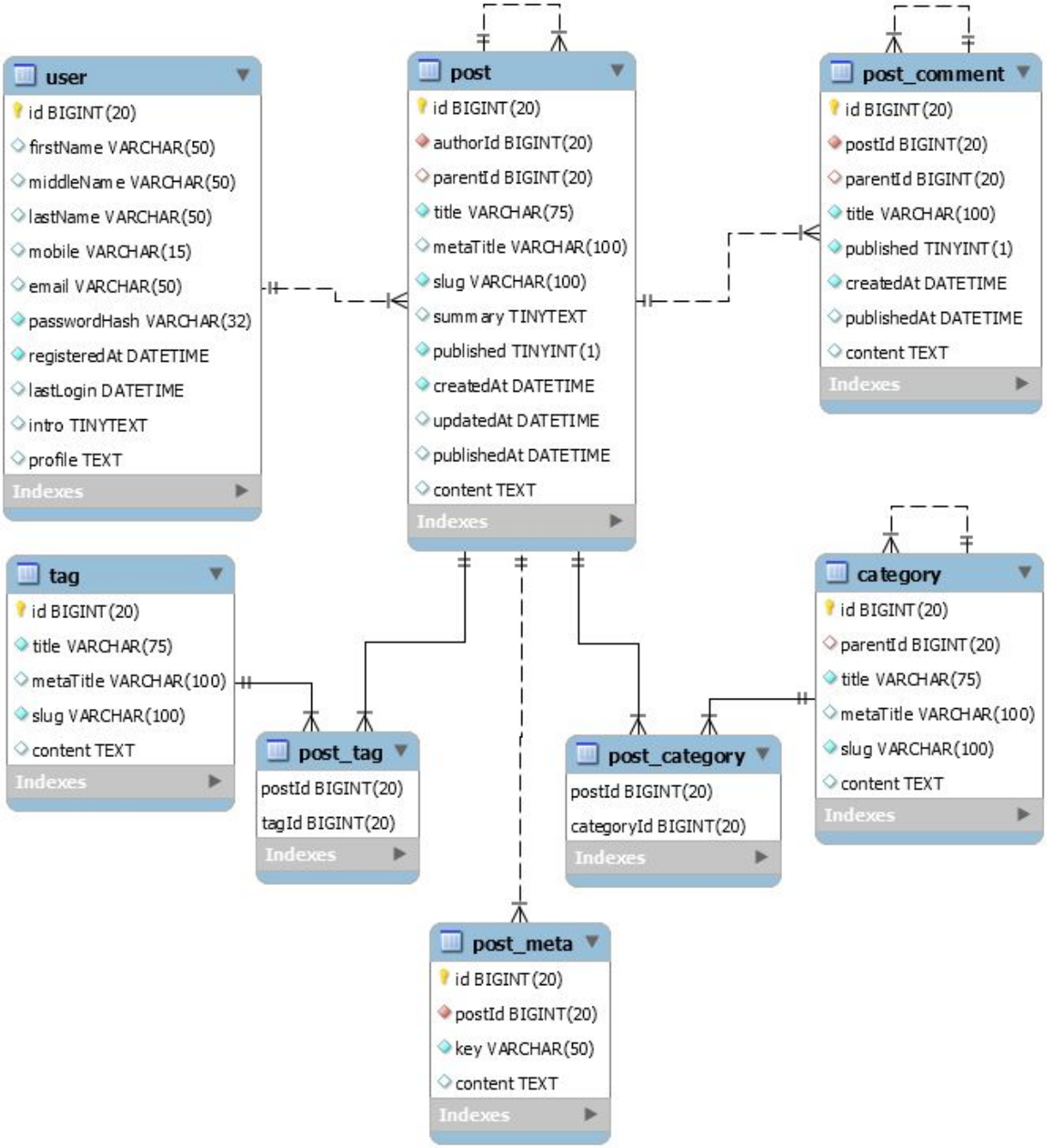
Blog Module

Database diagram to manage the users, blog posts, post meta data, post comments, post categories, and post tags.



