

1. Project Overview

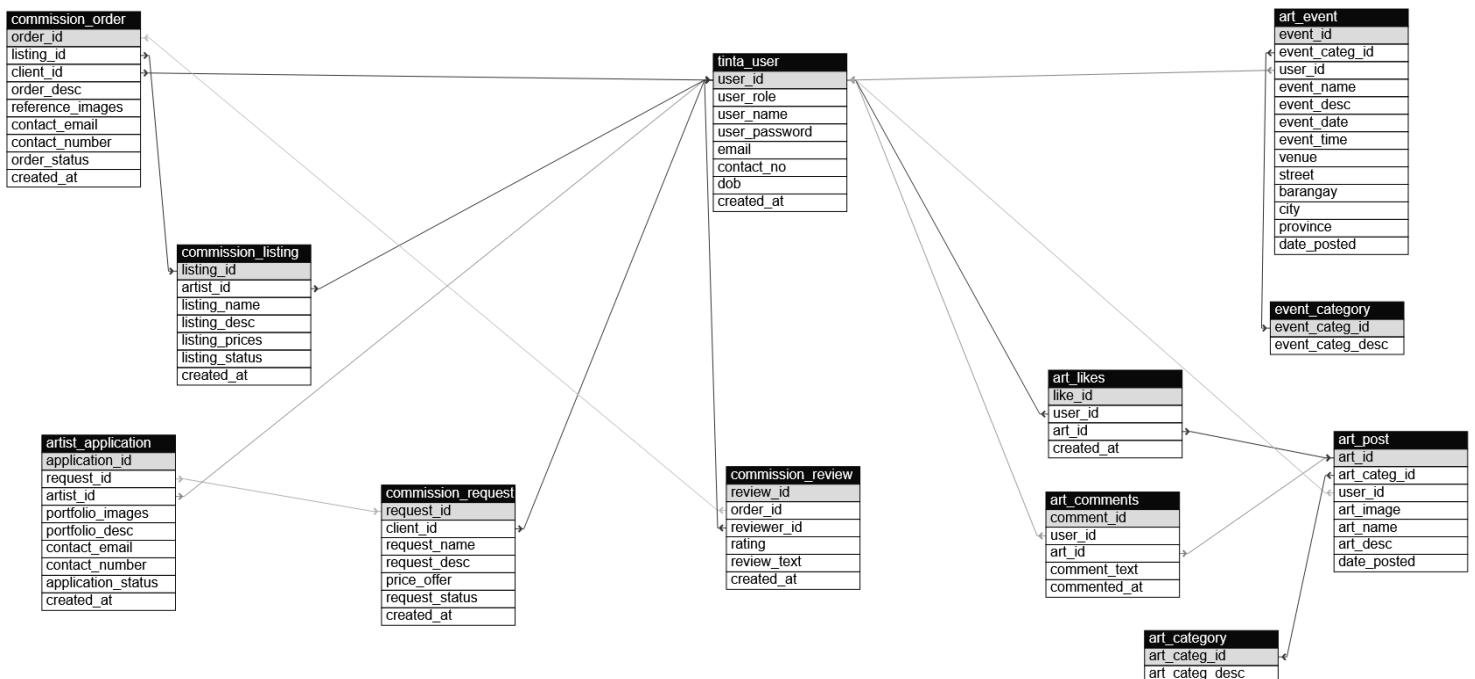
TintaPH is an art-centric web-based social media platform designed to connect artists and clients through commission listings, art events, and community interactions. The platform provides a structured environment for artists to showcase their work, accept commissions, and engage with potential clients. It features a commission system, allowing users to request and order custom artwork while streamlining the process with applications, reviews, and transaction tracking.

Technologies Used:

This project is developed using MySQL and PHP for the backend, and HTML, CSS and Javascript for the frontend.

2. Database Design and Implementation

2.1 Entity-Relationship Diagram (ERD)



2.2 Tables and Relationships

2.2.1 Tinta_User Table

```
CREATE TABLE Tinta_User (  
  user_id INT PRIMARY KEY AUTO_INCREMENT,  
  user_role ENUM('artist', 'client', 'admin'),  
  
  user_name VARCHAR(30) NOT NULL UNIQUE,  
  user_password VARCHAR(100) NOT NULL,  
  email VARCHAR(100) NOT NULL UNIQUE,  
  contact_no VARCHAR(15) NOT NULL UNIQUE,  
  dob DATE,  
  created_at TIMESTAMP DEFAULT CURRENT_TIMESTAMP  
);
```

- **Primary Key:** user_id
- **Foreign Keys:** None
- **Relationships:** All users can upload multiple varieties of content (art, events, commission listings and commission requests).

