

# PET ADOPTION MANAGEMENT SYSTEM

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## Triggers, Procedures & Functions

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## SCHEMA

```
[mysql] > SHOW TABLES;
+-----+
| Tables_in_pet_adoption_db |
+-----+
| AdoptionApplication
| adoptionsummary
| availablepets
| Payment
| Pet
| PetType
| Review
| Shelter
| ShelterWorker
| User
+-----+
10 rows in set (0.01 sec)
```

# Creating a new table for Pet Status logs

```
mysql>
mysql> -- ===== TABLES =====
Query OK, 0 rows affected (0.00 sec)

mysql>
mysql> CREATE TABLE IF NOT EXISTS PetStatusLog (
    ->     log_id INT AUTO_INCREMENT PRIMARY KEY,
    ->     pet_id INT,
    ->     old_status VARCHAR(50),
    ->     new_status VARCHAR(50),
    ->     changed_at TIMESTAMP DEFAULT CURRENT_TIMESTAMP,
    ->     FOREIGN KEY (pet_id) REFERENCES Pet(pet_id) ON DELETE CASCADE
    -> );
Query OK, 0 rows affected (0.01 sec)
```

---

## STORED PROCEDURES

### Q1. AddAdoptionApplication

Write a procedure that inserts a new adoption application if the pet is not already adopted.

If the pet's status is 'Adopted', raise an error 'Cannot apply: pet already adopted.'

```
mysql> DELIMITER //
mysql>
mysql> CREATE PROCEDURE AddAdoptionApplication (
    ->     IN p_user_id INT,
    ->     IN p_pet_id INT,
    ->     IN p_reason TEXT
    -> )
    -> BEGIN
    ->     DECLARE v_status VARCHAR(50);
    ->     SELECT p.status INTO v_status
    ->     FROM pet_adoption_db.Pet p
    ->     WHERE p.pet_id = p_pet_id
    ->     LIMIT 1;
    ->
    ->     IF v_status = 'Adopted' THEN
    ->         SIGNAL SQLSTATE '45000' SET MESSAGE_TEXT = 'Cannot apply: pet already adopted.';
    ->     END IF;
    ->
    ->     INSERT INTO pet_adoption_db.AdoptionApplication (status, reason, approved_by, pet_id, user_id)
    ->     VALUES ('Pending', p_reason, NULL, p_pet_id, p_user_id);
    -> END;
    -> //
```

Query OK, 0 rows affected (0.00 sec)

## Q2. RejectApplication

Create a procedure to mark an application as '**Denied**' and update its reason. Also, refund any related payment not already refunded.

```
mysql> CREATE PROCEDURE RejectApplication (
    ->     IN p_app_id INT,
    ->     IN p_reason TEXT
    -> )
    -> BEGIN
    ->     UPDATE pet_adoption_db.AdoptionApplication
    ->     SET status = 'Denied',
    ->         reason = p_reason
    ->     WHERE adopt_app_id = p_app_id;
    ->
    ->     UPDATE pet_adoption_db.Payment
    ->     SET status = 'Refunded'
    ->     WHERE adoption_app_id = p_app_id AND status <> 'Refunded';
    -> END;
    -> //
```

Query OK, 0 rows affected (0.01 sec)

## Q3. AutoRejectOtherApplications

Write a procedure that automatically rejects all other '**Pending**' applications for the same pet (except the approved one) by calling **RejectApplication**.

```
mysql>
mysql> CREATE PROCEDURE AutoRejectOtherApplications (
    ->     IN p_pet_id INT,
    ->     IN p_exclude_app_id INT
    -> )
    -> BEGIN
    ->     DECLARE done INT DEFAULT 0;
    ->     DECLARE v_app_id INT;
    ->
    ->     DECLARE app_cursor CURSOR FOR
    ->         SELECT adopt_app_id
    ->             FROM pet_adoption_db.AdoptionApplication
    ->             WHERE pet_id = p_pet_id
    ->                 AND status = 'Pending'
    ->                 AND adopt_app_id <> p_exclude_app_id;
    ->
    ->     DECLARE CONTINUE HANDLER FOR NOT FOUND SET done = 1;
    ->
    ->     OPEN app_cursor;
    ->     app_loop: LOOP
    ->         FETCH app_cursor INTO v_app_id;
    ->         IF done THEN
    ->             LEAVE app_loop;
    ->         END IF;
    ->         CALL pet_adoption_db.RejectApplication(
    ->             v_app_id,
    ->             'Automatically rejected since the pet has been adopted.'
    ->         );
    ->     END LOOP;
    ->     CLOSE app_cursor;
    -> END;
    -> //
```

