(Big) Data Engineering In Depth From Beginner to Professional

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The Definitive Guide to Big Data Engineering Tasks

Videos classification

Watching Method / Audience	Computer	Mobile/Tablet	Just listening
Developer	•		
DevOps	•		
Business	•		

Table: Video classification

The green circle • means short video.

The blue circle • means medium video.

The red circle • means long video

Dimensions Types: Fast (Rapidly) Changing Dimension (Mini Dimension)

Fast Changing Dimension (Mini Dimension)

- When we have a dimension with one or more of its attributes changing very fast.
- It causes a performance issue if we tried to handle this case similar SCD Type 2 because of the rapidly changing in this dimension and the table will includes a lot of rows for this dimension.
- We solve this case by separation the attributes into one or more dimensions. This technique also called *mini-dimensions*.

Fast Changing Dimension (Mini Dimension)

• How to implement FCD (Mini Dimension)?

Hint: Search for the mini-dimension relation table.

Patient_id	Name	Gender	BirthDate	Weight	B_Presaure	UpdateDt
123	Anna	F	1968-01-12	50	110.0	2019-01-01
123	Anna	F	1968-01-12	55	130.0	2019-01-07
123	Anna	F	1968-01-12	59	115.0	2019-01-14
123	Anna	F	1968-01-12	65	120.0	2019-01-21

Table: Patient Profile Dimension

Patient_id	Name	Gender	BirthDate
123	Anna	F	1968-01-12

Patient_Key	Weight	B_Presure
1	50	110.0
2	55	130.0
3	59	115.0
4	65	120.0

Table: Patient Profile Dimension After Removing FCD and Split it into Junk-Dimension table

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Fast Changing Dimension (Mini Dimension)

Patient_id	Patient_Key	Start_Date	End_Date
123	1	2019-01-01	2019-01-07
123	2	2019-01-07	2019-01-14
123	3	2019-01-14	2019-01-14
123	4	2019-01-21	null

Table: Patient Mini Dimension

PatientMeasureDetails	${\sf PatientRelationDim}$	Patient
PatientKey	PatientID PatientID	ID
Weight	PatientKey	Name
BPresure	StartDate	Gender
	EndDate	BirthDate