2.2.2 Art_Category Table

```
CREATE TABLE Art_Category (  
  art_categ_id INT PRIMARY KEY AUTO_INCREMENT,  
  art_categ_desc ENUM('Digital Art', 'Traditional Art',  
  'Photography', 'Artisan Crafts', 'Mixed Media')  
);
```

- **Primary Key:** art_categ_id
- **Foreign Keys:** None

- **Relationships:** A category will classify art posts depending on the medium used.

2.2.3 Art_Post Table

```
CREATE TABLE Art_Post (  
    art_id INT PRIMARY KEY AUTO_INCREMENT,  
    art_categ_id INT,  
    user_id INT,  
  
    art_image VARCHAR(300), -- store image URLs/file paths  
    art_name VARCHAR(100) NOT NULL,  
    art_desc TEXT,  
    date_posted TIMESTAMP DEFAULT CURRENT_TIMESTAMP,  
  
    FOREIGN KEY (user_id) REFERENCES Tinta_User(user_id),  
    FOREIGN KEY (art_categ_id) REFERENCES  
Art_Category(art_categ_id)  
);
```

- **Primary Key:** art_id
- **Foreign Keys:** user_id (References Tinta_User), art_categ_id (References Art_Category)
- **Relationships:**
 - o A user can upload multiple art posts.
 - o All art posts belong to a category.
 - o An art post can receive several likes and comments.

2.2.4 Art_Comment Table

```
CREATE TABLE Art_Comments (  
  comment_id INT AUTO_INCREMENT PRIMARY KEY,  
  user_id INT,  
  art_id INT,  
  
  comment_text TEXT,  
  commented_at TIMESTAMP DEFAULT CURRENT_TIMESTAMP,  
  
  FOREIGN KEY (user_id) REFERENCES Tinta_User(user_id),  
  FOREIGN KEY (art_id) REFERENCES Art_Post(art_id)  
);
```

- **Primary Key:** comment_id
- **Foreign Keys:** user_id (References Tinta_User), art_id (References Art_Post)
- **Relationships:** Users can post multiple comments on an art post.

2.2.5 Art_Likes Table

```
CREATE TABLE Art_Likes (  
  like_id INT AUTO_INCREMENT PRIMARY KEY,  
  user_id INT NOT NULL,  
  art_id INT NOT NULL,  
  
  created_at TIMESTAMP DEFAULT CURRENT_TIMESTAMP,  
  UNIQUE (user_id, art_id), -- user can like a post only once  
  
  FOREIGN KEY (user_id) REFERENCES Tinta_User(user_id) ON DELETE  
CASCADE,  
  FOREIGN KEY (art_id) REFERENCES Art_Post(art_id) ON DELETE  
CASCADE  
);
```

- **Primary Key:** like_id

- **Foreign Keys:** user_id (References Tinta_User), art_id (References Art_Post)
- **Relationships:** Users can like any art posts once.

2.2.6 Event_Category

```
CREATE TABLE Event_Category (
    event_categ_id INT PRIMARY KEY AUTO_INCREMENT,
    event_categ_desc ENUM('Exhibit', 'Convention', 'Workshop',
    'Contest', 'Auction')
);
```

- **Primary Key:** event_categ_id
- **Foreign Keys:** None.
- **Relationships:** A category will classify an event depending on its type.

2.2.7 Art_Event

```
CREATE TABLE Art_Event (
    event_id INT PRIMARY KEY AUTO_INCREMENT,
    event_categ_id INT,
    user_id INT,

    event_name VARCHAR(100) NOT NULL,
    event_desc TEXT NOT NULL,
    event_date DATE,
    event_time TIME,
    venue VARCHAR(100),
    street VARCHAR(100),
    barangay VARCHAR(100),
    city VARCHAR(100) NOT NULL,
    province VARCHAR(100) NOT NULL,
    date_posted TIMESTAMP DEFAULT CURRENT_TIMESTAMP,
```

```
FOREIGN KEY (user_id) REFERENCES Tinta_User(user_id),
FOREIGN KEY (event_categ_id) REFERENCES
Event_Category(event_categ_id)
);
```

- **Primary Key:** event_id
- **Foreign Keys:** user_id (References Tinta_User), event_categ_id (References Event_Category)
- **Relationships:**
 - o Each event is posted by a single user.
 - o All events belong to a category.