Query OK, 0 rows affected (0.00 sec)

## Q4. ApproveApplication

Develop a procedure that approves an adoption application, updates the pet status to 'Adopted', sets payment status to 'Completed', and calls AutoRejectOtherApplications.

```
mysql>
mysql> CREATE PROCEDURE ApproveApplication (
    >     IN p_app_id INT,
    >     IN p_worker_id INT
    > )
    > BEGIN
    >     DECLARE v_pet_id INT;
    >     DECLARE v_pet_status VARCHAR(50);
    >
    >     SELECT a.pet_id INTO v_pet_id
    >     FROM pet_adoption_db.AdoptionApplication a
    >     WHERE a.adopt_app_id = p_app_id
    >     LIMIT 1;
    >
    >     IF v_pet_id IS NULL THEN
    >         SIGNAL SQLSTATE '45000' SET MESSAGE_TEXT = 'Adoption application not found.';
    >     END IF;
    >
    >     SELECT p.status INTO v_pet_status
    >     FROM pet_adoption_db.Pet p
    >     WHERE p.pet_id = v_pet_id
    >     LIMIT 1;
    >
    >     IF v_pet_status = 'Adopted' THEN
    >         SIGNAL SQLSTATE '45000' SET MESSAGE_TEXT = 'This pet has already been adopted.';
    >     END IF;
    >
    >     UPDATE pet_adoption_db.AdoptionApplication a
    >     SET a.status = 'Approved',
    >         a.approved_by = p_worker_id
    >     WHERE a.adopt_app_id = p_app_id;
    >
    >     UPDATE pet_adoption_db.Payment pay
    >     SET pay.status = 'Completed'
    >     WHERE pay.adoption_app_id = p_app_id AND pay.status <> 'Completed';
    >
    >     UPDATE pet_adoption_db.Pet
    >     SET status = 'Adopted'
    >     WHERE pet_id = v_pet_id;
    >
    >     CALL pet_adoption_db.AutoRejectOtherApplications(v_pet_id, p_app_id);
    > END;
    > //
Query OK, 0 rows affected (0.01 sec)
```

## Q5. RegisterPet

Create a procedure that registers a new pet with details such as name, gender, age, reason, status, shelter ID, and type ID.

```
mysql>
mysql> CREATE PROCEDURE RegisterPet (
    >     IN p_name VARCHAR(100),
    >     IN p_gender ENUM('M','F','Unknown'),
    >     IN p_age INT,
    >     IN p_reason TEXT,
    >     IN p_status ENUM('Available','Adopted','Medical Hold','Reserved'),
    >     IN p_shelter_id INT,
    >     IN p_type_id INT
    > )
    > BEGIN
    >     INSERT INTO pet_adoption_db.Pet (name, gender, age, reason, status, shelter_id, type_id)
    >     VALUES (p_name, p_gender, p_age, p_reason, p_status, p_shelter_id, p_type_id);
    > END;
    > //
Query OK, 0 rows affected (0.00 sec)
```

## Q6. UpdatePaymentStatus

Write a procedure to update the payment status (values: 'Completed', 'Pending', 'Failed', 'Refunded') for a given payment ID.

```
mysql> CREATE PROCEDURE UpdatePaymentStatus (
->     IN p_pay_id INT,
->     IN p_status ENUM('Completed','Pending','Failed','Refunded')
-> )
-> BEGIN
->     UPDATE pet_adoption_db.Payment
->     SET status = p_status
->     WHERE pay_id = p_pay_id;
-> END;
-> //
Query OK, 0 rows affected (0.00 sec)
```

