Table Design

User:

Column Name	Data Type	Constraints
user_id	Serial (PK)	NOT NULL
username	Text	NOT NULL
email	Text	Unique
password	Text	NOT NULL
user_type	Text	NOT NULL
subscription_plan_id	Integer	FK: SubscriptionPlan(plan_id)

Column Name	Data Type	Constraints
creator_id	Serial (PK)	NOT NULL
user_id	Integer (FK)	References User(user_id)
portfolio_verification_status	Boolean	NOT NULL
approval_status	Boolean	NOT NULL

profile_picture	Text	NOT NULL
portfolio_pdf_path	Text	NOT NULL

Wallpaper Category Table:

Column Name	Data Type	Constraints
category_id	Serial (PK)	NOT NULL
category_name	Text	NOT NULL

Wallpaper Tag Table:

Column Name	Data Type	Constraints
tag_id	Serial (PK)	NOT NULL
tag_name	Text	NOT NULL

Wallpaper Collection Table:

Column Name	Data Type	Constraints
wallpaper_id	Serial (PK)	NOT NULL

creator_id	Integer (FK)	References ContentCreator(creator_id)
category_id	Integer (FK)	References WallpaperCategory(category_id)
tag_id	Integer(FK)	References WallpaperTag(tag_id)
title	Text	NOT NULL
description	Text	NOT NULL
upload_date	Date	NOT NULL
file_path	Text	NOT NULL
premium_status	Boolean	NOT NULL
price	Decimal	NOT NULL

User interaction Table:

Column Name	Data Type	Constraints
interaction_id	Serial (PK)	NOT NULL
user_id	Integer (FK)	References User(user_id)
wallpaper_id	Integer (FK)	References Wallpaper(wallpaper_id)

interaction_type	Text	NOT NULL

Subscription Plan Table:

Column Name	Data Type	Constraints
plan_id (Serial, PK)	Integer	NOT NULL
name (Text)	Text	NOT NULL
price (Decimal)	Decimal	NOT NULL
description (Text)	Text	NOT NULL
duration (Text)	Text	NOT NULL

Image customization Option:

Column Name	Data Type	Constraints
option_id	Serial (PK)	NOT NULL

option_name	Text	NOT NULL

Image Customization Value:

Column Name	Data Type	Constraints
value_id	Serial (PK)	NOT NULL
option_id	Integer (FK)	References ImageCustomizationOption(option_id)
value_name	Text	NOT NULL

Wallpaper Customization:

Column Name	Data Type	Constraints
customization_id	Serial (PK)	NOT NULL
wallpaper_id	Integer (FK)	References Wallpaper(wallpaper_id)
user_id	Integer (FK)	References User(user_id)
selected_options	JSON	NOT NULL

Subscription Transaction:

Column Name	Data Type	Constraints
transaction_id	Serial (PK)	NOT NULL
user_id	Integer (FK)	References User(user_id)
transaction_date	Date	NOT NULL
transaction_amount	Decimal	NOT NULL

Similar Image Pair:

Column Name	Data Type	Constraints
pair_id	Serial (PK)	NOT NULL
original_wallpaper_id	Integer (FK)	References Wallpaper(wallpaper_id)
similar_wallpaper_id	Integer (FK)	References Wallpaper(wallpaper_id)