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Relations: Ideas to Consider

Relational Databases Basics



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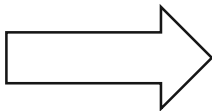
1) Use English ONLY!

Always use English **ONLY** for naming of any database object.
If you don't know English, write in transliteration, but use English alphabet **ONLY**.

2) Use some naming convention

No matter what naming convention you follow, you **MUST** follow some (and be consistent in this approach).

file	
«column»	
*PK identifier: INTEGER	CategoryOfFileIdentifier: INTEGER
* file_size: INTEGER	
* uploadDateTime: INTEGER	
* save_Date_and_Time: DATETIME	
* sourcename: VARCHAR(255)	extensionofsourcefilename: VARCHAR(255)
* File_Name_On_SERVER: VARCHAR(50)	
* chs: VARCHAR(50)	
* AccessRights_to_ThisFile: INTEGER	Downloadcount: INTEGER
	AgeR: INTEGER
* LinkHash_delFileOpt: VARCHAR(50)	
«PK»	
+ PK_file(INTEGER)	

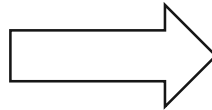


file	
«column»	
*PK f_uid: INTEGER	f_fc_uid: INTEGER
* f_size: INTEGER	
* f_upload_datetime: DATETIME	
* f_save_datetime: DATETIME	
* f_src_name: VARCHAR(255)	f_src_ext: VARCHAR(255)
* f_name: VARCHAR(50)	
* f_sha1_checksum: VARCHAR(50)	
* f_ar_uid: INTEGER	f_downloaded: INTEGER
	f_al_uid: INTEGER
* f_del_link_hash: VARCHAR(50)	
«PK»	
+ PK_file(INTEGER)	

3) Choose data types carefully

Choose all data types for all relation attributes as carefully and accurately as possible.

file	
«column»	
*PK	f_uid: INTEGER
	f_fc_uid: INTEGER
*	f_size: INTEGER
*	f_upload_datetime: DATETIME
*	f_save_datetime: DATETIME
*	f_src_name: VARCHAR(255)
	f_src_ext: VARCHAR(255)
*	f_name: VARCHAR(50)
*	f_sha1_checksum: VARCHAR(50)
*	f_ar_uid: INTEGER
	f_downloaded: INTEGER
	f_al_uid: INTEGER
*	f_del_link_hash: VARCHAR(50)
«PK»	
+	PK_file(INTEGER)



file	
«column»	
*PK	f_uid: BIGINT UNSIGNED
	f_fc_uid: BIGINT UNSIGNED
*	f_size: BIGINT UNSIGNED
*	f_upload_datetime: INTEGER
*	f_save_datetime: INTEGER
*	f_src_name: VARCHAR(255)
	f_src_ext: VARCHAR(255)
*	f_name: CHAR(200)
*	f_sha1_checksum: CHAR(40)
*	f_ar_uid: BIGINT UNSIGNED
	f_downloaded: BIGINT UNSIGNED = 0
	f_al_uid: BIGINT UNSIGNED
*	f_del_link_hash: CHAR(200)
«PK»	
+	PK_file(BIGINT)

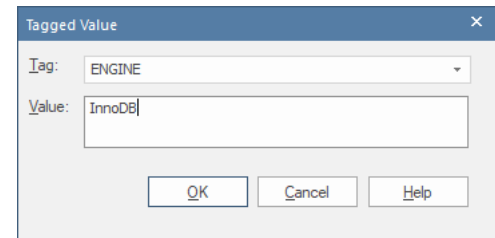
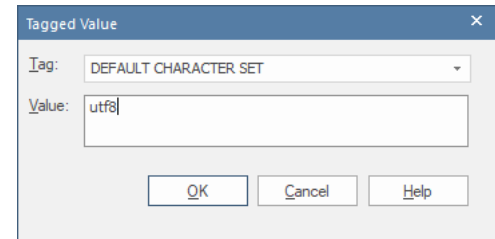
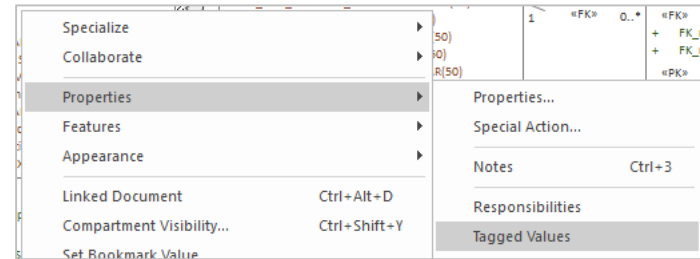
4) Remember about keys, relationships, indexes, constraints

Attributes are absolutely “must have” here, but still remember about keys, relationships, indexes, constraints.

file	
«column»	
*PK	f_id: BIGINT
*FK	f_owner: BIGINT
*	f_size: BIGINT
*	f_upload_dt: INT
	f_exp_dt: INT
*	f_original_name: VARCHAR(1000)
	f_original_extension: VARCHAR(1000)
*	<u>f_name: CHAR(64)</u>
*	f_control_sum: CHAR(64)
	<u>f_delete_link: CHAR(64)</u>
«FK»	
+	FK_file_user(BIGINT)
«PK»	
+	PK_file(BIGINT)
«unique»	
+	UNQ_f_name(CHAR)
+	UNQ_f_delete_link(CHAR)
«index»	
+	IDX_f_exp_dt(INT)
+	IDX_f_size(BIGINT)
+	IDX_f_upload_dt(INT)
+	IDX_f_orig_ext_f_orig_name(VARCHAR, VARCHAR)

5) Remember about encodings, storage engines and so on...

Yes, encodings, storage engine settings and other useful things belong to the physical modelling level, but still you may either make some comments “for the future”, or even make some adjustments.



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