## Q7. GetAdoptedPetsByUsers

Write a procedure that displays all users and their adopted pets where the adoption application status is 'Approved'.

```
mysql> DELIMITER //
mysql>
mysql> CREATE PROCEDURE GetAdoptedPetsByUsers ()
-> BEGIN
->     SELECT
->         u.user_id AS UserID,
->         u.name AS UserName,
->         p.pet_id AS PetID,
->         p.name AS PetName
->     FROM pet_adoption_db.AdoptionApplication a
->     JOIN pet_adoption_db.User u ON a.user_id = u.user_id
->     JOIN pet_adoption_db.Pet p ON a.pet_id = p.pet_id
->     WHERE a.status = 'Approved';
-> END;
-> //
Query OK, 0 rows affected (0.00 sec)

mysql> DELIMITER ;
```

---

# TRIGGERS

## Q1. trg\_update\_pet\_status\_on\_approval

Create an **AFTER UPDATE** trigger that sets the pet's status to '**Adopted**' and payment status to '**Completed**' when an application is approved.

```
mysql>
mysql> -- ===== TRIGGERS =====
Query OK, 0 rows affected (0.00 sec)

mysql>
mysql> DELIMITER //
mysql>
mysql> CREATE TRIGGER trg_update_pet_status_on_approval
-> AFTER UPDATE ON pet_adoption_db.AdoptionApplication
-> FOR EACH ROW
-> BEGIN
->     IF NEW.status = 'Approved' AND OLD.status <> 'Approved' THEN
->         UPDATE pet_adoption_db.Pet
->             SET status = 'Adopted'
->             WHERE pet_id = NEW.pet_id;
->
->         UPDATE pet_adoption_db.Payment
->             SET status = 'Completed'
->             WHERE adoption_app_id = NEW.adopt_app_id AND status <> 'Completed';
->     END IF;
-> END;
-> //
Query OK, 0 rows affected (0.01 sec)
```

## Q2. trg\_log\_pet\_status\_change

Write a **BEFORE UPDATE** trigger that logs every pet status change into **PetStatusLog** with old and new values.

```
mysql>
mysql> CREATE TRIGGER trg_log_pet_status_change
-> BEFORE UPDATE ON pet_adoption_db.Pet
-> FOR EACH ROW
-> BEGIN
->     IF OLD.status <> NEW.status THEN
->         INSERT INTO pet_adoption_db.PetStatusLog (pet_id, old_status, new_status)
->             VALUES (OLD.pet_id, OLD.status, NEW.status);
->     END IF;
-> END;
-> //
Query OK, 0 rows affected (0.00 sec)
```

## Q3. trg\_prevent\_duplicate\_adoption

Create a **BEFORE INSERT** trigger on **AdoptionApplication** that prevents new applications if the pet's status is '**Adopted**'.

```
mysql>
mysql> CREATE TRIGGER trg_prevent_duplicate_adoption
-> BEFORE INSERT ON pet_adoption_db.AdoptionApplication
-> FOR EACH ROW
-> BEGIN
->     DECLARE pet_stat VARCHAR(50);
->     SELECT p.status INTO pet_stat
->     FROM pet_adoption_db.Pet p
->     WHERE p.pet_id = NEW.pet_id
->     LIMIT 1;
->
->     IF pet_stat = 'Adopted' THEN
->         SIGNAL SQLSTATE '45000' SET MESSAGE_TEXT = 'This pet has already been adopted.';
->     END IF;
-> END;
-> //
Query OK, 0 rows affected (0.01 sec)

mysql> DELIMITER ;
mysql>
```

# FUNCTIONS

## Q1. CountAvailablePets

Function that returns the number of '**Available**' pets in a given shelter.

```
mysql>
mysql> -- ===== FUNCTIONS =====
Query OK, 0 rows affected (0.00 sec)

mysql> DELIMITER //
mysql>
mysql> CREATE FUNCTION CountAvailablePets (p_shelter_id INT)
-> RETURNS INT
-> DETERMINISTIC
-> BEGIN
->     DECLARE pet_count INT;
->     SELECT COUNT(*) INTO pet_count
->     FROM pet_adoption_db.Pet
->     WHERE shelter_id = p_shelter_id AND status = 'Available';
->     RETURN pet_count;
-> END;
-> //
Query OK, 0 rows affected (0.00 sec)
```

