

Digital User Churn Dashboard

Bank Muamalat Business Intelligence Analyst Based Internship Program

Presented by
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About You

Saya merupakan mahasiswa semester 5 dari program studi S1 Informatika di Universitas AMIKOM Yogyakarta. Dengan IPK 3.85, saya cukup menguasai dalam berbagai bidang seperti pengembangan web ,*UI designer* ,dan mengelola basis data. Saya memiliki komitmen yang kuat untuk belajar dan berkembang, serta siap untuk berkontribusi secara positif dalam lingkungan akademik maupun profesional.

Education

UNIVERSITAS AMIKOM YOGYAKARTA 2022 -
Yogyakarta, Indonesia

Project :


Final Project: "PENGEMBANGAN WEBSITE BERBASIS AI
UNTUK PENGELOLAAN SAMPAH SECARA EFEKTIF"



Case Study



Tugas 1


Tentukan masing-masing primary key pada 4 dataset penjualan

1. Primary key tabel Customer : CustomerID
2. Primary key tabel Products : ProdNumber
3. Primary key tabel Orders : OrderID
4. Primary key tabel ProductCategory : CategoryID

#	Name	Type
<input type="checkbox"/> 1	CustomerID 	int(11)
<input type="checkbox"/> 2	FirstName	varchar(50)
<input type="checkbox"/> 3	LastName	varchar(50)
<input type="checkbox"/> 4	CustomerEmail	varchar(100)
<input type="checkbox"/> 5	CustomerPhone	varchar(20)
<input type="checkbox"/> 6	CustomerAddress	varchar(150)
<input type="checkbox"/> 7	CustomerCity	varchar(50)
<input type="checkbox"/> 8	CustomerState	varchar(50)
<input type="checkbox"/> 9	CustomerZip	varchar(10)

#	Name	Type
<input type="checkbox"/> 1	ProdNumber 	varchar(10)
<input type="checkbox"/> 2	ProdName	varchar(100)
<input type="checkbox"/> 3	CategoryID 	int(11)
<input type="checkbox"/> 4	Price	decimal(10,2)

#	Name	Type
<input type="checkbox"/> 1	OrderID 	int(11)
<input type="checkbox"/> 2	Date	date
<input type="checkbox"/> 3	CustomerID 	int(11)
<input type="checkbox"/> 4	ProdNumber 	varchar(10)
<input type="checkbox"/> 5	Quantity	int(11)

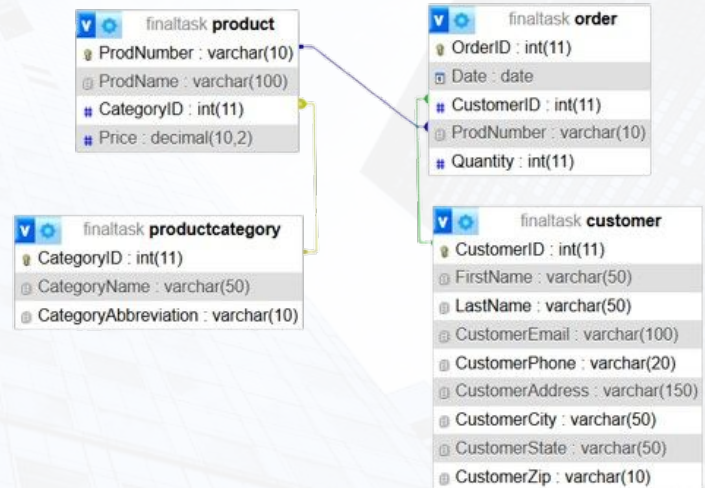
#	Name	Type
<input type="checkbox"/> 1	CategoryID 	int(11)
<input type="checkbox"/> 2	CategoryName	varchar(50)
<input type="checkbox"/> 3	CategoryAbbreviation	varchar(10)

Case Study

Tugas 2

Menentukan relationship dari ke-4 table tersebut

1. Terdapat relasi one to many antara tabel costumer dengan order.
2. Terdapat relasi one to many antara tabel product dengan order.
3. Terdapat relasi one to many antara tabel product category dengan product.