Blog Database

Create a new database called blog.

User Table

Id	The unique id to identify the user.
First Name	The first name of the user.
Middle Name	The middle name of the user.
Last Name	The last name of the user.
Mobile	The mobile number of the user. It can be used for login and registration purposes.
Email	The email of the user. It can be used for login and registration purposes.
Password Hash	The password hash generated by the appropriate algorithm. We must avoid storing plain passwords.
Registered At	This column can be used to calculate the life of the user with the blog.
Last Login	It can be used to identify the last login of the user.
Intro	The brief introduction of the Author to be displayed on each post.
Profile	The author details to be displayed on the Author Page.

Add Unique Index for Mobile and Email fields.

Post Table

Id	The unique id to identify the post.
Author Id	The author id to identify the post author.

Parent Id	The parent id to identify the parent post. It can be used to form the table of content of the parent post of the series.
Title	The post title to be displayed on the Post Page and the lists.
Meta Title	The meta title to be used for browser title and SEO.
Slug	The post slug to form the URL.
Summary	The summary of the post to mention the key highlights.
Published	It can be used to identify whether the post is publicly available.
Created At	It stores the date and time at which the post is created.
Updated At	It stores the date and time at which the post is updated.
Published At	It stores the date and time at which the post is published.
Content	The column used to store the post data.

Add foraign key to author id column reference to the user table.
Add index to the parent id column in this post table.
Add foraign key to the parent id column reference to the post table.

Post Meta

Id	The unique id to identify the post meta.
Post Id	The post id to identify the parent post.
Key	The key identifying the meta.
Content	The column used to store the post data.

Add index to the post id column.
Add unique index to the post id column and key column.
Add foraign key to the post id column reference to the post table.

Post Comment Table

Id	The unique id to identify the post comment.
Post Id	The post id to identify the parent post.

Parent Id	The parent id to identify the parent comment.
Title	The comment title.
Published	It can be used to identify whether the comment is publicly available.
Created At	It stores the date and time at which the comment is submitted.
Published At	It stores the date and time at which the comment is published.
Content	The column used to store the comment data.

Add index to the post id column.
Add foraign key to the post id column reference to the post table.
Add index to the parent id column.
Add foraign key to the parent id column reference to the post comment table.

Category Table

Id	The unique id to identify the category.
Parent Id	The parent id to identify the parent category.
Title	The category title.
Meta Title	The meta title to be used for browser title and SEO.
Slug	The category slug to form the URL.
Content	The column used to store the category data.

Add index to the Parent id column.
Add foraign key to the Parent id column reference to this table.

Post Category Table

Post Id	The post id to identify the post.
Category Id	The category id to identify the category.

Add index to the category id column.
Add index to the post id column.
Add foraign key to the post id reference to the post table.
Add foraign key to the category id reference to the category table.

Tag Table and Post Tag Table

Create the same as category and post category table.

Practice Exercise

1. Get all the users with columns firstname, lastname, email, phone and registered at.
2. Get the user with a specific email and phone number.
3. Get all the users registered before 2 days. (Add the such records in table if those are not available)
4. Get all the users with more than 2 published posts available.
5. Get all the users who created posts from the last 2 days.
6. Get all the users who do not have a post available.
7. Get all the users where any of their posts have at least one post comment. Also list out the users who do not have any post comment for their any post.
8. List out all the posts which are published and it should be sorted by created date.
9. List out all the posts for any specific user id. (Try with specific email id as well)
10. Get all the posts with their post comments.
11. Get all the posts with minimum 2 post comments.
12. Get all the posts with their categories. Category columns should be displayed in result with comma separated category names if the same post is assigned to multiple categories.
13. Get all the posts which do not have any category assigned.
14. List out all the categories with their post count. Only category and post count needs to be listed.
15. List out all the categories which are having at least one post assigned.
16. Get all the posts for the specific category. Category name and post title should be listed.
17. List out all the meta for the specific post.
18. Get the user name who is having a specific meta key assigned to their posts.