

Virtual Internship Experience

**Data Analysis:
Metadata, Data Joining,
and Data Blending**



Bank
Muamalat

Outline

- 1 **Konsep Dasar Metadata**
- 2 **Penerapan Editing Metadata**
- 3 **Joining**
- 4 **Blending**

Disclaimer

“Dokumen ini memiliki hak cipta. Barang siapa yang menyebarluaskan atau menduplikasi tanpa izin dari instansi terkait dapat diproses sesuai dengan ketentuan hukum yang berlaku.”

Editing Metadata

- **Checking Metadata**

Setelah memuat sumber data, Ms Acces menyajikan semua data kolom pada tabel yang ada di sumber.

- **Changing Data Type**

Pengubahan tipe data dapat dilakukan jika pengaturan data sebelumnya kurang tepat.

- **Renaming Column**

Nama kolom dapat diubah dengan menggunakan opsi penggantian nama.

- **Column Alias**

Setiap kolom sumber data dapat diberi alias yang membantu lebih memahami sifat kolom.

Checking Metadata



Database1 : Database- C:\Users\ASUS\Documents\Database1.accdb (Access 2007 - 2016 file format) - Access

File Home Create External Data Database Tools Fields Table Tell me what you want to do...

View Paste Copy Format Painter Filter Sort & Filter Ascending Descending Remove Sort Selection Advanced Toggle Filter Refresh All Delete More Records Find Find Replace Go To Select Text Formatting

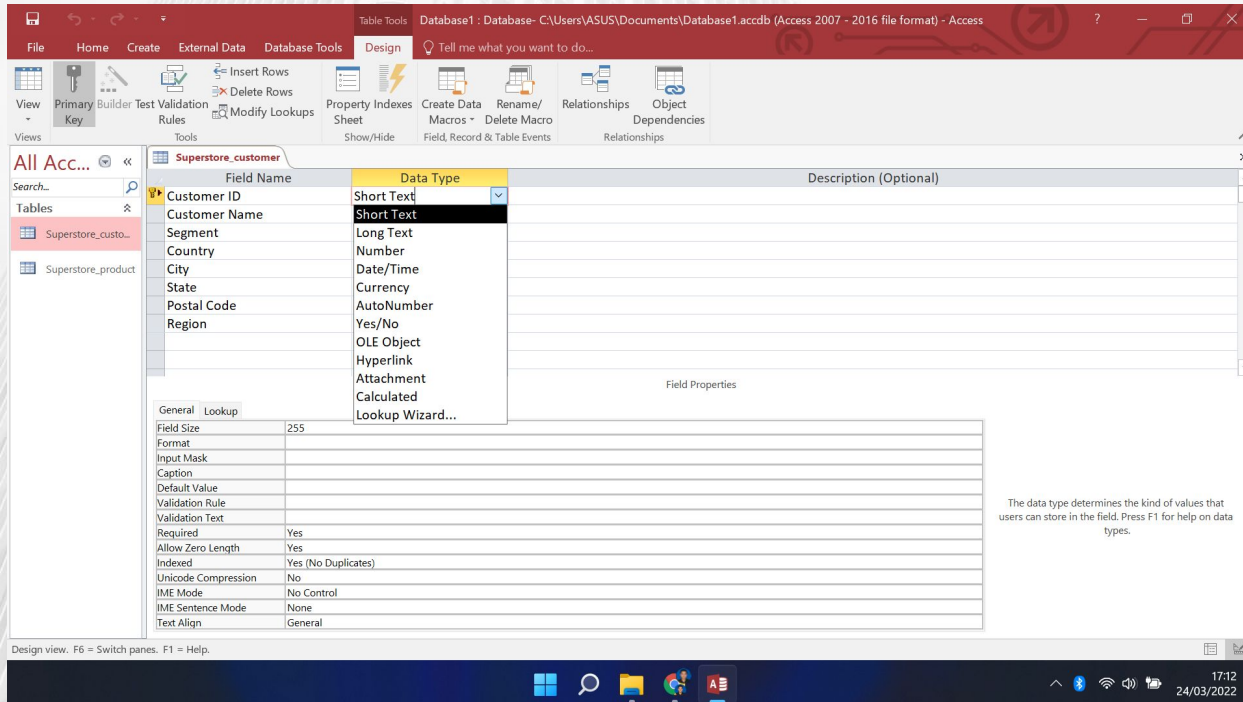
Datasheet View Design View Superstore_custo... Superstore_product

