

CASE STUDY

Virtual Art Gallery

Yadeesh Bhagnal

```
create database VAG;
```

```
use VAG;
```

```
-- Artwork table
```

```
create table artwork (  
  artworkid int primary key,  
  title varchar(255),  
  description text,  
  creationdate date,  
  medium varchar(255),  
  imageurl varchar(255),  
  artistid int,  
  foreign key (artistid) references artist(artistid)  
);
```

| Field | Type | Null | Key | Default | Extra |
|--------------|--------------|------|-----|---------|-------|
| artworkid | int | NO | PRI | NULL | |
| title | varchar(255) | YES | | NULL | |
| description | text | YES | | NULL | |
| creationdate | date | YES | | NULL | |
| medium | varchar(255) | YES | | NULL | |
| imageurl | varchar(255) | YES | | NULL | |
| artistid | int | YES | MUL | NULL | |

```
-- Artist table
```

```
create table artist (  
  artistid int primary key,  
  name varchar(255),  
  biography text,  
  birthdate date,  
  nationality varchar(255),  
  website varchar(255),  
  contactinformation varchar(255)  
);
```

| Field | Type | Null | Key | Default | Extra |
|--------------------|--------------|------|-----|---------|-------|
| artistid | int | NO | PRI | NULL | |
| name | varchar(255) | YES | | NULL | |
| biography | text | YES | | NULL | |
| birthdate | date | YES | | NULL | |
| nationality | varchar(255) | YES | | NULL | |
| website | varchar(255) | YES | | NULL | |
| contactinformation | varchar(255) | YES | | NULL | |

-- User table

```
create table user (  
  userid int primary key,  
  username varchar(255),  
  password varchar(255),  
  email varchar(255),  
  firstname varchar(255),  
  lastname varchar(255),  
  dateofbirth date,  
  profilepicture varchar(255),  
  favoriteartworks text  
);
```

| Field | Type | Null | Key | Default | Extra |
|------------------|--------------|------|-----|---------|-------|
| userid | int | NO | PRI | NULL | |
| username | varchar(255) | YES | | NULL | |
| password | varchar(255) | YES | | NULL | |
| email | varchar(255) | YES | | NULL | |
| firstname | varchar(255) | YES | | NULL | |
| lastname | varchar(255) | YES | | NULL | |
| dateofbirth | date | YES | | NULL | |
| profilepicture | varchar(255) | YES | | NULL | |
| favoriteartworks | text | YES | | NULL | |

-- Gallery table

```
create table gallery (  
  galleryid int primary key,  
  name varchar(255),  
  description text,  
  location varchar(255),  
  curatorid int,  
  openinghours varchar(255),  
  foreign key (curatorid) references artist(artistid)  
);
```

| Field | Type | Null | Key | Default | Extra |
|--------------|--------------|------|-----|---------|-------|
| galleryid | int | NO | PRI | NULL | |
| name | varchar(255) | YES | | NULL | |
| description | text | YES | | NULL | |
| location | varchar(255) | YES | | NULL | |
| curatorid | int | YES | MUL | NULL | |
| openinghours | varchar(255) | YES | | NULL | |

```
INSERT INTO artwork (artworkid, title, description, creationdate, medium, imageurl, artistid)
```

```
VALUES
```

```
(1, 'Sunset Over Mountains', 'A breathtaking view of mountains during sunset.', '2022-01-15', 'Oil  
Painting', 'sunset.jpg', 1),
```

```
(2, 'Abstract Harmony', 'An abstract piece with vibrant colors and shapes.', '2022-02-28', 'Mixed  
Media', 'abstract.jpg', 2),
```

(3, 'Sculpture of Freedom', 'A sculpture representing freedom and liberation.', '2022-03-10', 'Sculpture', 'freedom_sculpture.jpg', 3),

(4, 'Ocean Waves', 'Capturing the essence of ocean waves in a serene painting.', '2022-04-05', 'Acrylic Painting', 'ocean_waves.jpg', 1),

(5, 'Dancing Shadows', 'A play of light and shadows in a dance of colors.', '2022-05-20', 'Digital Art', 'dancing_shadows.jpg', 2),

(6, 'Bronze Elegance', 'A bronze sculpture showcasing elegance and grace.', '2022-06-02', 'Bronze Sculpture', 'bronze_elegance.jpg', 3),

(7, 'Cityscape Reflections', 'Reflecting the dynamic beauty of a cityscape.', '2022-07-12', 'Watercolor', 'cityscape.jpg', 1),

