Guide for Bank Transaction Management System in Laravel

1. Set Up Laravel Project

First, ensure you have Laravel installed. If not, you can install it using Composer:

```
composer create-project --prefer-dist laravel/laravel bankTransactionSystem
```

2. Create Database and Migration

Create a migration for the transactions table. Run the following command:

```
php artisan make:migration create_transactions_table
```

Then, in the migration file, define the schema:

```php
// database/migrations/xxxx_xx_xx_xxxxxx_create_transactions_table.php
use Illuminate\Database\Migrations\Migration;
use Illuminate\Database\Schema\Blueprint;
use Illuminate\Support\Facades\Schema;

class CreateTransactionsTable extends Migration
{
    public function up()
    {
        Schema::create('transactions', function (Blueprint $table) {
            $table->id();
            $table->string('employee_name');
```

```php
            $table->string('sender_name');

            $table->string('receiver_name');

            $table->string('sender_account');

            $table->string('receiver_account');

            $table->decimal('amount', 15, 2);

            $table->timestamps();

        });

    }


    public function down()

    {

        Schema::dropIfExists('transactions');

    }

}
```

3. Create Model

Create a model for the Transaction:

php artisan make:model Transaction

The model will look like this:

php

// app/Models/Transaction.php

namespace App\Models;

use Illuminate\Database\Eloquent\Factories\HasFactory;

```php
use Illuminate\Database\Eloquent\Model;

class Transaction extends Model
{
    use HasFactory;

    protected $fillable = [
        'employee_name',
        'sender_name',
        'receiver_name',
        'sender_account',
        'receiver_account',
        'amount',
    ];
}
```

4. Create Controller

Create a controller to handle the transactions:

php artisan make:controller TransactionController

In the controller, define the following methods:

```php
php
// app/Http/Controllers/TransactionController.php
namespace App\Http\Controllers;
```

```php
use App\Models\Transaction;

use Illuminate\Http\Request;


class TransactionController extends Controller

{

    public function index()

    {

        $transactions = Transaction::all();

        $totalAmount = Transaction::sum('amount');

        $totalCount = Transaction::count();


        return view('transactions.index', compact('transactions', 'totalAmount', 'totalCount'));

    }


    public function create()

    {

        return view('transactions.create');

    }


    public function store(Request $request)

    {

        $request->validate([

            'employee_name' => 'required|string|max:255',

            'sender_name' => 'required|string|max:255',

            'receiver_name' => 'required|string|max:255',

            'sender_account' => 'required|string|max:255',
```

```php
            'receiver_account' => 'required|string|max:255',

            'amount' => 'required|numeric',

        ]);


        Transaction::create($request->all());


        return redirect()->route('transactions.index');

}


public function edit($id)

{

    $transaction = Transaction::findOrFail($id);

    return view('transactions.edit', compact('transaction'));

}


public function update(Request $request, $id)

{

    $request->validate([

        'employee_name' => 'required|string|max:255',

        'sender_name' => 'required|string|max:255',

        'receiver_name' => 'required|string|max:255',

        'sender_account' => 'required|string|max:255',

        'receiver_account' => 'required|string|max:255',

        'amount' => 'required|numeric',

    ]);
```

```php
        $transaction = Transaction::findOrFail($id);

        $transaction->update($request->all());


        return redirect()->route('transactions.index');

    }


    public function destroy($id)

    {

        $transaction = Transaction::findOrFail($id);

        $transaction->delete();


        return redirect()->route('transactions.index');

    }

}
```

5. Create Routes

In the routes/web.php file, define routes for the transactions:

php

```php
// routes/web.php

use App\Http\Controllers\TransactionController;


Route::resource('transactions', TransactionController::class);
```

6. Create Views

Create views to display and manage the transactions.

For example:

php

```
<!-- resources/views/transactions/index.blade.php -->


<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

    <meta name="viewport" content="width=device-width, initial-scale=1.0">

    <title>Bank Transactions</title>

</head>

<body>

    <h1>Bank Transactions</h1>


    <a href="{{ route('transactions.create') }}">Add New Transaction</a>


    <table>

        <thead>

            <tr>

                <th>Employee Name</th>

                <th>Sender Name</th>

                <th>Receiver Name</th>

                <th>Sender Account</th>

                <th>Receiver Account</th>
```

```html
            <th>Amount</th>

            <th>Actions</th>

        </tr>

    </thead>

    <tbody>

        @foreach($transactions as $transaction)

            <tr>

                <td>{{ $transaction->employee_name }}</td>

                <td>{{ $transaction->sender_name }}</td>

                <td>{{ $transaction->receiver_name }}</td>

                <td>{{ $transaction->sender_account }}</td>

                <td>{{ $transaction->receiver_account }}</td>

                <td>{{ $transaction->amount }}</td>

                <td>

                    <a href="{{ route('transactions.edit', $transaction->id) }}">Edit</a>

                    <form action="{{ route('transactions.destroy', $transaction->id) }}" method="POST" style="display:inline;">

                        @csrf

                        @method('DELETE')

                        <button type="submit">Delete</button>

                    </form>

                </td>

            </tr>

        @endforeach

    </tbody>

</table>
```

```html
    <p>Total Transactions: {{ $totalCount }}</p>

    <p>Total Amount: {{ $totalAmount }}</p>

</body>

</html>
```