## Q2. TotalAdoptionsByUser

Function that returns how many pets a user has successfully adopted (**status = 'Approved'**).

```
mysql>
mysql> CREATE FUNCTION TotalAdoptionsByUser (p_user_id INT)
-> RETURNS INT
-> DETERMINISTIC
-> BEGIN
->     DECLARE total_adopted INT;
->     SELECT COUNT(*) INTO total_adopted
->     FROM pet_adoption_db.AdoptionApplication
->     WHERE user_id = p_user_id AND status = 'Approved';
->     RETURN total_adopted;
-> END;
-> //
Query OK, 0 rows affected (0.01 sec)
```

## Q3. AvgPetAgeInShelter

Function that returns the average age of all pets in a specified shelter.

```
mysql>
mysql> CREATE FUNCTION AvgPetAgeInShelter (p_shelter_id INT)
-> RETURNS DECIMAL(5,2)
-> DETERMINISTIC
-> BEGIN
->     DECLARE avg_age DECIMAL(5,2);
->     SELECT AVG(age) INTO avg_age
->     FROM pet_adoption_db.Pet
->     WHERE shelter_id = p_shelter_id;
->     RETURN avg_age;
-> END;
-> //
Query OK, 0 rows affected (0.00 sec)

mysql> DELIMITER ;
mysql>
```

# TEST

```

mysql> -- RegisterPet Procedure
Query OK, 0 rows affected (0.00 sec)

mysql> SELECT * FROM Pet;
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| pet_id | name | gender | age | reason | status | shelter_id | type_id | created_at | updated_at |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| 1 | Yuki | M | 3 | Owner relocation | Adopted | 1 | 1 | 2025-10-31 10:44:54 | 2025-10-31 10:44:54 |
| 2 | Milo | M | 2 | Found stray | Adopted | 2 | 6 | 2025-10-31 10:44:54 | 2025-10-31 10:44:54 |
| 3 | Luna | F | 1 | Abandoned kitten | Available | 1 | 7 | 2025-10-31 10:44:54 | 2025-10-31 10:44:54 |
| 4 | Snowball | F | 4 | Health issues | Medical Hold | 3 | 5 | 2025-10-31 10:44:54 | 2025-10-31 10:44:54 |
| 5 | Zoomie | M | 2 | Rescued stray cat | Available | 2 | 3 | 2025-10-31 10:44:54 | 2025-10-31 10:44:54 |
| 6 | Coco | M | 1 | Owner could not care for it | Available | 3 | 4 | 2025-10-31 10:44:54 | 2025-10-31 10:44:54 |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
6 rows in set (0.00 sec)

mysql> CALL RegisterPet('Buddy', 'M', 3, 'Friendly and playful', 'Available', 1, 1);
Query OK, 1 row affected (0.00 sec)

mysql> SELECT * FROM Pet;
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| pet_id | name | gender | age | reason | status | shelter_id | type_id | created_at | updated_at |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| 1 | Yuki | M | 3 | Owner relocation | Adopted | 1 | 1 | 2025-10-31 10:44:54 | 2025-10-31 10:44:54 |
| 2 | Milo | M | 2 | Found stray | Adopted | 2 | 6 | 2025-10-31 10:44:54 | 2025-10-31 10:44:54 |
| 3 | Luna | F | 1 | Abandoned kitten | Available | 1 | 7 | 2025-10-31 10:44:54 | 2025-10-31 10:44:54 |
| 4 | Snowball | F | 4 | Health issues | Medical Hold | 3 | 5 | 2025-10-31 10:44:54 | 2025-10-31 10:44:54 |
| 5 | Zoomie | M | 2 | Rescued stray cat | Available | 2 | 3 | 2025-10-31 10:44:54 | 2025-10-31 10:44:54 |
| 6 | Coco | M | 1 | Owner could not care for it | Available | 3 | 4 | 2025-10-31 10:44:54 | 2025-10-31 10:44:54 |
| 7 | Buddy | M | 3 | Friendly and playful | Available | 1 | 1 | 2025-10-31 10:46:13 | 2025-10-31 10:46:13 |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
7 rows in set (0.00 sec)