Customer ID	Customer Name	Segment	Country	City	State	Postal Code	Region	Click to Add
AA-10315	Alex Avila	Consumer	United States	Minneapolis	Minnesota	55407	Central	
AA-10375	Allen Arnold	Consumer	United States	Mesa	Arizona	85204	West	
AA-10480	Andrew Allen	Consumer	United States	Concord	North Carolina	28027	South	
AA-10645	Anna Andreadi	Consumer	United States	Chester	Pennsylvania	19013	East	
AB-10015	Aaron Bergmar	Consumer	United States	Seattle	Washington	98103	West	
AB-10060	Adam Bellavan	Home Office	United States	New York City	New York	10009	East	
AB-10105	Adrian Barton	Consumer	United States	Phoenix	Arizona	85023	West	
AB-10150	Aimee Bixby	Consumer	United States	Long Beach	New York	11561	East	
AB-10165	Alan Barnes	Consumer	United States	Los Angeles	California	90036	West	
AB-10255	Alejandro Balle	Home Office	United States	Lorain	Ohio	44052	East	
AB-10600	Ann Blume	Corporate	United States	Tucson	Arizona	85705	West	
AC-10420	Alyssa Crouse	Corporate	United States	San Francisco	California	94122	West	
AC-10450	Amy Cox	Consumer	United States	Minneapolis	Minnesota	55407	Central	
AC-10615	Ann Chong	Corporate	United States	New York City	New York	10009	East	
AC-10660	Anna Chung	Consumer	United States	Huntsville	Texas	77340	Central	
AD-10180	Alan Domingue	Home Office	United States	Houston	Texas	77041	Central	
AF-10870	Art Ferguson	Consumer	United States	College Station	Texas	77840	Central	
AF-10885	Art Foster	Consumer	United States	Louisville	Kentucky	40214	South	
AG-10270	Alejandro Grov	Consumer	United States	West Jordan	Utah	84084	West	
AG-10300	Aleksandra Gar	Corporate	United States	Los Angeles	California	90049	West	
AG-10330	Alex Grayson	Consumer	United States	Stockton	California	95207	West	
AG-10390	Allen Goldenen	Consumer	United States	Cincinnati	Ohio	45231	East	
AG-10495	Andrew Gjertse	Corporate	United States	Philadelphia	Pennsylvania	19140	East	

Record: 1 of 798 No Filter Search

Changing Data Type

View ⇒ Design View ⇒ Select Table ⇒ Data type



The screenshot shows the Microsoft Access Design View for a table named 'Superstore_customer'. The 'Data Type' dropdown menu is open, showing options: Short Text, Long Text, Number, Date/Time, Currency, AutoNumber, Yes/No, OLE Object, Hyperlink, Attachment, Calculated, and Lookup Wizard... The 'Short Text' option is highlighted. The table structure is as follows:

Field Name	Data Type	Description (Optional)
Customer ID	Short Text	
Customer Name	Short Text	
Segment	Long Text	
Country	Number	
City	Date/Time	
State	Currency	
Postal Code	AutoNumber	
Region	Yes/No	