(8, 'Mindful Abstraction', 'An abstract artwork that invites contemplation and mindfulness.', '2022-08-18', 'Mixed Media', 'mindful_abstraction.jpg', 2),

(9, 'Renaissance Revival', 'Inspired by the Renaissance era, a revival of classical art.', '2022-09-25', 'Oil Painting', 'renaissance_revival.jpg', 3),

(10, 'Whimsical Wonderland', 'A whimsical representation of a magical wonderland.', '2022-10-08', 'Digital Art', 'whimsical_wonderland.jpg', 1);

| artworkid | title | description | creationdate | medium | imageurl | artistid |
|-----------|-----------------------|--|--------------|------------------|--------------------------|----------|
| 1 | Sunset Over Mountains | A breathtaking view of mountains during sunset. | 2022-01-15 | Oil Painting | sunset.jpg | 1 |
| 2 | Abstract Harmony | An abstract piece with vibrant colors and shapes. | 2022-02-28 | Mixed Media | abstract.jpg | 2 |
| 3 | Sculpture of Freedom | A sculpture representing freedom and liberation. | 2022-03-10 | Sculpture | freedom_sculpture.jpg | 3 |
| 4 | Ocean Waves | Capturing the essence of ocean waves in a ser... | 2022-04-05 | Acrylic Painting | ocean_waves.jpg | 1 |
| 5 | Dancing Shadows | A play of light and shadows in a dance of colors. | 2022-05-20 | Digital Art | dancing_shadows.jpg | 2 |
| 6 | Bronze Elegance | A bronze sculpture showcasing elegance and gr... | 2022-06-02 | Bronze Sculpture | bronze_elegance.jpg | 3 |
| 7 | Cityscape Reflections | Reflecting the dynamic beauty of a cityscape. | 2022-07-12 | Watercolor | cityscape.jpg | 1 |
| 8 | Mindful Abstraction | An abstract artwork that invites contemplation ... | 2022-08-18 | Mixed Media | mindful_abstraction.jpg | 2 |
| 9 | Renaissance Revival | Inspired by the Renaissance era, a revival of d... | 2022-09-25 | Oil Painting | renaissance_revival.jpg | 3 |
| 10 | Whimsical Wonderland | A whimsical representation of a magical wonderl... | 2022-10-08 | Digital Art | whimsical_wonderland.jpg | 1 |

INSERT INTO artist (artistid, name, biography, birthdate, nationality, website, contactinformation)

VALUES

(1, 'John Artist', 'A visionary artist with a passion for capturing nature.', '1980-05-15', 'American', 'www.johnartist.com', 'contact@johnartist.com'),

(2, 'Alice Painter', 'An abstract painter exploring the realms of color and form.', '1985-08-22', 'British', 'www.alicepainter.com', 'alice.painter@email.com'),

(3, 'Sculptor Smith', 'A sculptor shaping emotions into tangible expressions.', '1978-12-03', 'Italian', 'www.sculptorsmith.com', 'smith_sculptor@domain.com'),

(4, 'Eva Landscape', 'Specializing in landscapes, capturing the beauty of natural scenery.', '1990-03-20', 'French', 'www.evalandscape.com', 'eva_landscape@gmail.com'),

(5, 'Mark Digital', 'Pushing boundaries in digital art with a futuristic vision.', '1988-06-18', 'German', 'www.markdigital.com', 'mark_digital@website.net'),

(6, 'Sophia Bronze', 'A master of bronze sculptures, creating timeless pieces of art.', '1982-09-10', 'Greek', 'www.sophiabronze.com', 'sophia.bronze@hotmail.com'),

(7, 'Chris Watercolorist', 'A watercolor artist known for capturing the essence of moments.', '1975-11-30', 'Australian', 'www.chriswatercolorist.com', 'chris_watercolor@artist.org'),

(8, 'Miranda Mixed Media', 'Exploring the intersection of various media for artistic expression.', '1987-04-12', 'Canadian', 'www.mirandamixedmedia.com', 'miranda.mixed@gmail.com'),

(9, 'Leon Renaissance', 'Reviving the spirit of the Renaissance through classical paintings.', '1984-07-08', 'Italian', 'www.leonrenaissance.com', 'leon_renaissance@studio.it'),