```

```

mysql> SELECT * FROM ADOPTIONAPPLICATION;
+-----+-----+-----+-----+-----+-----+-----+-----+
| adopt_app_id | date | status | reason | approved_by | pet_id | user_id | created_at |
+-----+-----+-----+-----+-----+-----+-----+-----+
| 1 | 2025-10-31 11:04:42 | Pending | Want to adopt a cat for my family | NULL | 5 | 4 | 2025-10-31 11:04:42 |
| 2 | 2025-10-31 11:04:42 | Approved | Looking for a friendly dog | 1 | 1 | 3 | 2025-10-31 11:04:42 |
| 3 | 2025-10-31 11:04:42 | Pending | Not enough space at home | NULL | 2 | 7 | 2025-10-31 11:04:42 |
| 4 | 2025-10-31 11:04:42 | Pending | Want a small pet for my apartment | NULL | 3 | 8 | 2025-10-31 11:04:42 |
| 5 | 2025-10-31 11:04:42 | Approved | Need a companionion | 2 | 2 | 9 | 2025-10-31 11:04:42 |
+-----+-----+-----+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)

mysql> CALL AddAdoptionApplication(9, 7, 'Looking to adopt a friendly dog');
Query OK, 1 row affected (0.00 sec)

mysql> SELECT * FROM AdoptionApplication;
+-----+-----+-----+-----+-----+-----+-----+-----+
| adopt_app_id | date | status | reason | approved_by | pet_id | user_id | created_at |
+-----+-----+-----+-----+-----+-----+-----+-----+
| 1 | 2025-10-31 11:04:42 | Pending | Want to adopt a cat for my family | NULL | 5 | 4 | 2025-10-31 11:04:42 |
| 2 | 2025-10-31 11:04:42 | Approved | Looking for a friendly dog | 1 | 1 | 3 | 2025-10-31 11:04:42 |
| 3 | 2025-10-31 11:04:42 | Pending | Not enough space at home | NULL | 2 | 7 | 2025-10-31 11:04:42 |
| 4 | 2025-10-31 11:04:42 | Pending | Want a small pet for my apartment | NULL | 3 | 8 | 2025-10-31 11:04:42 |
| 5 | 2025-10-31 11:04:42 | Approved | Need a companionion | 2 | 2 | 9 | 2025-10-31 11:04:42 |
| 7 | 2025-10-31 11:09:16 | Pending | Looking to adopt a friendly dog | NULL | 7 | 9 | 2025-10-31 11:09:16 |
+-----+-----+-----+-----+-----+-----+-----+-----+
6 rows in set (0.00 sec)

```

```

mysql> -- Prevent Duplicate Adoption Trigger
Query OK, 0 rows affected (0.00 sec)

mysql> INSERT INTO AdoptionApplication (status, reason, pet_id, user_id)
| -> VALUES ('Pending', 'Trying to adopt an already adopted pet', 1, 7);
ERROR 1644 (45000): This pet has already been adopted.

```

```

mysql> CALL GetAdoptedPetsByUsers();
+-----+-----+-----+
| UserID | UserName | PetID | PetName |
+-----+-----+-----+
| 4 | Suchitra Shankar | 5 | Zoomie |
| 3 | Angad Bhalla | 1 | Yuki |
| 8 | Taylor Swift | 3 | Luna |
| 9 | Harry Styles | 2 | Milo |
+-----+-----+-----+
4 rows in set (0.00 sec)

Query OK, 0 rows affected (0.00 sec)