2.2.8 Commission_Listing Table

```
CREATE TABLE Commission_Listing (
  listing_id INT AUTO_INCREMENT PRIMARY KEY,
  artist_id INT NOT NULL,

  listing_name VARCHAR(100) NOT NULL,
  listing_desc TEXT NOT NULL,
  listing_prices INT(100) NOT NULL,
  listing_status ENUM('open', 'closed') DEFAULT 'open',
  created_at TIMESTAMP DEFAULT CURRENT_TIMESTAMP,

  FOREIGN KEY (artist_id) REFERENCES Tinta_User(user_id) ON
DELETE CASCADE
);
```

- **Primary Key:** listing_id
- **Foreign Keys:** artist_id (References Tinta_User)
- **Relationships:**

- o An artist can post a commission listing.
- o Each commission listing is linked to a single user.

2.2.9 Commission_Order Table

```
CREATE TABLE Commission_Order (
  order_id INT AUTO_INCREMENT PRIMARY KEY,
  listing_id INT NOT NULL,
  client_id INT NOT NULL,

  order_desc TEXT NOT NULL,
  reference_images TEXT, -- store image URLs/file paths
  contact_email VARCHAR(100) NOT NULL,
  contact_number VARCHAR(15),
  order_status ENUM('pending', 'in progress', 'completed',
'cancelled') DEFAULT 'pending',
  created_at TIMESTAMP DEFAULT CURRENT_TIMESTAMP,

  FOREIGN KEY (listing_id) REFERENCES
Commission_Listing(listing_id) ON DELETE CASCADE,
  FOREIGN KEY (client_id) REFERENCES Tinta_User(user_id) ON
DELETE CASCADE
);
```

- **Primary Key:** order_id
- **Foreign Keys:** listing_id (References Commission_Listing), client_id (References Tinta_User)
- **Relationships:** A client can order from multiple commission listings.

2.2.10 Commission_Request Table

```
CREATE TABLE Commission_Request (  
    request_id INT AUTO_INCREMENT PRIMARY KEY,  
    client_id INT NOT NULL,  
  
    request_name VARCHAR(100) NOT NULL,  
    request_desc TEXT NOT NULL,  
    price_offer INT(100) NOT NULL,  
    request_status ENUM('open', 'artist found', 'closed') DEFAULT  
'open',  
    created_at TIMESTAMP DEFAULT CURRENT_TIMESTAMP,  
  
    FOREIGN KEY (client_id) REFERENCES Tinta_User(user_id) ON  
DELETE CASCADE  
);
```

- **Primary Key:** request_id
- **Foreign Keys:** client_id (References Tinta_User)
- **Relationships:** A commission request can receive multiple artist applications.

2.2.11 Artist_Application Table

```
CREATE TABLE Artist_Application (  
    application_id INT AUTO_INCREMENT PRIMARY KEY,  
    request_id INT NOT NULL,  
    artist_id INT NOT NULL,  
  
    portfolio_images TEXT NOT NULL, -- store image URLs/file paths  
    portfolio_desc TEXT NOT NULL,  
    contact_email VARCHAR(100) NOT NULL,  
    contact_number VARCHAR(15),  
    application_status ENUM('pending', 'accepted', 'rejected')  
DEFAULT 'pending',  
    created_at TIMESTAMP DEFAULT CURRENT_TIMESTAMP,
```



```

        FOREIGN KEY (request_id) REFERENCES
Commission_Request(request_id) ON DELETE CASCADE,
        FOREIGN KEY (artist_id) REFERENCES Tinta_User(user_id) ON
DELETE CASCADE
);

```

- **Primary Key:** application_id
- **Foreign Keys:** request_id (References Commission_Request), artist_id (References Tinta_User)
- **Relationships:** An artist can submit an application to many commission requests.

2.2.12 Commission_Review

```

CREATE TABLE Commission_Review (
    review_id INT AUTO_INCREMENT PRIMARY KEY,
    order_id INT NOT NULL,
    reviewer_id INT NOT NULL, -- either artist or client

    rating INT NOT NULL,
    CONSTRAINT check_rating CHECK (rating BETWEEN 1 AND 5),
    review_text TEXT,
    created_at TIMESTAMP DEFAULT CURRENT_TIMESTAMP,

    FOREIGN KEY (order_id) REFERENCES Commission_Order(order_id) ON
DELETE CASCADE,
    FOREIGN KEY (reviewer_id) REFERENCES Tinta_User(user_id) ON
DELETE CASCADE
);

```

- **Primary Key:** review_id
- **Foreign Keys:** order_id (References Commission_Order), reviewer_id (References Tinta_User)

- **Relationships:** User reviews can be submitted to multiple commission orders.

