

Database Schema for ASTA Blog System

1. Users Table:

```
CREATE TABLE users (  
    id INT AUTO_INCREMENT PRIMARY KEY,  
    username VARCHAR(50) NOT NULL UNIQUE,  
    email VARCHAR(100) NOT NULL UNIQUE,  
    password VARCHAR(255) NOT NULL,  
    full_name VARCHAR(100),  
    profile_picture VARCHAR(255),  
    bio TEXT,  
    location VARCHAR(100),  
    is_admin BOOLEAN DEFAULT FALSE,  
    created_at TIMESTAMP DEFAULT CURRENT_TIMESTAMP,  
    updated_at    TIMESTAMP    DEFAULT    CURRENT_TIMESTAMP    ON    UPDATE  
CURRENT_TIMESTAMP  
);
```

2. Posts Table:

```
CREATE TABLE posts (  
    id INT AUTO_INCREMENT PRIMARY KEY,  
    title VARCHAR(255) NOT NULL,  
    body TEXT NOT NULL,  
    image VARCHAR(255),  
    user_id INT NOT NULL,  
    created_at TIMESTAMP DEFAULT CURRENT_TIMESTAMP,
```

```
        updated_at    TIMESTAMP    DEFAULT    CURRENT_TIMESTAMP    ON    UPDATE
CURRENT_TIMESTAMP,

        FOREIGN KEY (user_id) REFERENCES users(id) ON DELETE CASCADE

);
```

3. Comments Table:

```
CREATE TABLE comments (

    id INT AUTO_INCREMENT PRIMARY KEY,

    post_id INT NOT NULL,

    user_id INT NOT NULL,

    comment TEXT NOT NULL,

    parent_comment_id INT DEFAULT NULL,

    created_at TIMESTAMP DEFAULT CURRENT_TIMESTAMP,

    FOREIGN KEY (post_id) REFERENCES posts(id) ON DELETE CASCADE,

    FOREIGN KEY (user_id) REFERENCES users(id) ON DELETE CASCADE,

    FOREIGN KEY (parent_comment_id) REFERENCES comments(id) ON DELETE CASCADE

);
```

4. Reactions Table:

```
CREATE TABLE reactions (

    id INT AUTO_INCREMENT PRIMARY KEY,

    post_id INT NOT NULL,

    user_id INT NOT NULL,

    reaction_type ENUM('like', 'dislike') NOT NULL,

    created_at TIMESTAMP DEFAULT CURRENT_TIMESTAMP,

    FOREIGN KEY (post_id) REFERENCES posts(id) ON DELETE CASCADE,

    FOREIGN KEY (user_id) REFERENCES users(id) ON DELETE CASCADE,
```

```
    UNIQUE (post_id, user_id)
);
```

5. Admin Actions Table:

```
CREATE TABLE admin_actions (
    id INT AUTO_INCREMENT PRIMARY KEY,
    admin_id INT NOT NULL,
    action_type VARCHAR(255) NOT NULL,
    target_id INT,
    target_type ENUM('user', 'post', 'comment') NOT NULL,
    action_timestamp TIMESTAMP DEFAULT CURRENT_TIMESTAMP,
    FOREIGN KEY (admin_id) REFERENCES users(id) ON DELETE CASCADE
);
```

6. Header Images Table:

```
CREATE TABLE header_images (
    id INT AUTO_INCREMENT PRIMARY KEY,
    image_path VARCHAR(255) NOT NULL,
    uploaded_by INT NOT NULL,
    uploaded_at TIMESTAMP DEFAULT CURRENT_TIMESTAMP,
    FOREIGN KEY (uploaded_by) REFERENCES users(id) ON DELETE CASCADE
);
```