(10, 'Oliver Digital Dreams', 'Crafting dreamlike digital art that transports viewers to new realms.', '1992-02-25', 'Swedish', 'www.oliverdigitaldreams.com', 'oliver_digital@dreamland.se');

| artistid | name | biography | birthdate | nationality | website | contactinformation |
|----------|-----------------------|---|------------|-------------|-----------------------------|-----------------------------|
| 1 | John Artist | A visionary artist with a passion for capturing nature. | 1980-05-15 | American | www.johnartist.com | contact@johnartist.com |
| 2 | Alice Painter | An abstract painter exploring the realms of color and form. | 1985-08-22 | British | www.alicepainter.com | alice.painter@email.com |
| 3 | Sculptor Smith | A sculptor shaping emotions into tangible expressions. | 1978-12-03 | Italian | www.sculptorsmith.com | smith_sculptor@domain.com |
| 4 | Eva Landscape | Specializing in landscapes, capturing the beauty of natural scenery. | 1990-03-20 | French | www.evalandscape.com | eva_landscape@gmail.com |
| 5 | Mark Digital | Pushing boundaries in digital art with a futuristic vision. | 1988-06-18 | German | www.markdigital.com | mark_digital@website.net |
| 6 | Sophia Bronze | A master of bronze sculptures, creating timeless pieces of art. | 1982-09-10 | Greek | www.sophiabronze.com | sophia.bronze@hotmail.com |
| 7 | Chris Watercolorist | A watercolor artist known for capturing the essence of moments. | 1975-11-30 | Australian | www.chriswatercolorist.com | chris_watercolor@artist.org |
| 8 | Miranda Mixed Media | Exploring the intersection of various media for artistic expression. | 1987-04-12 | Canadian | www.mirandamixedmedia.com | miranda.mixed@gmail.com |
| 9 | Leon Renaissance | Reviving the spirit of the Renaissance through classical paintings. | 1984-07-08 | Italian | www.leonrenaissance.com | leon_renaissance@studio.it |
| 10 | Oliver Digital Dreams | Crafting dreamlike digital art that transports viewers to new realms. | 1992-02-25 | Swedish | www.oliverdigitaldreams.com | oliver_digital@dreamland.se |
| NULL | NULL | NULL | NULL | NULL | NULL | NULL |

INSERT INTO user (userid, username, password, email, firstname, lastname, dateofbirth, profilepicture, favoriteartworks)

VALUES

(1, 'art_lover_1', 'secure_password1', 'artlover1@email.com', 'Art', 'Lover1', '1989-03-12', 'profile1.jpg', '2,5,7'),

(2, 'creative_soul', 'myp@ssw0rd', 'creativesoul@email.com', 'Creative', 'Soul', '1995-08-28', 'profile2.jpg', '3,6,9'),

(3, 'gallery_owner', 'gallerypass123', 'owner@email.com', 'Gallery', 'Owner', '1980-12-05', 'profile3.jpg', '1,4,8'),

(4, 'visionary_artist', 'paintingislife', 'artist@email.com', 'Visionary', 'Artist', '1992-05-18', 'profile4.jpg', '5,8,10'),

(5, 'digital_art_enthusiast', 'digitalpass', 'digitalart@email.com', 'Digital', 'Enthusiast', '1987-09-22', 'profile5.jpg', '1,2,7'),

(6, 'sculpture_lover', 'bronzelove', 'sculpturelover@email.com', 'Sculpture', 'Lover', '1984-02-14', 'profile6.jpg', '3,6,9'),

(7, 'watercolor_afficionado', 'colorful@rt', 'watercolor@email.com', 'Watercolor', 'Afficionado', '1991-06-30', 'profile7.jpg', '4,7,10'),

(8, 'mixed_media_admirer', 'mediaadmire', 'mixedmedia@email.com', 'Mixed Media', 'Admirer', '1986-10-08', 'profile8.jpg', '1,5,8'),

(9, 'renaissance_enthusiast', 'classicallove', 'renaissance@email.com', 'Renaissance', 'Enthusiast', '1983-03-25', 'profile9.jpg', '2,6,9'),

(10, 'dreamy_artist', 'dreamart123', 'dreamy@email.com', 'Dreamy', 'Artist', '1990-07-16', 'profile10.jpg', '3,7,10');

