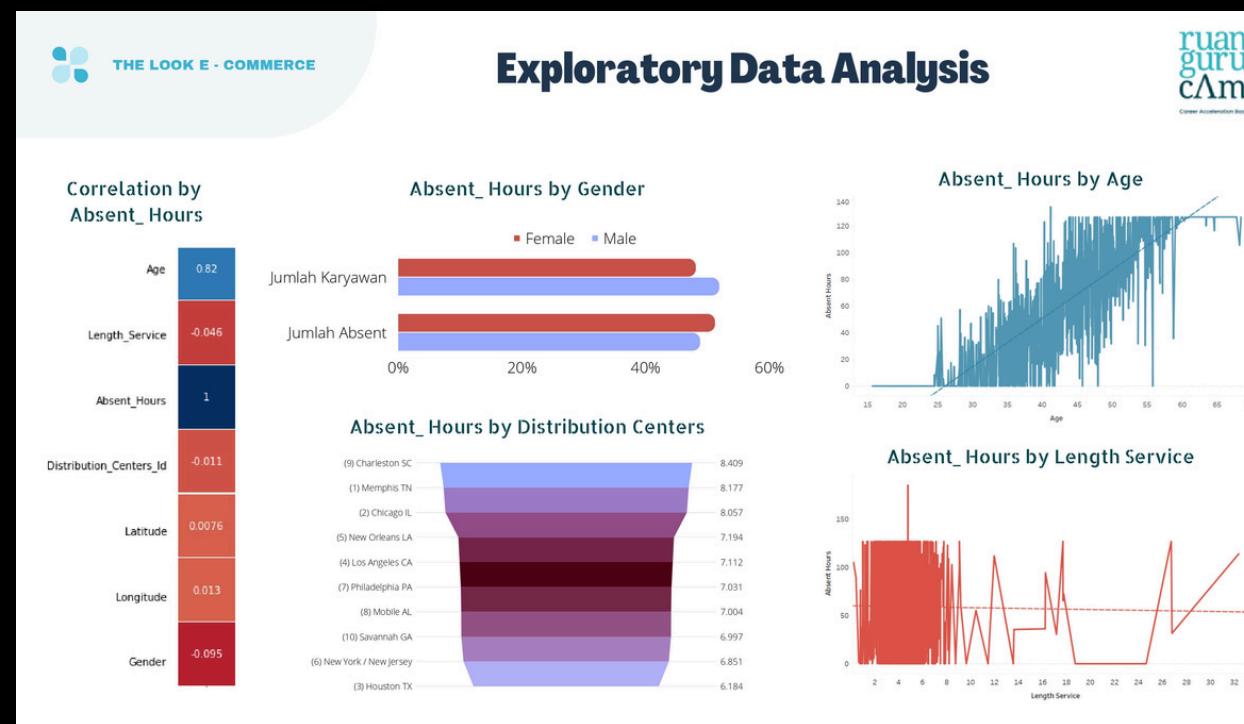
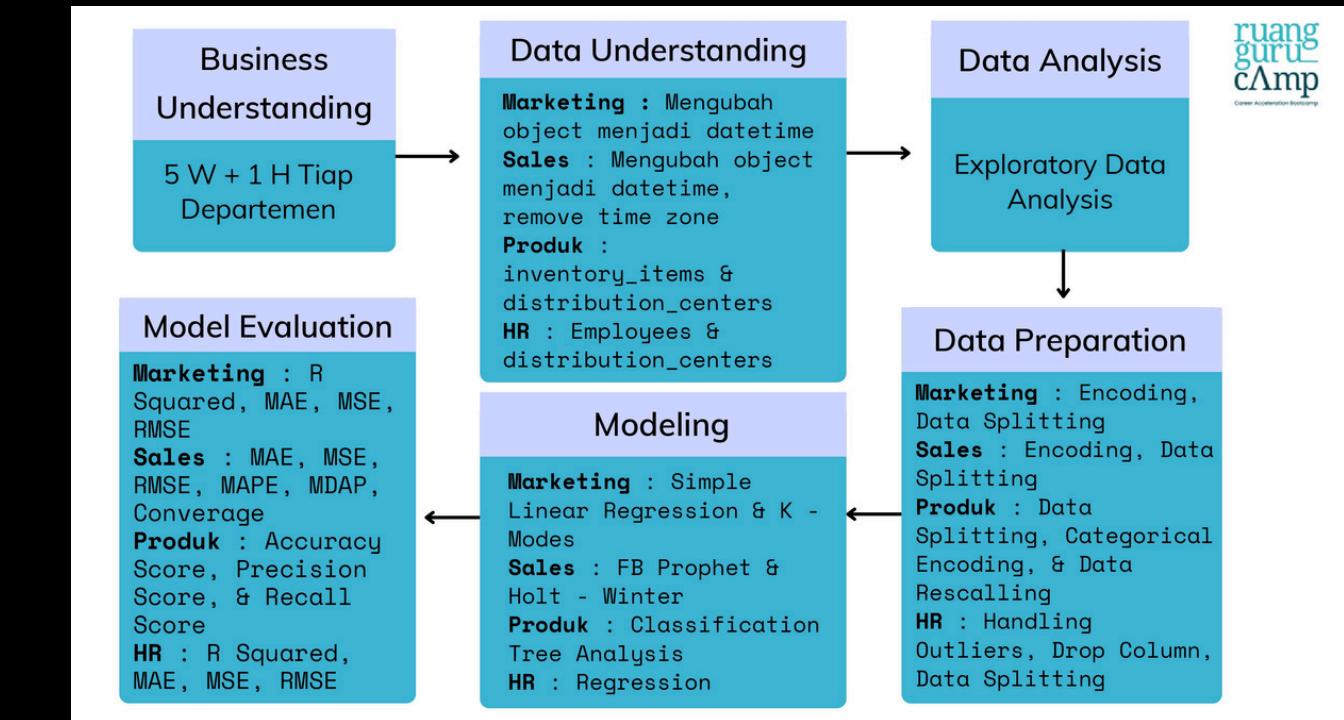
Search for music recommendations to listen to based on playlist history using K-Means Clustering.

# JOINT GROUP FINAL PROJECT

## STUDY INDEPENDEN AT PT RUANG RAYA INDONESIA

**Kelompok 149**

Member	Name	University	Major	Department	ID
1	ALFENDO RIZKY SYACHPUTRA	Universitas Dian Nuswantoro	B.S - INFORMATICS ENGINEERING	MARKETING DEPARTMENT	DBA2007820
2	DELLAVITRYA PUTRI KHAIRUNNISA	Universitas Singaperbangsa Karawang	B.S - AKUNTANSI	PRODUCT DEPARTMENT	DBA2229734
3	SYAHRUL IKHSAN	Universitas Negeri Malang	B.S - MANAGEMENT	SALES DEPARTMENT	DBA2211112
4	DEVI AYU RACHMAWATI	Universitas Dian Nuswantoro	B.S - INFORMATICS ENGINEERING	HUMAN RESOURCE DEPARTMENT	DBA2304424



Taking the role as the Data Team from fictitious company, our objective get rewarded Top 5 Final Project Data & Business Analyst.

# feel free to reach me out!



deviayu919@gmail.com



<https://github.com/deviayu05>



<https://www.linkedin.com/in/devi-ayu-rachmawati-21536b232>

# THANK YOU