

Sustech Nd(need) => DBA design

Name: 周恒(Alan Chou)

SID: 11510629

Email: alanzhchou@gmail.com

Part-1 Analysis

Object atom => only the client side

1. user => ~1000-10000
2. Post Object => ~1000-5000/day
3. comments
4. Post Object types
5. Post Object tags
6. transaction table
7. *favorite Post table (work for AI algorithm)
8. *System config

when face more users or infomation => module to many smaller parts

Part-2 details design

User table

table_name	num	cols	type	key	index?	discribe
User	1	id	int	unique/primary/auto increase		
	2	account	varchar(50)	unique		
	3	name	varchar(100)	unique	y	
	4	sex	int	NOT NULL		female/male/not show
	5	bio	varchar(255)			
	6	avater_src	varchar(255)	unique		
	7	address	varchar(100)			

table_name	num	cols	type	key	index?	discribe
	8	contact	json			
	9	auth_infomation	json			
	10	password	varchar(255)	NOT NULL		
	11	create_date	Date	NOT NULL		

Post table

table_name	num	cols	type	key	index?	discribe
Post	1	id	int	unique/primary/auto increase		
	2	title	varchar(100)	NOT NULL	y	
	3	type_id	int	NOT NULL		
	4	tags	array[int]	NOT NULL		
	5	describe	varchar(1000)	NOT NULL		
	6	post_user_id	int	NOT NULL		
	7	create_date	Date	NOT NULL		
	8	comments_id	array[int]			
	9	state	int	NOT NULL		save/post/destroy
	10	favorite	boolean			strick to the top or not
	11	imgs	json			img_name=>img_src
	12	*hot_value	int			different class for showing

Comment table (not support img insert)

table_name	num	cols	type	key	index?	discribe
Comment	1	id	int	unique/primary/auto increase		
	2	content	varchar(255)	NOT NULL		
	3	post_object_id	int	NOT NULL		
	4	post_user_id	int	NOT NULL		
	5	son_comments	array[int]			hold son comments id

table_name	num	cols	type	key	index?	discribe
	6	create_date	Date	NOT NULL		
	7	read_date	Date			

PostType table (dynamically adding)

table_name	num	cols	type	key	index?	discribe
Type	1	id	int	unique/primary/auto increase		
	2	name	varchar(100)	unique/NOT NULL	y	the type name
	3	discribe	varchar(255)	NOT NULL		
	4	son_post_types	array[int]			a widely type can contain others
	5	create_date	Date	NOT NULL		

PostTags table (dynamically adding)

table_name	num	cols	type	key	index?	discribe
tag	1	id	int	unique/primary/auto increase		
	2	name	varchar(50)	unique/NOT NULL		
	3	create_date	Date	NOT NULL		

Transaction table

table_name	num	cols	type	key	index?	discribe
Transaction	1	id	int	unique/primary/auto increase		
	2	post_object_id	int	unique/NOT NULL		based on which post_object
	3	poster_user_id	int	NOT NULL		
	4	finish_user_id	int	NOT NULL		
	6	create_date	Date	NOT NULL		
	7	finish_date	Date	NOT NULL		