POLITÉCNICO DE LEIRIA | ESCOLA SUPERIOR DE TECNOLOGIA E GESTÃO

SISTEMAS DE APOIO À DECISÃO

Engenharia Informática, 3º Ano / 1º Semestre

Plataforma ETL^2 - Mapa Lógico de Dados (v2.25.0)

EXTRACT					TRANSFORM				LOAD				
source			target		target			operation	target				
-	-	-	-	-	-	-	-	-					
VIEW_CLIENTES	src_id	integer	t_data_customers	id	T_CLEAN_CUSTOMERS	id	NUMBER	-	T_DIM_CUSTOMER	customer_key	NUMBER(12)	PK	SCD 1
	src_card_number	varchar2(20)	t_data_customers	card_number		card_number	VARCHAR2	-		customer_natural_Key	NUMBER(10)	-	SCD 1
	src_name	varchar2(40)	t_data_customers	name		name	VARCHAR2	to UPPERCASE		customer_card_number	VARCHAR2(20)	-	SCD 1
	src_address	varchar2(60)	t_data_customers	address		address	VARCHAR2	to UPPERCASE		customer_name	VARCHAR2(40)	-	SCD 1
	src_location	varchar2(60)	t_data_customers	location		location	VARCHAR2	to UPPERCASE		customer_address	VARCHAR2(60)	-	SCD 1
	src_district	varchar2(40)	t_data_customers	district		district	VARCHAR2	to UPPERCASE		customer_location	VARCHAR2(60)	-	SCD 2
	src_zip_code	varchar2(8)	t_data_customers	zip_code		zip_code	VARCHAR2			customer_district	VARCHAR2(40)	-	SCD 2
	src_phone_nr	number(9)	t_data_customers	phone_nr		phone_nr	NUMBER			customer_zip_code	VARCHAR2(8)	-	SCD 2
	src_gender	char(1)	t_data_customers	gender		gender	VARCHAR2	IF (gender='M') THEN 'MALE' ELSE IF (gender='F') THEN 'FEMALE' ELSE 'OTHER';		customer_phone_nr	NUMBER(9)	-	SCD 1
	src_age	number(3)	t_data_customers	age		age	NUMBER			customer_gender	VARCHAR2(15)	-	SCD3
	src_marital_status	char(1)	t_data_customers	marital_status		marital_status	VARCHAR2	IF (marital_status='C') THEN 'MARRIED'' ELSE IF (marital_status='S') THEN 'SINGLE' ELSE IF (marital_status='V') THEN 'WIDOW' ELSE IF (marital_status='D') THEN 'DIVORCED' ELSE 'OTHER';		customer_age	NUMBER(3)	-	SCD 2
	src_card_number	varchar2(20)	t_data_customers	card_number		-	VARCHAR2	(JOIN OPERATION) t_data_customers JOIN t_data_customers_reg		customer_marital_status	VARCHAR2(15)	-	SCD2
VIEW_REGISTOS	src_card_number	varchar2(20)	t_data_customers_reg	card_number		-				customer_type	VARCHAR2(20)	-	SCD2
	src_customer_type	varchar2(10)	t_data_customers_reg	customer_type		customer_type							

EXTRACT					TRANSFORM				LOAD				
source			target		target			operation	target				
-	-	-	-	-	-	-	-	-					
VIEW_PRODUTOS	src_id	integer	t_data_products	id	T_CLEAN_PRODUCTS	id	NUMBER	-	T_DIM_PRODUCT	product_key	NUMBER(12)	PK	SCD 1
	src_name	varchar2(30)	t_data_products	name		name	VARCHAR2	to UPPERCASE		product_natural_Key	NUMBER(10)	-	SCD 1
	src_brand	varchar2(30)	t_data_products	brand		brand	VARCHAR2	correct invalid brands by using t_lookup_brands		product_name	VARCHAR2(30)	-	SCD 1
	src_height	integer	t_data_products	height		pack_size	VARCHAR2	concatenate (height, 'x', width, 'x', depth)		product_brand	VARCHAR2(30)	-	SCD 1
	src_width	integer	t_data_products	width						product_size_package	VARCHAR2(20)	-	SCD 2
	src_depth	integer	t_data_products	depth									
	src_pack_type	varchar2(30)	t_data_products	pack_type		pack_type	VARCHAR2	to UPPERCASE		product_type_package	VARCHAR2(30)	-	SCD 2
	src_calories_100g	integer	t_data_products	calories_100g		diet_type	VARCHAR2	IF (calories_100g<10) THEN 'EXTRA-LIGHT' ELSE IF (calories_100g)<30 THEN 'LIGHT' ELSE IF (calories_100g<70) THEN 'REGULAR' ELSE 'FAT'		product_diet_type	VARCHAR2(15)	-	SCD 2
	src_liq_weight	number(8,2)	t_data_products	liq_weight		liq_weight	NUMBER	-		product_liquid_weight	NUMBER(8,2)	-	SCD 2
	src_category_id	char(5)	t_data_products	category_id		-	VARCHAR2	(JOIN OPERATION) t_data_categories JOIN t_data_products		product_category	VARCHAR2(20)	-	SCD 1
VIEW_CATEGORIAS	src_id	char(5)	t_data_categories	id		-							
	src_name	varchar	t_data_categories	name		category_name							