3. SQL Queries

3.1 Basic Queries

3.1.1 Show All Tables

```
SHOW TABLES;
```

```
+-----+
| Tables_in_tintaph_db |
+-----+
| art_category          |
| art_comments          |
| art_event             |
| art_likes             |
| art_post              |
| artist_application     |
| commission_listing     |
| commission_order       |
| commission_request     |
| commission_review      |
| event_category        |
| tinta_user             |
+-----+
```

3.1.2 Insert Records in Tinta_User

```
INSERT INTO Tinta_User (user_role, user_name, user_password, email,
contact_no, dob) VALUES
    ('admin', 'pybun', 'X21[3r,E', 'pybun22@gmail.com',
09273615553, '1995-06-15'),
    ('artist', 'FinoBB', 'M54a£}4r', 'finomela.b@yahoo.com',
09683492012, '2000-02-20'),
    ('', 'MinatheSilence', 'iU94"G3t', 'minapasion_98@yahoo.com',
09412676584, '1998-09-10'),
    ('client', 'fffrogggs', '/A>h853;w+',
'ilove_forgs_1@vivaldi.net', 09192310988, '1985-12-05'),
    ('', 'Kay-Rex', 'oStUREfLOU', 'kayr_business@gmail.com',
09599928310, '1992-04-25'),
    ('client', 'JTBolly', 'tLeTheLipsYlE', 'bolsherk@gmail.com',
09314873252, '1989-02-10'),
    ('artist', 'ninetailsdragon999', 'artENTaLoIdiG',
```

```
'yugioh100@yahoo.com', 09124879561, '1992-04-20'),
    ('client', '1KillerQueen2', 'deNtIL', 'farcambe@yahoo.com',
09432847493, '1982-12-12'),
    ('artist', 'mrkwashere', 'Gd230ds', 'mark_je03@vivaldi.net',
09223816595, '2003-06-05'),
    ('artist', 'jay9542', '22hDrYLo', 'sipajayarts@gmail.com',
09683745921, '1992-10-25');
```

3.1.3 Insert Records in Art_Event

```
INSERT INTO `art_event` (`event_categ_id`, `user_id`, `event_name`,
`event_desc`, `event_date`, `event_time`, `venue`, `street`,
`barangay`, `city`, `province`) VALUES
    ('3', '13', 'Graphika Manila 2025', 'See you at
#GraphikaManila2025!', '2025-03-01', '13:00:00', 'SMX Mall of Asia',
NULL, NULL, 'Pasay', 'Metro Manila'),
    ('2', '21', 'Komiket February', 'LOVE KOMIKS & ART AT KOMIKET
FEBRUARY!', '2025-02-08', '11:00:00', 'SM Megamall, Megatrade Hall
2', NULL, 'Ortigas Center', 'Mandaluyong', 'Metro Manila'),
    ('3', '13', 'HUBOG-LIKHA: Latagan At Acoustics', '',
'2025-02-19', '08:00:00', 'UP College of Fine Arts - Arts and Design
West Hall', NULL, 'Diliman', 'Quezon City', 'Metro Manila'),
    ('1', '14', 'Womens Month By Patreon of the Arts', 'Join us as
we put the spotlight on women empowerment through art!',
'2025-03-08', '08:00:00', 'Centris Elements', NULL, NULL, 'Quezon
City', 'Metro Manila'),
    ('2', '14', 'Hayop At Halaman', 'Join us for an enchanting
journey of creativity at our nature-inspired event.', '2025-04-12',
'08:00:00', 'Centris Elements', NULL, NULL, 'Quezon City', 'Metro
Manila'),
    ('1', '13', 'Ghibli Art Summer Fest', 'Step into the whimsical
world of Studio Ghibli at the Ghibli Summer Art Fest!', '2025-03-29',
'10:00:00', NULL, '24 Mayaman St.', 'Diliman', 'Quezon City', 'Metro
Manila'),
    ('3', '21', 'Magics And Mystics', 'Immerse yourself in our
magic-themed program with recreational activities, workshops, talks,
games, and challenges!', '2025-05-17', '10:00:00', 'Bayanihan
```

```
Center', NULL, NULL, 'Pasig City', 'Metro Manila'),
    ('1', '21', 'Summer Komikon 2025', '#SummerKomikon2025',
'2025-03-15', '10:00:00', 'Bayanihan Center', NULL, NULL, 'Pasig
City', 'Metro Manila'),
    ('1', '12', 'Pinoy OTAKU Festival ', NULL, '2025-05-04',
'10:00:00', 'Trade Hall, Robinsons Novaliches', NULL, NULL, 'Quezon
City', 'Metro Manila'),
    ('2', '13', 'Cosplay Carnival 2025', NULL, '2025-03-22',
'08:00:00', 'SMX Mall of Asia', NULL, NULL, 'Pasay', 'Metro Manila');
```

