

ENTITY RELATIONSHIP DIAGRAM

1. Objects and Attributes

Object	Attributes
Users	<ul style="list-style-type: none">• user_id• first_name• last_name• gender• school• address• email• phone_number• location• date_of_birth
Posts	<ul style="list-style-type: none">• post_id• user_id• post_date• post_content
Friends	<ul style="list-style-type: none">• friend_id• user_id
PostLikes	<ul style="list-style-type: none">• post_id• user_id
Photos	<ul style="list-style-type: none">• photo_id• post_id• image_content
Shares	<ul style="list-style-type: none">• post_id• user_id
Comments	<ul style="list-style-type: none">• comment_id• post_id• user_id• comment_date• comment_content
CommentLikes	<ul style="list-style-type: none">• comment_id• user_id
PageLikes	<ul style="list-style-type: none">• page_id• user_id
Pages	<ul style="list-style-type: none">• page_id• page_name• page_content

2. Relation between every object

- **Users and Posts**

One user can have many posts. Users as the master and Post as the child

- **Users and Friends**

One user can have many friends. Users as the master and Friends as the child

- **Users and Page Likes**

One user can have many page likes. Users as the master and Page Likes as the child

- **Pages and Page Likes**

One page can have many likes. Pages as the master and Page Likes as the child

- **Posts and Post Likes**

One post can have many likes. Posts as the master and Post Likes as the child

- **Posts and Photos**

One post can have many photos. Posts as the master and Photos as the child

- **Posts and Shares**

One post can have many shares. Posts as the master and Shares as the child

- **Posts and Comments**

One post can have many comments. Posts as the master and Comments as the child

- **Comments and Comment Likes**

One comment can have many likes. Comments as the master and Comment Likes as the child

3. Constraint

Object	Attributes	Constraints
Users	<ul style="list-style-type: none">• user_id• first_name• last_name• gender• school• address• email• phone_number• location• date_of_birth	NOT NULL CHECK (input ends with @[email provider].com or not) CHECK (input is number or not)
Posts	<ul style="list-style-type: none">• post_id• user_id• post_date• post_content	NOT NULL NOT NULL
Friends	<ul style="list-style-type: none">• friend_id• user_id	NOT NULL NOT NULL
PostLikes	<ul style="list-style-type: none">• post_id• user_id	NOT NULL NOT NULL

Photos	<ul style="list-style-type: none"> photo_id post_id image_content 	NOT NULL NOT NULL
Shares	<ul style="list-style-type: none"> post_id user_id 	NOT NULL NOT NULL
Comments	<ul style="list-style-type: none"> comment_id post_id user_id comment_date comment_content 	NOT NULL NOT NULL NOT NULL
CommentLikes	<ul style="list-style-type: none"> comment_id user_id 	NOT NULL NOT NULL
PageLikes	<ul style="list-style-type: none"> page_id user_id 	NOT NULL NOT NULL
Pages	<ul style="list-style-type: none"> page_id page_name page_content 	NOT NULL

4. ERD