EXTRACT					TRANSFORM				LOAD				
source			target		target			operation	target				
-	-	-	-	-	-	-	-	-					
VIEW_PROMOCOES	src_id	integer	t_data_promotions	id	T_CLEAN_PROMOTIONS	id	NUMBER	-	T_DIM_PROMOTION	promo_key	NUMBER(12)	PK	SCD 1
	src_name	varchar2(100)	t_data_promotions	name		name	VARCHAR2	to UPPERCASE		promo_natural_Key	NUMBER(10)	-	SCD 1
	src_start_date	DATE	t_data_promotions	start_date		start_date	DATE	-		promo_name	VARCHAR2(100)	-	SCD 1
	src_end_date	DATE	t_data_promotions	end_date		end_date	DATE	-		promo_start_date	DATE	-	SCD 1
	src_reduction	number(3,2)	t_data_promotions	reduction		reduction	NUMBER	-		promo_end_date	DATE	-	SCD 1
	src_on_outdoor	number(1)	t_data_promotions	on_outdoor		on_outdoor	VARCHAR2	IF (on_outdoor=1) THEN 'YES' ELSE 'NO'		promo_red_price	NUMBER(3,2)	-	SCD 1
	src_on_tv	number(1)	t_data_promotions	on_tv		on_tv	VARCHAR2	IF (on_tv=1) THEN 'YES' ELSE 'NO'		promo_board	VARCHAR2(3)	-	SCD 1
										promo_advertise	VARCHAR2(3)	-	SCD 1

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EXTRACT					TRANSFORM				LOAD				
source			target		target			operation	target				
-	-	-	-	-	-	-	-	-	T_DIM_STORE	store_key	NUMBER(5)	PK	SCD 1
LOJAS.CSV	Nomeação da loja	char	t_data_stores_new	name	T_CLEAN_STORES	name	VARCHAR2(100)	to UPPERCASE		store_name	VARCHAR2(40)	-	SCD 2
	Referência da loja	char(6)	t_data_stores_new	reference		reference	VARCHAR2(6)	to UPPERCASE		store_natural_key	VARCHAR2(6)	-	SCD 1
	Nome do edifício	char	t_data_stores_new	building		address	VARCHAR2(250)	UPPERCASE(concatenate (IF (nome_edifício='-') THEN NULL ELSE concatenate(nome_edifício;" - "); endereço; ' / '; código_postal; ', '; localidade))		store_full_address	VARCHAR2(250)	-	SCD 1
	Endereço	char	t_data_stores_new	address									
	Código Postal	char(8)	t_data_stores_new	zip_code									
	Localidade	char	t_data_stores_new	location									
	Localidade	char	t_data_stores_new	location		location	VARCHAR2(40)	to UPPERCASE		store_location	VARCHAR2(40)	-	SCD 1
	distrito	char	t_data_stores_new	district		district	VARCHAR2(30)	to UPPERCASE		store_district	VARCHAR2(30)	-	SCD 1
	Código Postal	char(8)	t_data_stores_new	zip_code		zip_code	VARCHAR2(8)	-		store_zip_code	VARCHAR2(8)	-	SCD 1
	Telefones	char	t_data_stores_new	telephones		telephones	VARCHAR2(9)	SUBSTR(telefones sem espaços e sem pontos,1,9)		store_main_phone	VARCHAR2(9)	-	SCD3
	Fax	char	t_data_stores_new	fax		fax	VARCHAR2(9)			store_fax	VARCHAR2(9)	-	SCD3
	Data de encerramento	date	t_data_stores_new	closure_date		status	VARCHAR2(8)	IF (data_encerramento IS NULL) THEN 'ACTIVE' ELSE 'INACTIVE'		store_state	VARCHAR2(8)	-	SCD 1
	Referência da loja	char(6)	t_data_stores_new	reference		-	-	(JOIN OPERATION) (t_data_stores_new MINUS t_data_stores_old) JOIN (t_data_managers_new MINUS t_data_managers_old)					
MANAGERS.CSV	Referência da loja	char(6)	t_data_managers_new	reference		-	-						
	Director da loja	char	t_data_managers_new	manager_name		manager_name	VARCHAR2(100)			store_manager_name	VARCHAR2(100)	-	SCD 2
	Data de entrada	date	t_data_managers_new	manager_since		manager_since	DATE			store_manager_since	DATE	-	SCD 2