```

```

mysql> -- AutoRejectOtherApplications Trigger
Query OK, 0 rows affected (0.00 sec)

mysql> SELECT * FROM AdoptionApplication WHERE pet_id = 3;
+-----+-----+-----+-----+
| adopt_app_id | date | status | reason |
+-----+-----+-----+-----+
| 4 | 2025-10-31 11:19:25 | Pending | Want a small pet for my apartment |
| 7 | 2025-10-31 11:20:31 | Pending | Love small cats |
| 8 | 2025-10-31 11:20:32 | Pending | Perfect for family |
+-----+-----+-----+-----+
3 rows in set (0.00 sec)

mysql> SELECT * FROM Pet WHERE pet_id = 3;
+-----+-----+-----+-----+-----+-----+-----+-----+
| pet_id | name | gender | age | reason | status | shelter_id | type_id | created_at | updated_at |
+-----+-----+-----+-----+-----+-----+-----+-----+
| 3 | Luna | F | 1 | Abandoned kitten | Available | 1 | 7 | 2025-10-31 11:19:25 | 2025-10-31 11:19:25 |
+-----+-----+-----+-----+-----+-----+-----+-----+
1 row in set (0.01 sec)

mysql> CALL ApproveApplication(4, 5);
Query OK, 0 rows affected (0.01 sec)

mysql> SELECT * FROM AdoptionApplication WHERE pet_id = 3;
+-----+-----+-----+-----+
| adopt_app_id | date | status | reason | approved_by | pet_id | user_id | created_at |
+-----+-----+-----+-----+
| 4 | 2025-10-31 11:19:25 | Approved | Want a small pet for my apartment | 5 | 3 | 8 | 2025-10-31 11:19:25 |
| 7 | 2025-10-31 11:20:31 | Denied | Automatically rejected since the pet has been adopted. | NULL | 3 | 7 | 2025-10-31 11:20:31 |
| 8 | 2025-10-31 11:20:32 | Denied | Automatically rejected since the pet has been adopted. | NULL | 3 | 9 | 2025-10-31 11:20:32 |
+-----+-----+-----+-----+
3 rows in set (0.00 sec)

mysql> SELECT * FROM Pet WHERE pet_id = 3;
+-----+-----+-----+-----+-----+-----+-----+-----+
| pet_id | name | gender | age | reason | status | shelter_id | type_id | created_at | updated_at |
+-----+-----+-----+-----+-----+-----+-----+-----+
| 3 | Luna | F | 1 | Abandoned kitten | Adopted | 1 | 7 | 2025-10-31 11:19:25 | 2025-10-31 11:22:06 |
+-----+-----+-----+-----+-----+-----+-----+-----+
1 row in set (0.00 sec)

mysql> SELECT * FROM PetStatusLog WHERE pet_id = 3;
+-----+-----+-----+-----+
| log_id | pet_id | old_status | new_status | changed_at |
+-----+-----+-----+-----+
| 2 | 3 | Available | Adopted | 2025-10-31 11:22:06 |
+-----+-----+-----+-----+
1 row in set (0.00 sec)

