

Entities

UserInfo

Attribute	Type	Properties	Description
userID	integer	PK, autoincrement	
display_name	char(50)	not null	
avatar	text		
gender	char(10)		
birthday	date		
age	int		
occupation	char(30)		
education	char(30)		
location_	char(30)		

Registration

Attribute	Type	Properties	Description
user_account	char(30)	PK	
userID	int	FK rf userInfo(userID)	
password_	char(30)	not null	

Posts

Attribute	Type	Properties	Description
postID	integer	PK	
userID	int	FK rf userInfo(userID)	

title	text		
content	text		
post_time	datetime		

Likes

Attribute	Type	Properties	Description
postID	int	FK rf userInfo(userID)	
userID	int	FK rf posts(postID)	

Comments

Attribute	Type	Properties	Description
postID	int	FK rf posts(postID)	
userID	int	FK rf userInfo(userID)	
content	text		
comment_time	datetime		

UserRelationship

Attribute	Type	Properties	Description
followerID	int		
followingID	int		
closeness_rate	float		a value description about the closeness between two users

Timeline

Attribute	Type	Properties	Description
userID	int		
postID	int		
post_userID	int		
post_time	datetime		
is_notified	boolean		if the post is added into the timeline for the first time, the flag is True.

Relations

1. timeline-UserInfo: many to one (based on userID)
2. timeline-posts: many to one (based on postID)
3. timeline-UserInfo: many to one (based on post_userID)
4. userRelationship-UserInfo: many to one (based on followerID)
5. userRelationship-UserInfo: many to one (based on followingID)
6. comments-UserInfo: many to one (based on userID)
7. comments-posts: many to one (based on postID)
8. likes-UserInfo: many to one (based on userID)
9. likes-posts: many to one (based on postID)
10. posts-UserInfo: many to one (based on userID)
11. registration-UserInfo: many to one (based on userID)

ER Diagram