| userid | username | password | email | firstname | lastname | dateofbirth | profilepicture | favoriteartworks |
|--------|------------------------|------------------|--------------------------|-------------|-------------|-------------|----------------|------------------|
| 1 | art_lover_1 | secure_password1 | artlover1@email.com | Art | Lover1 | 1989-03-12 | profile1.jpg | 2,5,7 |
| 2 | creative_soul | myp@ssw0rd | creativesoul@email.com | Creative | Soul | 1995-08-28 | profile2.jpg | 3,6,9 |
| 3 | gallery_owner | gallerypass123 | owner@email.com | Gallery | Owner | 1980-12-05 | profile3.jpg | 1,4,8 |
| 4 | visionary_artist | paintingislife | artist@email.com | Visionary | Artist | 1992-05-18 | profile4.jpg | 5,8,10 |
| 5 | digital_art_enthusiast | digitalpass | digitalart@email.com | Digital | Enthusiast | 1987-09-22 | profile5.jpg | 1,2,7 |
| 6 | sculpture_lover | bronzelove | sculpturelover@email.com | Sculpture | Lover | 1984-02-14 | profile6.jpg | 3,6,9 |
| 7 | watercolor_afficionado | colorful@rt | watercolor@email.com | Watercolor | Afficionado | 1991-06-30 | profile7.jpg | 4,7,10 |
| 8 | mixed_media_admirer | mediaadmire | mixedmedia@email.com | Mixed Media | Admirer | 1986-10-08 | profile8.jpg | 1,5,8 |
| 9 | renaissance_enthusiast | classicallove | renaissance@email.com | Renaissance | Enthusiast | 1983-03-25 | profile9.jpg | 2,6,9 |
| 10 | dreamy_artist | dreamart123 | dreamy@email.com | Dreamy | Artist | 1990-07-16 | profile10.jpg | 3,7,10 |
| NULL | NULL | NULL | NULL | NULL | NULL | NULL | NULL | NULL |

INSERT INTO gallery (galleryid, name, description, location, curatorid, openinghours)

VALUES

(1, 'Art Haven', 'A haven for art lovers to explore various genres.', 'Downtown City', 1, '10 AM - 6 PM'),

(2, 'Abstract Expressions', 'A gallery dedicated to the beauty of abstract art.', 'Art District', 2, '11 AM - 7 PM'),

(3, 'Sculpture Sanctuary', 'Showcasing the beauty and diversity of sculptures.', 'Gallery Street', 3, '9 AM - 5 PM'),

(4, 'Ocean Waves Gallery', 'A gallery with a focus on artworks inspired by ocean themes.', 'Coastal Avenue', 4, '10:30 AM - 6:30 PM'),

(5, 'Digital Dreamscape', 'Exploring the limitless possibilities of digital art.', 'Tech Hub', 5, '12 PM - 8 PM'),

(6, 'Bronze Elegance Gallery', 'An elegant space dedicated to bronze sculptures.', 'Sculpture Square', 6, '10 AM - 6 PM'),

(7, 'Watercolor Wonders', 'Celebrating the beauty and fluidity of watercolor paintings.', 'Riverside Plaza', 7, '11 AM - 7 PM'),

(8, 'Mixed Media Marvels', 'A gallery showcasing the marvels of mixed media artworks.', 'Arts Boulevard', 8, '10 AM - 6 PM'),

(9, 'Renaissance Revival Gallery', 'Reviving classical art with a modern touch.', 'Historic District', 9, '9 AM - 5 PM'),

(10, 'Dreamy Art Space', 'A space dedicated to dreamlike and surreal digital art.', 'Dreamers Lane', 10, '12 PM - 8 PM');

| galleryid | name | description | location | curatorid | openinghours |
|-----------|-----------------------------|---|-------------------|-----------|--------------------|
| 1 | Art Haven | A haven for art lovers to explore various genres. | Downtown City | 1 | 10 AM - 6 PM |
| 2 | Abstract Expressions | A gallery dedicated to the beauty of abstract art. | Art District | 2 | 11 AM - 7 PM |
| 3 | Sculpture Sanctuary | Showcasing the beauty and diversity of sculptu... | Gallery Street | 3 | 9 AM - 5 PM |
| 4 | Ocean Waves Gallery | A gallery with a focus on artworks inspired by o... | Coastal Avenue | 4 | 10:30 AM - 6:30 PM |
| 5 | Digital Dreamscape | Exploring the limitless possibilities of digital art. | Tech Hub | 5 | 12 PM - 8 PM |
| 6 | Bronze Elegance Gallery | An elegant space dedicated to bronze sculptures. | Sculpture Square | 6 | 10 AM - 6 PM |
| 7 | Watercolor Wonders | Celebrating the beauty and fluidity of watercolo... | Riverside Plaza | 7 | 11 AM - 7 PM |
| 8 | Mixed Media Marvels | A gallery showcasing the marvels of mixed medi... | Arts Boulevard | 8 | 10 AM - 6 PM |
| 9 | Renaissance Revival Gallery | Reviving classical art with a modern touch. | Historic District | 9 | 9 AM - 5 PM |
| 10 | Dreamy Art Space | A space dedicated to dreamlike and surreal digit... | Dreamers Lane | 10 | 12 PM - 8 PM |
| NULL | NULL | NULL | NULL | NULL | NULL |