3.1.4 Insert Records in Commission_Listing

```
INSERT INTO `commission_listing` (`listing_id`, `artist_id`,
`listing_name`, `listing_desc`, `listing_prices`, `listing_status`,
`created_at`) VALUES
    (1, 12, 'Custom Crochet Hat', '', '500PHP to 1000PHP', 'open',
'2025-02-26 14:51:33'),
    (2, 12, 'Doggo Portrait', 'I will draw your doggo for 500
pesos! :D', '500PHP', 'open', '2025-02-26 14:52:43'),
    (3, 22, 'Sticker Designs', 'I will do 1-2 pages of sticker
designs', '750PHP', 'closed', '2025-02-26 14:54:58'),
    (4, 25, 'Full Body 3D Model ', 'using 3Ds Max, timeframe 1-3
weeks depending on complexity', '2500PHP to 4000PHP', 'closed',
'2025-02-26 14:56:55'),
    (5, 25, 'Horror Book Cover Illustration', 'Check my portfolio
for samples', '1500PHP', 'open', '2025-02-26 14:59:07'),
    (6, 11, 'Character Turn-Around', '', '500PHP', 'open',
'2025-02-26 15:00:11'),
    (7, 24, 'Chibi Illustration', 'for personal use only',
'250PHP', 'closed', '2025-02-26 15:01:50'),
    (8, 11, 'Full Rendered Half-Body', '', '1250PHP', 'open',
'2025-02-26 15:04:30'),
    (9, 11, 'Animated Emotes Pack', '', '900PHP', 'open',
'2025-02-26 15:06:06'),
    (10, 22, 'Youtube Banner Illustration', 'can be digital or
water color!', '1000PHP', 'closed', '2025-02-26 15:07:36');
```

3.1.5 Insert Records in Commission_Order

```
INSERT INTO `commission_order` (`order_id`, `listing_id`,  
`client_id`, `order_desc`, `reference_images`, `contact_email`,  
`contact_number`, `order_status`, `created_at`) VALUES  
  (1, 1, 14, 'pink frog crochet for medium size, please!',  
  'https://istock/poison_dart.jpg', 'ilove_forgs_1@vivaldi.net',  
  2147483647, 'pending', '2025-02-26 15:58:40'),  
  (2, 2, 14, 'portrait of my borzoi please',  
  'https://drive.google.com/file/d/1XKb', 'ilove_forgs_1@vivaldi.net',  
  2147483647, 'pending', '2025-02-26 15:58:40'),  
  (3, 5, 23, 'Looking for a horror book cover with dark, surreal  
vibes. Want a similar composition to ref pic.',  
  'https://cooking.com/apple_pie_recipe.jpg', 'farcambe@yahoo.com',  
  2147483647, 'in progress', '2025-02-26 15:58:40'),  
  (4, 6, 21, 'Character turn-around for my OC, references  
attached.', 'https://sta.sh/georg.png', 'bolsherk@gmail.com',  
  2147483647, 'pending', '2025-02-26 15:58:40'),  
  (5, 8, 21, 'Full rendered half-body of my DnD character.',  
  'https://sta.sh/dnd_ref.png', 'bolsherk@gmail.com', 2147483647,  
  'pending', '2025-02-26 15:58:40'),  
  (6, 9, 14, 'Animated emotes pack for my Twitch channel.',  
  'https://drive.google.com/file/d/4KCv', 'client6@example.com',  
  2147483647, 'completed', '2025-02-26 15:58:40');
```

