**BACKEND CODE**

Create schema pet\_adoption1;

USE pet\_adoption1;CREATE TABLE Shelter ( shelterID INT AUTO\_INCREMENT PRIMARY KEY, name VARCHAR(255) NOT NULL, location VARCHAR(255) NOT NULL);CREATE TABLE Pet ( petID INT AUTO\_INCREMENT PRIMARY KEY, name VARCHAR(255) NOT NULL, species VARCHAR(100) NOT NULL, adoptionStatus VARCHAR(20) NOT NULL, vaccination VARCHAR(255) NOT NULL CHECK (vaccination IN ('done', 'not done')), shelterID INT NOT NULL, FOREIGN KEY (shelterID) REFERENCES Shelter(shelterID) ON DELETE CASCADE);CREATE TABLE Adopter (

adopterID INT AUTO\_INCREMENT PRIMARY KEY,

name VARCHAR(255) NOT NULL,

email VARCHAR(255) NOT NULL

);CREATE TABLE AdoptionApplication (

applicationNumber INT AUTO\_INCREMENT PRIMARY KEY,

date DATE NOT NULL,

petID INT NOT NULL,

adopterID INT NOT NULL,

applicationStatus ENUM('Pending', 'Rejected', 'Approved') DEFAULT 'Pending',

FOREIGN KEY (petID) REFERENCES Pet(petID) ON DELETE CASCADE,

FOREIGN KEY (adopterID) REFERENCES Adopter(adopterID) ON DELETE CASCADE

);

CREATE TABLE admins (

id INT AUTO\_INCREMENT PRIMARY KEY,

username VARCHAR(255) NOT NULL UNIQUE,

password VARCHAR(255) NOT NULL

);

-- Create AdoptionEvents table

CREATE TABLE AdoptionEvents (

eventID INT AUTO\_INCREMENT PRIMARY KEY,

name VARCHAR(255) NOT NULL,

date DATE NOT NULL,

location VARCHAR(255) NOT NULL,

shelterID INT NOT NULL,

FOREIGN KEY (shelterID) REFERENCES Shelter(shelterID) ON DELETE CASCADE

);

--Used **trigger** after insering an application the stautus of the pet is set to pending

DELIMITER //

CREATE TRIGGER UpdateAdoptionStatusToPending

AFTER INSERT ON AdoptionApplication

FOR EACH ROW

BEGIN

UPDATE Pet

SET adoptionStatus = 'pending'

WHERE petID = NEW.petID;

END //

DELIMITER ;

--**view** that is created havind all the application info regarding a pet

CREATE VIEW AdoptionProcessView AS

SELECT

a.applicationNumber,

a.date AS application\_date,

p.petID,

p.name AS pet\_name,

p.species,

p.adoptionStatus,

p.vaccination,

s.name AS shelter\_name,

s.location AS shelter\_location,

a.applicationStatus,

ad.name AS adopter\_name,

ad.email AS adopter\_email

FROM

AdoptionApplication a

JOIN

Pet p ON a.petID = p.petID

JOIN

Shelter s ON p.shelterID = s.shelterID

JOIN

Adopter ad ON a.adopterID = ad.adopterID

ORDER BY

a.date;

-- **procedure created** to approve the adoption application when button is pressed it is called

DELIMITER //

CREATE PROCEDURE ApproveAdoptionApplication(IN applicationNum INT)

BEGIN

-- Declare a variable to store petID

DECLARE petIDVar INT;

-- Select the petID associated with the given applicationNumber

SELECT petID INTO petIDVar

FROM AdoptionApplication

WHERE applicationNumber = applicationNum;

-- Update the application status to 'approved' in AdoptionApplication table

UPDATE AdoptionApplication

SET applicationStatus = 'approved'

WHERE applicationNumber = applicationNum;

-- Update the adoption status to 'adopted' for the pet with the selected petID

UPDATE Pet

SET adoptionStatus = 'adopted'

WHERE petID = petIDVar;

END //

DELIMITER ;

--CALL ApproveAdoptionApplication(?)

**-- procedure** **created** to reject the adoption application when button is pressed it is called

DELIMITER //

CREATE PROCEDURE RejectAdoptionApplication(IN applicationNum INT)

BEGIN

-- Declare a variable to store petID

DECLARE petIDVar INT;

-- Select the petID associated with the given applicationNumber

SELECT petID INTO petIDVar

FROM AdoptionApplication

WHERE applicationNumber = applicationNum;

-- Update the application status to 'rejected' in AdoptionApplication table

UPDATE AdoptionApplication

SET applicationStatus = 'rejected'

WHERE applicationNumber = applicationNum;

-- Update the adoption status to 'available' for the pet with the selected petID

UPDATE Pet

SET adoptionStatus = 'available'

WHERE petID = petIDVar;

END //

DELIMITER ;

--INSERTING VALUES(EXCEPT FOR THE APPLICATION)

-- Inserting data into the Shelter table

INSERT INTO Shelter (name, location) VALUES

('Happy Paws Shelter', '123 Main St'),

('Cozy Critters Rescue', '456 Elm St'),

('Paws and Claws Adoption Center', '789 Oak St'),

('Furry Friends Haven', '101 Maple St'),

('Whiskers and Wags Sanctuary', '555 Pine St');

-- Inserting data into the Pet table

INSERT INTO Pet (name, species, adoptionStatus, vaccination, shelterID) VALUES

('Buddy', 'Dog', 'available', 'done', 1),

('Smokey', 'Cat', 'available', 'done', 2),

('Max', 'Dog', 'available', 'done', 3),

('Luna', 'Cat', 'available', 'done', 4),

('Charlie', 'Dog', 'available', 'done', 5);

-- Inserting data into the Adopter table

INSERT INTO Adopter (name, email) VALUES

('John Smith', 'john@example.com'),

('Emily Johnson', 'emily@example.com'),

('Michael Davis', 'michael@example.com'),

('Sarah Brown', 'sarah@example.com'),

('David Wilson', 'david@example.com');

-- Inserting data into the admins table

INSERT INTO admins (username, password) VALUES

('admin1', 'password1');