EXTRACT					TRANSFORM				LOAD				
source			target		target			operation	target				
DATES.CSV	Key	char	-	-	-	-	-	-	T_DIM_DATE	date_key	NUMBER(6)	PK	SCD 1
	day_full	DATE	-	-						date_full_date	VARCHAR2(10)	-	SCD 1
	month_full	char	-	-						date_month_full	VARCHAR2(7)	-	SCD 1
	month_name	char	-	-						date_month_name	VARCHAR2(12)	-	SCD 1
	month_short	char(3)	-	-						date_month_short_name	VARCHAR2(3)	-	SCD 1
	month_nr	number(2)	-	-						date_month_nr	NUMBER(2)	-	SCD 1
	quarter	number(1)	-	-						date_quarter_nr	VARCHAR2(1)	-	SCD 1
	quarter_full	char(7)	-	-						date_quarter_full	VARCHAR2(7)	-	SCD 1
	semester	number(1)	-	-						date_semester_nr	NUMBER(1)	-	SCD 1
	semester_full	char(7)	-	-						date_semester_full	VARCHAR2(7)	-	SCD 1
	day	char	-	-						date_day_nr	NUMBER(2)	-	SCD 1
	is_holiday	char	-	-						date_is_holiday	VARCHAR2(3)	-	SCD 1
	event	char	-	-						date_event	VARCHAR2(100)	-	SCD 1
	year	number(4)	-	-						date_year	NUMBER(4)	-	SCD 1
http://api.ipma.pt/open-data/forecast/meteorology/cities/daily/hp-daily-forecast-day0.json	forecastDate	DATE	t_data_celsius	forecast_date	T_CLEAN_CELSIUS	forecast_date	VARCHAR2(20)	Change date format to dd/mm/yyyy		date_temperature_status	VARCHAR2(20)	-	SCD 1
	globalIdLocal	char	t_data_celsius	id_local		temperature_status	VARCHAR2(20)	Temperatura média nacional (m) = AVERAGE(AVERAGE(tMin,tMax)); IF (m)<4 THEN 'COLD' ELSE IF (m)<10 THEN FRESH' ELSE IF (m)<25 THEN 'NICE' ELSE 'HOT';					
	tMin	number	t_data_celsius	t_min									
	tMax	number	t_data_celsius	t_max									

EXTRACT					TRANSFORM				LOAD				
source			target		target			operation	target				
TIME.CSV	Key	char	-	-	-	-	-	-	T_DIM_TIME	time_key	NUMBER(6)	PK	SCD 1
	time_full	DATE	-	-						time_full_time	VARCHAR2(8)	-	SCD 1
	period_of_day	char	-	-						time_period_of_day	VARCHAR2(20)	-	SCD 1
	minutes_after_00	char	-	-						time_minutes_after_midnight	NUMBER(4)	-	SCD 1
	hour	char	-	-						time_hour_nr	NUMBER(2)	-	SCD 1
	minute	char	-	-						time_minute_nr	NUMBER(2)	-	SCD 1
	second	char	-	-						time_second_nr	NUMBER(2)	-	SCD 1

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EXTRACT					TRANSFORM				LOAD				
source			target		target			operation	target				operation
VIEW_VENDAS	src_store_id	INTEGER	T_DATA_SALES	store_id	T_CLEAN_LINESOFSALE	store_id	VARCHAR2(6)	(JOIN OPERATION) t_data_sales s JOIN t_data_linesofsale JOIN t_data_linesofsale_promos	T_FACT_LINESOFSALE	store_key	NUMBER(5)	FK	JOIN t_dim_store ON store_id = store_natural_key
	src_customer_id	INTEGER		customer_id		customer_id	INTEGER			customer_key	NUMBER(8)	FK	JOIN t_dim_customer ON customer_id = customer_natural_key
	src_id	INTEGER		id		sale_id	NUMBER(10)			sale_id_dd	NUMBER(10)	PK, FK	-
VIEW_LINHASVENDA	src_sale_id	INTEGER	T_DATA_LINESOFSALE	sale_id		-	-			-	-	-	-
	src_product_id	INTEGER		product_id		product_id	NUMBER(10)			product_key	NUMBER(12)	PK, FK	JOIN t_dim_product ON product_id = product_natural_key
	src_quantity	NUMBER(8,2)		quantity		quantity	NUMBER(8.2)			sold_quantity	NUMBER(8.2)	measure	-
	src_ammount_paid	NUMBER(11,2)		ammount_paid		ammount_paid	NUMBER(11,2)			ammount_paid	NUMBER(11,2)	measure	-
	src_line_date	DATE		line_date		line_date	DATE			time_key	NUMBER(6)	PK, FK	JOIN t_dim_time ON TO_CHAR(line_date,'hh24:mi:ss')=time_full_time
										date_key	NUMBER(6)	PK, FK	JOIN t_dim_date ON TO_CHAR(line_date,'dd/mm/yyyy'')=date_full_date
	src_id	INTEGER		id		-	-			-	-	-	-
VIEW_LINHASVENDA_PROMOCOES	src_line_id	INTEGER	T_DATA_LINESOFSALE_PROMOS	line_id		-	-			-	-	-	-
	src_promo_id	INTEGER		promo_id		promo_id	NUMBER(10)			promo_key	NUMBER(12)	FK	JOIN t_dim_promotion ON promo_id = promo_natural_key