3.1.6 Insert Records in Commission_Request

```
INSERT INTO Commission_Request (client_id, request_name,  
request_desc, price_offer, request_status) VALUES  
  (14, 'Anime Style Portrait', 'looking for an artist to draw my  
OC in anime style.', '500PHP - 1000PHP', 'open'),  
  (14, 'traditional painting portrait', 'Need a portrait of me  
and my partner for our anniversary', '1500PHP - 2500PHP', 'artist  
found'),  
  (23, 'Chibi Avatar Design', 'Requesting a set of 3 chibi
```

```
avatars for my social media.', '700PHP - 1200PHP', 'open'),
    (23, 'DND Character Full-Body', 'Need a full-body illustration
for DND', '2000PHP - 3500PHP', 'artist found'),
    (21, 'Watercolor Landscape Painting', 'this is for a gift for
my mom, should look like larsson', '1000PHP - 1800PHP', 'closed'),
    (14, '3D Model for VTuber', 'Looking for an artist to create a
full 3D model for my VTuber.', '5000PHP - 7000PHP', 'open');
```

3.1.7 Insert Records in Artist_Application

```
INSERT INTO Artist_Application (request_id, artist_id,
portfolio_images, portfolio_desc, contact_email, contact_number,
application_status) VALUES
    (1, 11, 'https://drive.google.com/file/d/HF3s', 'Freelance
anime artist for 3 years.', 'pybun22@gmail.com', '9273615553',
'pending'),
    (2, 13, 'https://drive.google.com/file/d/dVC2', 'I specialize
in oil and watercolor portraits.', 'minapasion_98@yahoo.com',
'9412676584', 'accepted'),
    (3, 25, 'https://sta.sh/chibis_port.png', 'I create cute and
expressive chibi characters.', 'sipajayarts@gmail.com', '9683745921',
'pending'),
    (4, 22, 'https://www.behance.net/gallery/sdfdsfsd', 'Fantasy
and DND-themed character illustrations.', 'yugioh100@yahoo.com',
'9124879561', 'accepted'),
    (5, 24, 'artworks/digital/beach_painting.jpg', 'check my
portfolio, ive painted 10 larssons', 'mark_je03@vivaldi.net',
'9223816595', 'rejected'),
    (6, 25, 'https://www.twitch.tv/punopalo', 'I did punopalos
vtuber avatar', 'sipajayarts@gmail.com', '9683745921', 'pending');
```

3.1.8 Insert Records in Commission_Review

```
INSERT INTO Commission_Review (order_id, reviewer_id, rating,
review_text)
VALUES
```

```
(3, 23, 5, 'Absolutely loved the horror book cover!'),
(4, 21, 4, 'some minor details were off, but overall
excellent.'),
(5, 21, 5, 'amazing work on my DnD character! lahat sila na
inggit hehe'),
(6, 14, 5, 'The animated emotes came out fantastic! Will
definitely commission again.');
```

3.1.9 Display Data in Tinta_User

```
SELECT * FROM tinta_user;
```

user_id	user_role	user_name	user_password	email	contact_no	dob	created_at
11	admin	pybun	X21[3r,E	pybun22@gmail.com	9273615553	1995-06-15	2025-02-26 18:41:33
12	artist	FinoBB	M54a?}4r	finomela.b@yahoo.com	9683492012	2000-02-20	2025-02-26 18:41:33
13		MinatheSilence	iU94"G3t	minapasion_98@yahoo.com	9412676584	1998-09-10	2025-02-26 18:41:33
14	client	fffrogggs	/A>h853;w+	ilove_forgs_1@vivaldi.net	9192310988	1985-12-05	2025-02-26 18:41:33
15		Kay-Rex	oStUREfLOU	kayr_business@gmail.com	9599928310	1992-04-25	2025-02-26 18:41:33
21	client	JTBolly	tLeTHeLipsYLE	bolsherk@gmail.com	9314873252	1989-02-10	2025-02-26 18:50:37
22	artist	ninetailsdragon999	artENTaLoIdiG	yugioh100@yahoo.com	9124879561	1992-04-20	2025-02-26 18:50:37
23	client	1KillerQueen2	deNtIL	farcambe@yahoo.com	9432847493	1982-12-12	2025-02-26 18:50:37
24	artist	mrkwashere	Gd230ds	mark_je03@vivaldi.net	9223816595	2003-06-05	2025-02-26 18:50:37
25	artist	jay9542	22hDrYLo	sipajayarts@gmail.com	9683745921	1992-10-25	2025-02-26 18:50:37

