

Entity Relationship Diagram:

1.

<u>Object</u>	<u>Attributes</u>
Posts	<ul style="list-style-type: none"> • User ID • Post Date • Post Content • Post ID
Post Likes	<ul style="list-style-type: none"> • Post ID • User ID
Photos	<ul style="list-style-type: none"> • Post ID • Photo ID • Image Content
Shares	<ul style="list-style-type: none"> • Post ID • User ID
Comments	<ul style="list-style-type: none"> • Comment ID • Comment Date • Post ID • User ID • Comment Content
Comment Likes	<ul style="list-style-type: none"> • Comment ID • User ID
Users	<ul style="list-style-type: none"> • User ID • First Name • Last Name • School • Address • Email • Phone Number • Location • Date of Birth • Gender
Friends	<ul style="list-style-type: none"> • Friend ID • User ID
Pages	<ul style="list-style-type: none"> • Page ID • Page Name • Page Content
Page Likes	<ul style="list-style-type: none"> • User ID • Page ID

2. S

<u>Master</u>	<u>Child</u>
Users	Posts
Users	Post Likes
Posts	Post Likes
Posts	Photos
Users	Shares
Posts	

Users	Comments
Posts	Comments
Comment	Comment Likes
Users	Comment Likes
Users	Friends
Pages	Page Likes
Users	Page Likes

3. *FK = Foreign Key

<u>Object</u>	<u>Constraint</u>
Posts	<ul style="list-style-type: none"> Users, because Posts has Users ID as its FK, so it has dependency to Users, so the constraint is Users.
Post Likes	<ul style="list-style-type: none"> Posts, because Post Likes has Posts ID as its FK, so it has dependency to Posts, so the constraint is Posts. Users, because Post Likes has Users ID as its FK, so it has dependency to Users, so the constraint is Users.
Photos	<ul style="list-style-type: none"> Posts, because Photos has Post ID as its FK, so it has dependency to Posts, so the constraint is Posts.
Shares	<ul style="list-style-type: none"> Posts, because Shares has Post ID as its FK, so it has dependency to Posts, so the constraint is Posts. Users, because Shares Likes has Users ID as its FK, so it has dependency to Users, so the constraint is Users.
Comments	<ul style="list-style-type: none"> Posts, because Comments has Post ID as its FK, so it has dependency to Posts, so the constraint is Posts. Users, because Comments has Users ID as its FK, so it has dependency to Users, so the constraint is Users.
Comment Likes	<ul style="list-style-type: none"> Comments, because Comment Likes has Comment ID as its FK, so it has dependency to Comments, so the constraint is Comments. Users, because Comment Likes has Users ID as its FK, so it has dependency to Users, so the constraint is Users.
Users	-
Friends	<ul style="list-style-type: none"> Users, because Friends has Users ID as its FK, so it has dependency to Users, so the constraint is Users.
Pages	-
Page Likes	<ul style="list-style-type: none"> Users, because Page Likes has Users ID as its FK, so it has dependency to Users, so the constraint is Users.

- Pages, because Page Likes has Page ID as its FK, so it has dependency to Pages, so the constraint is Pages.

Attributes constraint:

- ID: integer of length 5
- Date: must be a date format (e.g. dd/mm/yyyy)
- Email: email format
- Phone Number: phone number (char type)
- Date of Birth: must be a date format
- Gender: Male / Female

4.