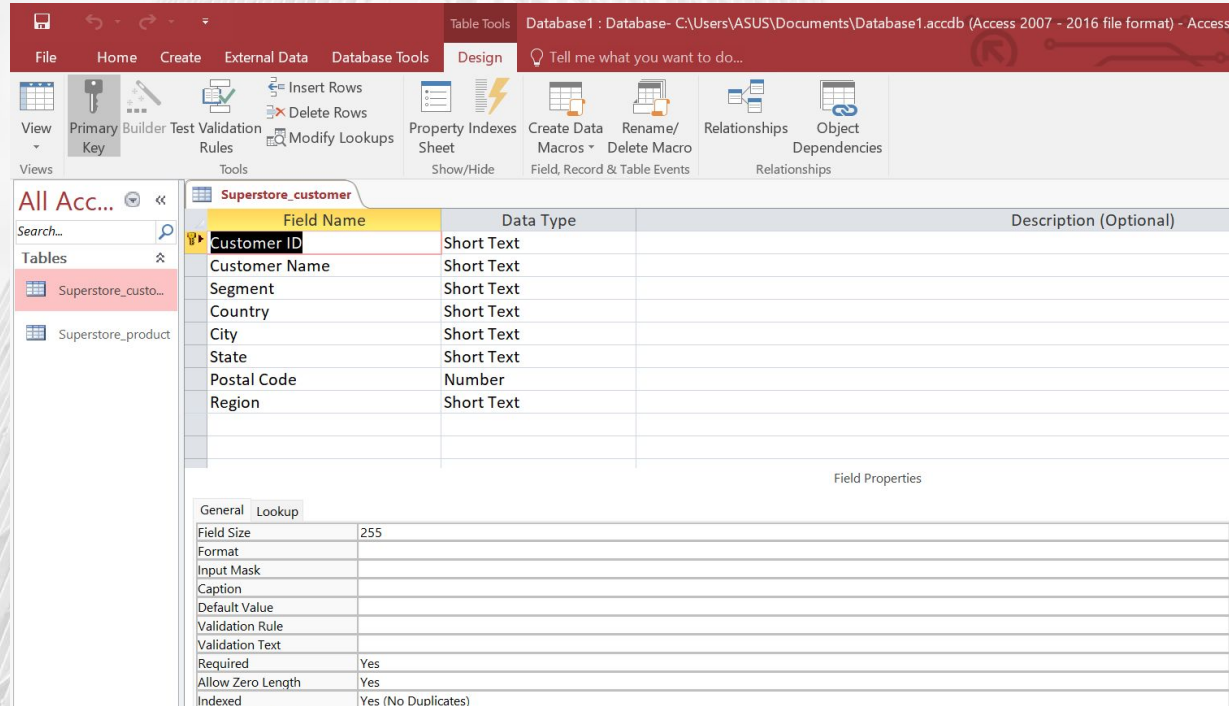
Below the table structure, the 'Field Properties' pane is visible, showing the 'General' tab with the following properties:

Property	Value
Field Size	255
Format	
Input Mask	
Caption	
Default Value	
Validation Rule	
Validation Text	
Required	Yes
Allow Zero Length	Yes
Indexed	Yes (No Duplicates)
Unicode Compression	No
IME Mode	No Control
IME Sentence Mode	None
Text Align	General

The status bar at the bottom indicates 'Design view. F6 = Switch panes. F1 = Help.' and the system clock shows 17:12 on 24/03/2022.

Renaming Column

View ⇒ Design View ⇒ Select Table ⇒ Field Name



Database1 : Database- C:\Users\ASU\Documents\Database1.accdb (Access 2007 - 2016 file format) - Access

File Home Create External Data Database Tools Design Tell me what you want to do...

View Primary Key Builder Test Validation Rules Insert Rows Delete Rows Modify Lookups Property Indexes Sheet Create Data Macros Rename/Delete Macro Relationships Object Dependencies

Views Tools Show/Hide Field, Record & Table Events Relationships

All Acc... Search... Tables Superstore_custo... Superstore_product

Superstore_customer

Field Name	Data Type	Description (Optional)
Customer ID	Short Text	
Customer Name	Short Text	
Segment	Short Text	
Country	Short Text	
City	Short Text	
State	Short Text	
Postal Code	Number	
Region	Short Text	

Field Properties

General Lookup

Field Size	255
Format	
Input Mask	
Caption	
Default Value	
Validation Rule	
Validation Text	
Required	Yes
Allow Zero Length	Yes
Indexed	Yes (No Duplicates)

Joining dan Blending

Suatu data akan lebih powerfull jika dapat didukung oleh data lainnya.

Metode penggabungan (*joining*) dapat dilakukan dengan cara menggabungkan data yang **memiliki kesamaan**. Ada empat tipe penggabungan, yaitu inner join, left join, right join, dan full outer join.

Blending data adalah metode untuk menggabungkan data dari berbagai sumber. Memadukan data membawa **informasi tambahan dari sumber data sekunder** dan menampilkannya dengan data dari sumber data primer langsung dalam tampilan.



Perbedaan *Joining* dan *Blending*



Perbedaan *joining* dan *blending* terletak pada sumber datanya. ***Joining*** digunakan apabila kumpulan data berasal dari **sumber yang sama**, sedangkan ***blending*** digunakan apabila datanya berasal dari **sumber yang berbeda**.



Implementation in Bank Muamalat



Source

<https://www.qubisa.com/microlearning/memahami-cara-menggabungkan-tabel-dalam-tableau#showSummary>

<https://sis.binus.ac.id/2020/07/31/about-data-blending-and-steps-for-blending-data-in-tableau/>

<https://edu.gcfglobal.org/en/access2016/modifying-tables/1/>

Assets



Logo Putih



Logo Berwarna



Thank You!