```

```

mysql> -- Approve a pending application and auto trigger adoption + reject others
Query OK, 0 rows affected (0.00 sec)

mysql> SELECT * FROM Pet WHERE pet_id = 5; -- Zoomie
+-----+-----+-----+-----+
| pet_id | name | gender | age | reason | status | shelter_id | type_id | created_at | updated_at |
+-----+-----+-----+-----+
| 5 | Zoomie | M | 2 | Rescued stray cat | Available | 2 | 3 | 2025-10-31 11:19:25 | 2025-10-31 11:19:25 |
+-----+-----+-----+-----+
1 row in set (0.00 sec)

mysql> SELECT * FROM AdoptionApplication WHERE pet_id = 5;
+-----+-----+-----+-----+
| adopt_app_id | date | status | reason | approved_by | pet_id | user_id | created_at |
+-----+-----+-----+-----+
| 1 | 2025-10-31 11:19:25 | Pending | Want to adopt a cat for my family | NULL | 5 | 4 | 2025-10-31 11:19:25 |
+-----+-----+-----+-----+
1 row in set (0.00 sec)

mysql> SELECT * FROM Payment WHERE adoption_app_id IN (SELECT adopt_app_id FROM AdoptionApplication WHERE pet_id = 5);
+-----+-----+-----+-----+-----+-----+
| pay_id | method | date | amount | status | user_id | adoption_app_id | created_at |
+-----+-----+-----+-----+-----+-----+
| 2 | UPI | 2025-10-31 11:19:25 | 200.00 | Pending | 4 | 1 | 2025-10-31 11:19:25 |
+-----+-----+-----+-----+-----+-----+
1 row in set (0.00 sec)

mysql> CALL ApproveApplication(1, 2);
Query OK, 0 rows affected (0.00 sec)

mysql> SELECT * FROM Pet WHERE pet_id = 5; -- Zoomie
+-----+-----+-----+-----+-----+-----+-----+-----+
| pet_id | name | gender | age | reason | status | shelter_id | type_id | created_at | updated_at |
+-----+-----+-----+-----+-----+-----+-----+-----+
| 5 | Zoomie | M | 2 | Rescued stray cat | Adopted | 2 | 3 | 2025-10-31 11:19:25 | 2025-10-31 11:19:45 |
+-----+-----+-----+-----+-----+-----+-----+-----+
1 row in set (0.00 sec)

mysql> SELECT * FROM AdoptionApplication WHERE pet_id = 5;
+-----+-----+-----+-----+
| adopt_app_id | date | status | reason | approved_by | pet_id | user_id | created_at |
+-----+-----+-----+-----+
| 1 | 2025-10-31 11:19:25 | Approved | Want to adopt a cat for my family | 2 | 5 | 4 | 2025-10-31 11:19:25 |
+-----+-----+-----+-----+
1 row in set (0.00 sec)

mysql> SELECT * FROM Payment WHERE adoption_app_id IN (SELECT adopt_app_id FROM AdoptionApplication WHERE pet_id = 5);
+-----+-----+-----+-----+-----+-----+
| pay_id | method | date | amount | status | user_id | adoption_app_id | created_at |
+-----+-----+-----+-----+-----+-----+
| 2 | UPI | 2025-10-31 11:19:25 | 200.00 | Completed | 4 | 1 | 2025-10-31 11:19:25 |
+-----+-----+-----+-----+-----+-----+
1 row in set (0.00 sec)

mysql> SELECT * FROM PetStatusLog WHERE pet_id = 5;
+-----+-----+-----+-----+
| log_id | pet_id | old_status | new_status | changed_at |
+-----+-----+-----+-----+
| 1 | 5 | Available | Adopted | 2025-10-31 11:19:45 |
+-----+-----+-----+-----+
1 row in set (0.00 sec)

```

```

mysql> -- RejectApplication Procedure
Query OK, 0 rows affected (0.00 sec)

mysql> SELECT * FROM AdoptionApplication WHERE adopt_app_id = 3;
+-----+-----+-----+-----+-----+-----+
| adopt_app_id | date | status | reason | approved_by | pet_id | user_id | created_at |
+-----+-----+-----+-----+-----+-----+
| 3 | 2025-10-31 11:19:25 | Pending | Not enough space at home | NULL | 2 | 7 | 2025-10-31 11:19:25 |
+-----+-----+-----+-----+-----+-----+
1 row in set (0.00 sec)

mysql> SELECT * FROM Payment WHERE adoption_app_id = 3;
+-----+-----+-----+-----+-----+-----+
| pay_id | method | date | amount | status | user_id | adoption_app_id | created_at |
+-----+-----+-----+-----+-----+-----+
| 3 | PayPal | 2025-10-31 11:19:25 | 800.00 | Completed | 8 | 3 | 2025-10-31 11:19:25 |
+-----+-----+-----+-----+-----+-----+
1 row in set (0.00 sec)

mysql> CALL RejectApplication(3, 'User withdrew application');
Query OK, 1 row affected (0.01 sec)

mysql> SELECT * FROM AdoptionApplication WHERE adopt_app_id = 3;
+-----+-----+-----+-----+-----+-----+
| adopt_app_id | date | status | reason | approved_by | pet_id | user_id | created_at |
+-----+-----+-----+-----+-----+-----+
| 3 | 2025-10-31 11:19:25 | Denied | User withdrew application | NULL | 2 | 7 | 2025-10-31 11:19:25 |
+-----+-----+-----+-----+-----+-----+
1 row in set (0.00 sec)

mysql> SELECT * FROM Payment WHERE adoption_app_id = 3;
+-----+-----+-----+-----+-----+-----+
| pay_id | method | date | amount | status | user_id | adoption_app_id | created_at |
+-----+-----+-----+-----+-----+-----+
| 3 | PayPal | 2025-10-31 11:19:25 | 800.00 | Refunded | 8 | 3 | 2025-10-31 11:19:25 |
+-----+-----+-----+-----+-----+-----+
1 row in set (0.00 sec)