3.1.10 Display Data in Art_Category

```
SELECT * FROM Art_Category;
```

art_categ_id	art_categ_desc
1	Digital Art
2	Traditional Art
3	Photography
4	Artisan Crafts
5	Mixed Media

3.1.11 Display Data in Event_Category

```
SELECT * FROM Event_Category;
```

event_categ_id	event_categ_desc
1	Exhibit
2	Convention
3	Workshop
4	Contest
5	Auction

3.1.12 Describe Art_Likes Table

```
DESC art_likes;
```

Field	Type	Null	Key	Default	Extra
like_id	int(11)	NO	PRI	NULL	auto_increment
user_id	int(11)	NO	MUL	NULL	
art_id	int(11)	NO	MUL	NULL	
created_at	timestamp	NO		current_timestamp()	

3.1.13 Describe Art_Comments Table

```
DESC art_comments;
```

Field	Type	Null	Key	Default	Extra
comment_id	int(11)	NO	PRI	NULL	auto_increment
user_id	int(11)	YES	MUL	NULL	
art_id	int(11)	YES	MUL	NULL	
comment_text	text	YES		NULL	
commented_at	timestamp	NO		current_timestamp()	

3.2. Join Queries

3.2.1 Display Tinta_User along with the Art_Event they have created.

```
SELECT
```



```
tu.user_id,  
tu.user_name,  
tu.user_role,  
ae.event_id,  
ae.event_name,  
ae.event_desc,  
ae.event_date,  
ae.event_time,  
ae.venue,  
ae.street,  
ae.barangay,  
ae.city,  
ae.province,  
ae.date_posted  
FROM Tinta_User tu  
INNER JOIN Art_Event ae ON tu.user_id = ae.user_id  
ORDER BY tu.user_id, ae.date_posted DESC;
```

3.2.2 Display Commission_Listing along with the Tinta_User who posted them.

```
SELECT  
cl.listing_id,  
cl.listing_name,  
cl.listing_desc,  
cl.listing_prices,  
cl.listing_status,  
cl.created_at,  
u.user_id,  
u.user_name,  
u.email  
FROM Commission_Listing cl  
JOIN Tinta_User u ON cl.artist_id = u.user_id;
```

3.2.3 Display Commission_Request along with the Tinta_User who posted them.

```
SELECT
```

```
    cr.request_id,  
    cr.request_name,  
    cr.request_desc,  
    cr.price_offer,  
    cr.request_status,  
    u.user_id,  
    u.user_name,  
FROM Commission_Request cr  
JOIN Tinta_User u ON cr.client_id = u.user_id;
```

3.2.4 Display Commission_Listing, the artist user who posted it, and the Commission_Order with the user who ordered it.

```
SELECT  
    cl.listing_id,  
    cl.listing_name,  
    cl.listing_desc,  
    cl.listing_prices,  
    cl.listing_status,  
    cl.created_at AS listing_created_at,  
  
    artist.user_id AS artist_id,  
    artist.user_name AS artist_name,  
    artist.email AS artist_email,  
  
    co.order_id,  
    co.order_desc,  
    co.order_status,  
    co.created_at AS order_created_at,  
  
    client.user_id AS client_id,  
    client.user_name AS client_name,  
    client.email AS client_email  
FROM Commission_Listing cl  
JOIN Tinta_User artist ON cl.artist_id = artist.user_id  
LEFT JOIN Commission_Order co ON cl.listing_id = co.listing_id
```

```
LEFT JOIN Tinta_User client ON co.client_id = client.user_id;
```

3.2.5 Display Commission_Review and the corresponding Commission_Listing from which the order originated.

```
SELECT
    cr.review_id,
    cr.rating,
    cr.review_text,
    cr.created_at AS review_created_at,

    co.order_id,
    co.order_status,
    co.created_at AS order_created_at,

    cl.listing_id,
    cl.listing_name,
    cl.listing_desc,
    cl.listing_prices,
    cl.listing_status,
    cl.created_at AS listing_created_at,

    reviewer.user_id AS reviewer_id,
    reviewer.user_name AS reviewer_name,
    reviewer.email AS reviewer_email

FROM Commission_Review cr
JOIN Commission_Order co ON cr.order_id = co.order_id
JOIN Commission_Listing cl ON co.listing_id = cl.listing_id
JOIN Tinta_User reviewer ON cr.reviewer_id = reviewer.user_id;
```