Case Study

Tugas 3

```
WITH customer_temp AS (  
    SELECT  
        CustomerID AS customer_id,  
        CustomerEmail AS customer_email,  
        CustomerCity AS customer_city  
    FROM Customer  
)  
product_temp AS (  
    SELECT  
        p.ProdNumber AS product_number,  
        p.ProdName AS product_name,  
        p.Price AS product_price,  
        pc.CategoryName AS category_name  
    FROM Product p  
    LEFT JOIN productcategory pc  
        ON p.CategoryID = pc.CategoryID  
)  
order_temp AS (  
    SELECT  
        o.OrderID AS order_id,  
        o.Date AS order_date,  
        o.CustomerID AS customer_id,  
        o.ProdNumber AS product_number,  
        o.Quantity AS order_quantity  
    FROM `order` o  
)  
SELECT  
    ot.order_id,  
    ot.order_date,  
    ct.customer_email,  
    ct.customer_city,  
    pt.product_name,  
    pt.product_price,  
    pt.category_name,  
    ot.order_quantity,  
    (pt.product_price * ot.order_quantity) AS total_price  
FROM order_temp ot  
LEFT JOIN customer_temp ct  
    ON ot.customer_id = ct.customer_id  
LEFT JOIN product_temp pt  
    ON ot.product_number = pt.product_number  
ORDER BY ot.order_date ASC;
```

Dengan menggunakan CTE untuk memberikan alias pada kolom dan mengatur data sebelum digabungkan dengan LEFT JOIN berdasarkan hubungan antar tabel. Data dari tabel customer, order, product dan product category digabungkan menjadi satu tampilan lengkap yang mencakup informasi. Hasilnya dapat diekspor dalam format CSV untuk keperluan analisis dan visualisasi data menggunakan alat seperti Looker Studio atau Google Data Studio.

Hasil

order_id	order_date	customer_email	customer_city	product_name	product_price	category_name	order_quantity	total_price
1	2020-01-01	fvaslerqt@comsenz.com#mailto:fvaslerqt@comsenz.com...	Jackson	Polar Robots	23.99	eBooks	2	47.98
2	2020-01-01	tmckernot@tinyurl.com#mailto:tmckernot@tinyurl.com...	Katy	RWW-75 Robot	883.00	Robots	3	2649.00
3	2020-01-01	gstiggersdd@eventbrite.com#mailto:gstiggersdd@even...	Saint Petersburg	Drone Video Techniques	37.99	Training Videos	6	227.94
4	2020-01-01	edew@nba.com#mailto:edew@nba.com#	Honolulu	BYOD-220	69.00	Drone Kits	1	69.00
5	2020-01-01	llespercx@com.com#mailto:llespercx@com.com#	Des Moines	SCARA Robots	19.50	eBooks	5	97.50
6	2020-01-01	lfmonte9@de.vu#mailto:lfmonte9@de.vu#	Birmingham	Spherical Robots	16.75	eBooks	5	83.75
7	2020-01-02	aguiongo@behance.net#mailto:aguiongo@behance.net#	Houston	BYOR-2640S	189.00	Robot Kits	2	378.00
8	2020-01-02	ksteershp@ameblo.jp#mailto:ksteershp@ameblo.jp#	San Diego	Understanding Automation	44.95	Training Videos	1	44.95
9	2020-01-02	lgatenbyel@quantcast.com#mailto:lgatenbyel@quantca...	Des Moines	Drone Video Techniques	37.99	Training Videos	2	75.98
10	2020-01-02	jcolthurstgu@cbsnews.com#mailto:jcolthurstgu@cbsne...	Sacramento	DTE-QFN20 Drone	250.00	Drones	2	500.00
11	2020-01-02	gmirrlees4v@state.tx.us#mailto:gmirrlees4v@state.t...	Washington	BYOR-2640S	189.00	Robot Kits	2	378.00
12	2020-01-02	jzellick84@ustream.tv#mailto:jzellick84@ustream.tv...	Washington	BYOD-100	54.00	Drone Kits	5	270.00
13	2020-01-02	ohalbardv@booking.com#mailto:ohalbardv@booking.com...	Birmingham	Fixed Wing Drones	15.50	eBooks	3	46.50
14	2020-01-02	akingaby78@deviantart.com#mailto:akingaby78@devian...	West Palm Beach	Ladybug Robot Blueprint	12.00	Blueprints	2	24.00
15	2020-01-02	croylede@dot.gov#mailto:croylede@dot.gov#	Virginia Beach	BYOR-3000	214.00	Robot Kits	2	428.00