```

```

mysql> -- UpdatePaymentStatus Procedure
Query OK, 0 rows affected (0.00 sec)

mysql> SELECT * FROM Payment WHERE pay_id = 2;
+-----+-----+-----+-----+-----+-----+
| pay_id | method | date | amount | status | user_id | adoption_app_id | created_at |
+-----+-----+-----+-----+-----+-----+
| 2 | UPI | 2025-10-31 11:19:25 | 200.00 | Completed | 4 | 1 | 2025-10-31 11:19:25 |
+-----+-----+-----+-----+-----+-----+
1 row in set (0.00 sec)

mysql> CALL UpdatePaymentStatus(2, 'Completed');
Query OK, 0 rows affected (0.00 sec)

mysql> SELECT * FROM Payment WHERE pay_id = 2;
+-----+-----+-----+-----+-----+-----+
| pay_id | method | date | amount | status | user_id | adoption_app_id | created_at |
+-----+-----+-----+-----+-----+-----+
| 2 | UPI | 2025-10-31 11:19:25 | 200.00 | Completed | 4 | 1 | 2025-10-31 11:19:25 |
+-----+-----+-----+-----+-----+-----+
1 row in set (0.00 sec)

```

```

mysql> -- Pet Status Log Trigger
Query OK, 0 rows affected (0.00 sec)

mysql> SELECT * FROM PetStatusLog;
+-----+-----+-----+-----+-----+
| log_id | pet_id | old_status | new_status | changed_at |
+-----+-----+-----+-----+-----+
| 1 | 5 | Available | Adopted | 2025-10-31 11:19:45 |
| 2 | 3 | Available | Adopted | 2025-10-31 11:22:06 |
+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)

mysql> UPDATE Pet SET status = 'Medical Hold' WHERE pet_id = 6;
Query OK, 1 row affected (0.00 sec)
Rows matched: 1 Changed: 1 Warnings: 0

mysql> SELECT * FROM PetStatusLog;
+-----+-----+-----+-----+-----+
| log_id | pet_id | old_status | new_status | changed_at |
+-----+-----+-----+-----+-----+
| 1 | 5 | Available | Adopted | 2025-10-31 11:19:45 |
| 2 | 3 | Available | Adopted | 2025-10-31 11:22:06 |
| 3 | 6 | Available | Medical Hold | 2025-10-31 11:24:27 |
+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)

```

```

mysql> -- CountAvailablePets
Query OK, 0 rows affected (0.00 sec)

mysql> SELECT CountAvailablePets(1) AS AvailablePets_In_Shelter1;
+-----+
| AvailablePets_In_Shelter1 |
+-----+
| 1 |
+-----+
1 row in set (0.00 sec)

mysql>
mysql> -- TotalAdoptionsByUser
Query OK, 0 rows affected (0.00 sec)

mysql> SELECT TotalAdoptionsByUser(3) AS Total_Adoptions_By_Angad;
+-----+
| Total_Adoptions_By_Angad |
+-----+
| 1 |
+-----+
1 row in set (0.00 sec)

mysql>
mysql> -- AvgPetAgeInShelter
Query OK, 0 rows affected (0.00 sec)

mysql> SELECT AvgPetAgeInShelter(1) AS Avg_Age_Shelter1;
+-----+
| Avg_Age_Shelter1 |
+-----+
| 2.33 |
+-----+
1 row in set (0.00 sec)

```