

Lab report #7 Task 6-8
Sadovskaya Veronika

Task 6 – Solution concept – Add: Chapter Dimensions Types

Name	Type	Size	DW – Merged Dimension	Description
DIM_GEN_TIMES	SCD1	BIG	DW.T_DAY DW.T_WEEKS DW.T_MONTHS DW.T_QUARTERS DW.T_YEARS	TBD – Example row
DIM_GEO_LOCATIONS	SCD1	SMALL	GEO_ID GEO_GROUP_ID GEO_GROUP_DESC GEO_SUB_GROUP_ID GEO_DUB_GROUP_DESC GEO_SYSTEM_CODE GEO_SYSTEM_DESC GEO_REGION_ID GEO_REGION_DESC GEO_COUNTRY_CODE_A2 GEO_COUNTRY_CODE_A3 GEO_COUNTRY_ID GEO_COUNTRY_DESC	This kind of dimension contains information about all countries, subregions, regions of the world where the company's stores are located. And also enters information on the types of economic development and unions according to the international classification.
CLIENT_DIMENSION	SCD1	BIG	CLIENT_ID FIRST_NAME LAST_NAME PHONE EMAIL ADDRESS COUNTRY CITY STATUS	This kind of dimension contains detailed information about clients.
DISH_DIMENSION	SCD2	BIG	DISH_ID DISH_NAME DISH_CATEGORY PRICE COMPOSITION WEIGHT STATUS	This kind of dimension contains detailed information about the restaurant's dishes, including the name of dish, category, composition and weight. To do so,

				provided the opportunity for dimension Type SCD 2 perfectly partitions history because each detailed version of a dimensional entity is correctly connected to the span of fact table records for which that version is exactly correct.
RESTAURANT_DIMENSION	SCD1	SMALL	RESTAURANT_ID PHONE EMAIL ADDRESS COUNTRY CITY BUILDING APARTMENT STATUS	This kind of dimension contains detailed information about restaurant including the restaurant's address, email and phone.
EMPLOYEE_DIMENSION	SCD2	BIG	EMPLOYEE_ID FIRST_NAME LAST_NAME DATE_OF_BIRTH EMAIL PHONE DEPARTMENT RESTAURANT_ID JOB_TITLE ADDRESS COUNTRY CITY BUILDING APARTMENT STATUS	This kind of dimension contains detailed information about employee. To do so, provided the opportunity for dimension Type SCD 2 perfectly partitions history because each detailed version of a dimensional entity is correctly connected to the span of fact table records for which that version is exactly correct.
PAYMENT_METHOD_DIMENSION	SCD1	SMALL	PAYMENT_METHOD_ID PAYMENT_METHOD_NAME STATUS	This kind of dimension contains information about the payment method used.
DIM_GEN_PERIOD	SCD2	BIG	PERIOD_ID VALID_FROM VALID_TO PROMOTIONS_ID	A specific type of dimension that allows grouping facts based on

			DESCRIPTION	logic (the duration of product discounts).
DATE_DIMENSION	SCD1	BIG	DATE_ID DAY_ID WEEK_ID MONTHS_ID QUARTER_ID YEAR_ID	This kind of information contains information about days, weeks, months, quarters and years.

Task 7 - Solution concept – Add: Chapter Dimensions Hierarchies

DATE_DIMENSION

Hierarchy DAY-WEEK-MONTH-YEAR

Name	LEVEL_CODE	LEVEL_DESC	LEVEL_NATURAL_KEY
DAY	DAY	Store all days at the week	DAY_ID
WEEK	WEEK	Store all weeks at the month	WEEK_ID
MONTH	MONTH	Store all months at the year	MONTH_ID
YEAR	YEAR	Store all years	YEAR_ID

Hierarchy DAY-MONTH-QUARTER-YEAR

Name	LEVEL_CODE	LEVEL_DESC	LEVEL_NATURAL_KEY
DAY	DAY	Store all days at the month	DAY_ID
MONTH	MONTH	Store all months at the quarter	WEEK_ID
QUARTER	QUARTER	Store all quarters at the year	QUARTER_ID
YEAR	YEAR	Store all years	YEAR_ID

Hierarchy DAY-QUARTER-YEAR

Name	LEVEL_CODE	LEVEL_DESC	LEVEL_NATURAL_KEY
DAY	DAY	Store all days at the quarter	DAY_ID
QUARTER	QUARTER	Store all quarters at the year	QUARTER_ID
YEAR	YEAR	Store all years	YEAR_ID

Hierarchy DAY-WEEKS-YEAR

Name	LEVEL_CODE	LEVEL_DESC	LEVEL_NATURAL_KEY
DAY	DAY	Store all days at the quarter	DAY_ID
WEEKS	WEEKS	Store all weeks at the year	QUARTER_ID
YEAR	YEAR	Store all years	YEAR_ID

GEO_LOCATIONS_DIMENSION

Hierarchy COUNTRY – REGION – GEO_GROUP – GEO_SUB_GROUP

Name	LEVEL_CODE	LEVEL_DESC	LEVEL_NATURAL_KEY
COUNTRY	GEO_COUNTRY	Store all countries for each region	GEO_COUNTRY_ID
REGION	GEO_REGION	Store all regions for each geo_group	GEO_REGION_ID
GEO_GROUP	GEO_GROUP	Store all geo_groups for each geo_sub_group	GEO_GROUP_ID
GEO_SUB_GROUP	GEO_SUB_GROUP	Store all geo_sub_groups	GEO_SUB_GROUP_ID

DISH_DIMENSION

Hierarchy NAME – CATEGORY

Name	LEVEL_CODE	LEVEL_DESC	LEVEL_NATURAL_KEY
NAME	NAME	Store all dishes for each category	DISH_ID
CATEGORY	CATEGORY	Store all categories	CATEGORY_ID

EMPLOYEE_DIMENSION

Hierarchy EMPLOYEE – DEPARTMENT

Name	LEVEL_CODE	LEVEL_DESC	LEVEL_NATURAL_KEY
EMPLOYEE	EMPLOYEE	Store all employees for each department	EMPLOYEE_ID
DEPARTMENT	DEPARTMENT	Store all departments	DEPARTMENT_ID

Hierarchy JOB_TITLE – DEPARTMENT

Name	LEVEL_CODE	LEVEL_DESC	LEVEL_NATURAL_KEY
JOB_TITLE	JOB_TITLE	Store all job_titles for each department	JOB_TITLE_ID
DEPARTMENT	DEPARTMENT	Store all departments	DEPARTMENT_ID

Task 8 - Solution concept – Add: Chapter Facts Aggregations

Facts aggregations

Name	Code	Table Name	Additive	Description
Total amount of paid orders	ORDERS_AMOUNT	ORDER_FACT	+	Calculate total amount of orders in the selected period or restaurant, city, country and atc or pay method or dilevery (profit)
Total number of paid orders	ORDERS_NUMBER	ORDER_FACT	+	Calculate total amount of orders in the selected period or restaurant, city, country and atc or pay method or dilevery (visit statistics)
Quantity of each paid dish	DISH_QUANTITY	ORDER_FACT	+	Calculate quantity of each paid dish in the selected period or restaurant, city, country and atc or pay method or dilevery
Quantity of paid dishes in each category	DISH_QUANTITY_I N_CATEGORY	ORDER_FACT	+	Calculate quantity of paid dishes in each category in the selected period or restaurant, city, country and atc or pay method or dilevery
Average order amount	AVG_ORDER_AMO UNT	ORDER_FACT	-	Calculate average order amount in each category in the selected period or restaurant, city, country and atc or pay method or dilevery