Case Study

Tugas 4

Sales Dashboard

PT Sejahtera Bersama

Category

- ☒ Blueprints
- ☒ Drone Kits
- ☒ Drones
- ☒ Robot Kits
- ☒ Robots
- ☒ Training Videos
- ☒ eBooks

Year

- ☒ 2020
- ☒ 2021

City

Total Sales

Rp1.75M

Total Item Sold

11.7K

Total Order

3.3K

Total Customer

1.7K

Total City

361

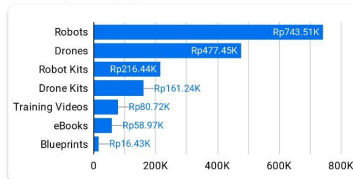
Top 5 Category by Sales

Product Name	Category	Total sales
1. MICR-23K Robot	Robots	Rp157,329
2. RWW-75 Robot	Robots	Rp120,971
3. RLK-9920 Robot	Robots	Rp120,927
4. RQTE-554 Robot	Robots	Rp116,280
5. RCB-889 Robot	Robots	Rp114,192

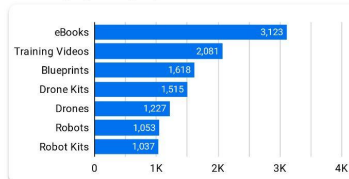
Top 5 Category by Quantity

Product Name	Category	Order quantity
1. Sleepy Eye Blue...	Blueprints	312
2. DTI-84 Drone	Drones	231
3. AI for Educators	Training Videos	211
4. Building Your O...	eBooks	210
5. RCB-889 Robot	Robots	208

Sales by Category



Quantity by Category



Total Sales by City

City	Total sales
Washington	Rp55,381.94
Houston	Rp33,761.49
Sacramento	Rp33,380.2
San Diego	Rp29,228.59
Albany	Rp25,405.88
Grand total	Rp1,754,750.57

Total Quantity by City

City	Order quantity
Washington	308
Houston	249
San Diego	203
Sacramento	153
Atlanta	153
Grand total	11,654

Visualisasi kedalam Looker Studio:

- Total keseluruhan sales
- Total keseluruhan sales berdasarkan kategori produk
- Total keseluruhan qty berdasarkan kategori produk
- Total sales berdasarkan kota
- Total qty berdasarkan kota
- Top 5 kategori produk yang paling tinggi salesnya
- Top 5 kategori produk yang paling tinggi qtynya

Business Sugestion

- **Fokus pada Kategori dengan Penjualan Tertinggi**
- **Optimalisasi Kategori dengan Permintaan Tinggi**
- **Peningkatan Penjualan di Kota dengan Permintaan Tinggi**
- **Meningkatkan Penjualan di Kategori dengan Potensi Besar**
- **Personalisasi Promosi & Retargeting**

Video Presentation

<https://drive.google.com/file/d/11DWAtzDExkhxhMi357auSRCi4C9MvtE5/view?usp=sharing>

Githun Repository

https://github.com/Slush03/PBI-BI_Analyst_Bank_Muamalat.git

Looker Studio

<https://lookerstudio.google.com/reporting/1f2270b1-9eaf-4f54-b14c-12d7f0332ac1>

Thank You



Rakamin
Academy



Bank
Muamalat