3.2.6 Display Commission_Request and their received Artist_Application.

```
SELECT
    cr.request_id,
```

```
    cr.request_name,  
    cr.request_desc,  
    cr.price_offer,  
    cr.request_status,  
    cr.created_at AS request_created_at,  
  
    aa.application_id,  
    aa.portfolio_desc,  
    aa.application_status,  
    aa.created_at AS application_created_at,  
  
    artist.user_id AS artist_id,  
    artist.user_name AS artist_name,  
    artist.email AS artist_email,  
  
    client.user_id AS client_id,  
    client.user_name AS client_name,  
    client.email AS client_email  
  
FROM Commission_Request cr  
LEFT JOIN Artist_Application aa ON cr.request_id = aa.request_id  
LEFT JOIN Tinta_User artist ON aa.artist_id = artist.user_id  
JOIN Tinta_User client ON cr.client_id = client.user_id;
```

3.3 Aggregation Queries

3.3.1 Count the number of Art_Event per city.

```
SELECT  
    city,  
    COUNT(event_id)  
FROM Art_Event  
GROUP BY city;
```

3.3.2 Return the average value in price_offer.

```
SELECT AVG(price_offer)
FROM Commission_Request;
```

3.3.3 Return the maximum value in price_offer.

```
SELECT MAX(price_offer)
FROM Commission_Request;
```

3.3.4 Return the minimum value in listing_prices.

```
SELECT MIN(listing_prices)
FROM Commission_Listing;
```

3.3.5 Display Tinta_User, their Art_Post, along with the number of likes and comments each post has received.

```
SELECT
    tu.user_id,
    tu.user_name,
    ap.art_id,
    ap.art_name,
    ap.art_desc,
    ap.date_posted,
    COUNT(DISTINCT al.like_id) AS total_likes,
    COUNT(DISTINCT ac.comment_id) AS total_comments
FROM Tinta_User tu
INNER JOIN Art_Post ap ON tu.user_id = ap.user_id
LEFT JOIN Art_Likes al ON ap.art_id = al.art_id
LEFT JOIN Art_Comments ac ON ap.art_id = ac.art_id
GROUP BY tu.user_id, tu.user_name, ap.art_id, ap.art_name,
ap.art_desc, ap.date_posted
ORDER BY tu.user_id, ap.date_posted DESC;
```

3.3.6 Display Art_Post details along with the number of likes and comments for each post.

```
SELECT
    ap.art_id,
    ap.art_name,
    ap.art_desc,
    ap.art_image,
    COUNT(DISTINCT al.like_id) AS total_likes,
    COUNT(DISTINCT ac.comment_id) AS total_comments
FROM Art_Post ap
LEFT JOIN Art_Likes al ON ap.art_id = al.art_id
LEFT JOIN Art_Comments ac ON ap.art_id = ac.art_id
GROUP BY ap.art_id, ap.art_name, ap.art_desc, ap.art_image
ORDER BY total_likes DESC;
```

4. Collaboration and Teamwork

4.1 Communication and Coordination

The team utilized GitHub for version control of the developed schema and queries, and coordinated through Microsoft Teams and Messenger. Project development followed the Waterfall model, breaking the project into sequential phases, with progress tracked using Miro Board and Obsidian.

5. Conclusion

5.1 Project Summary

The development of TintaPH aims to connect Filipino artists and art enthusiasts, by providing a web-based platform for growth and connection making. This collective effort not only highlights the diverse talents within the Filipino artistic community but also cultivates an environment where creativity can flourish and thrive.

During the development process, the team encountered several challenges,

particularly foreign key constraints and data integrity issues, which required extensive debugging and database restructuring. Additionally, maintaining a smooth user experience while optimizing database efficiency demanded continuous improvements in query performance and system architecture.

Despite these challenges, the development of TintaPH has been a valuable learning experience in database management and system optimization. More than just a platform, TintaPH serves as a structured space where Filipino artists can showcase their work, collaborate, and grow within a supportive creative community.

5.2 Future Enhancements

To improve TintaPH, several key enhancements can be implemented to optimize user experience and streamline platform functionality:

Enhanced Commission System

- Introduce a built-in payment gateway for seamless transactions, allowing users to securely pay for commissions directly within the platform.

Expanded Event Features

- Improve the event management system by adding ticketing and RSVP functionalities, allowing users to register for events directly on the platform.

Portfolio System for Artists

- Enable artists to create personalized profiles with a portfolio showcase, helping them display their previous works, skills, and experience.