

## 1. Diseño de la Base de Datos

Se necesitan varias tablas para representar las relaciones entre administradores, grupos de pre-IPO, gestores y clientes. Aquí hay un esquema básico:

- `users` : Tabla para todos los usuarios del sistema (administradores, gestores, clientes).

- `id`

- `name`

- `email`

- `password`

- `role` (admin, manager, client)

- `preipo\_groups` : Tabla para los grupos de pre-IPO.

- `id`

- `name`

- `description`

- `created\_by` (foreign key a `users.id`)

- `managers` : Tabla para los gestores de banca.

- `id`

- `user\_id` (foreign key a `users.id`)

- `bank\_name`

- `clients` : Tabla para los clientes.

- `id`

- `user\_id` (foreign key a `users.id`)

- `manager\_id` (foreign key a `managers.id`)
  
- `group\_manager` : Tabla pivot para la relación muchos a muchos entre grupos de pre-IPO y gestores.
- `id`
- `group\_id` (foreign key a `preipo\_groups.id`)
- `manager\_id` (foreign key a `managers.id`)
  
- `investments` : Tabla para las inversiones de los clientes.
- `id`
- `client\_id` (foreign key a `clients.id`)
- `group\_id` (foreign key a `preipo\_groups.id`)
- `amount`
- `status`

## 2. Modelos de Eloquent

Se deben crear modelos para cada tabla mencionada:

```

` `` ` php
// app/Models/User.php
namespace App\Models;

use Illuminate\Foundation\Auth\User as Authenticatable;
use Illuminate\Notifications\Notifiable;

class User extends Authenticatable
{
    use Notifiable;

```

```
protected $fillable = [
    'name', 'email', 'password', 'role',
];

protected $hidden = [
    'password', 'remember_token',
];

public function manager()
{
    return $this->hasOne(Manager::class);
}

public function client()
{
    return $this->hasOne(Client::class);
}
}

// app/Models/PreipoGroup.php
namespace App\Models;

use Illuminate\Database\Eloquent\Factories\HasFactory;
use Illuminate\Database\Eloquent\Model;

class PreipoGroup extends Model
{
```

```
use HasFactory;

protected $fillable = ['name', 'description', 'created_by'];

public function managers()
{
    return $this->belongsToMany(Manager::class, 'group_manager');
}
}
```

```
// app/Models/Manager.php
```

```
namespace App\Models;
```

```
use Illuminate\Database\Eloquent\Factories\HasFactory;
```

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

```
class Manager extends Model
```

```
{
```

```
    use HasFactory;
```

```
    protected $fillable = ['user_id', 'bank_name'];
```

```
    public function user()
```

```
    {
```

```
        return $this->belongsTo(User::class);
```

```
    }
```

```
    public function clients()
```

```
{  
    return $this->hasMany(Client::class);  
}  
  
public function groups()  
{  
    return $this->belongsToMany(PreipoGroup::class, 'group_manager');  
}  
}
```

// app/Models/Client.php

namespace App\Models;

use Illuminate\Database\Eloquent\Factories\HasFactory;

use Illuminate\Database\Eloquent\Model;

class Client extends Model

```
{  
    use HasFactory;  
  
    protected $fillable = ['user_id', 'manager_id'];
```

```
    public function user()  
    {  
        return $this->belongsTo(User::class);  
    }
```

```
    public function manager()
```

```

    {
        return $this->belongsTo(Manager::class);
    }

    public function investments()
    {
        return $this->hasMany(Investment::class);
    }
}

// app/Models/Investment.php
namespace App\Models;

use Illuminate\Database\Eloquent\Factories\HasFactory;
use Illuminate\Database\Eloquent\Model;

class Investment extends Model
{
    use HasFactory;

    protected $fillable = ['client_id', 'group_id', 'amount', 'status'];

    public function client()
    {
        return $this->belongsTo(Client::class);
    }

    public function group()

```

```

    {
        return $this->belongsTo(PreipoGroup::class);
    }
}
```

```

### ### 3. Controladores

Los controladores manejarán las operaciones CRUD para los diferentes modelos. Aquí hay un ejemplo para el controlador de grupos de pre-IPO:

```

```php
// app/Http/Controllers/PreipoGroupController.php

namespace App\Http\Controllers;

use Illuminate\Http\Request;
use App\Models\PreipoGroup;
use App\Models\Manager;

class PreipoGroupController extends Controller
{
    public function index()
    {
        $groups = PreipoGroup::all();
        return view('preipo_groups.index', compact('groups'));
    }

    public function create()

```

```

{
    return view('preipo_groups.create');
}

public function store(Request $request)
{
    $validated = $request->validate([
        'name' => 'required|string|max:255',
        'description' => 'nullable|string',
    ]);

    $group = PreipoGroup::create([
        'name' => $validated['name'],
        'description' => $validated['description'],
        'created_by' => auth()->id(),
    ]);

    return redirect()->route('preipo_groups.index')->with('success', 'Group created successfully.');
```

```

    }

    public function show(PreipoGroup $preipoGroup)
    {
        return view('preipo_groups.show', compact('preipoGroup'));
    }

    public function edit(PreipoGroup $preipoGroup)
    {

```



```

        return view('preipo_groups.edit', compact('preipoGroup'));
    }

    public function update(Request $request, PreipoGroup $preipoGroup)
    {
        $validated = $request->validate([
            'name' => 'required|string|max:255',
            'description' => 'nullable|string',
        ]);

        $preipoGroup->update($validated);

        return redirect()->route('preipo_groups.index')->with('success', 'Group updated
successfully.');
```

```

    }

    public function destroy(PreipoGroup $preipoGroup)
    {
        $preipoGroup->delete();

        return redirect()->route('preipo_groups.index')->with('success', 'Group deleted
successfully.');
```

```

    }

    public function addManager(Request $request, PreipoGroup $preipoGroup)
    {
        $validated = $request->validate([
            'manager_id' => 'required|exists:managers,id',
        ]);

```

```

$preipoGroup->managers()->attach($validated['manager_id']);

    return redirect()->route('preipo_groups.show', $preipoGroup)->with('success',
'Manager added successfully.');
```

```

    }
}
...

```

### ### 4. Rutas

Definir las rutas necesarias en `routes/web.php` :

```

` `` `php
use App\Http\Controllers\PreipoGroupController;

Route::middleware(['auth'])->group(function () {
    Route::resource('preipo_groups', PreipoGroupController::class);

    Route::post('preipo_groups/{preipoGroup}/add_manager',
[PreipoGroupController::class, 'addManager'])-
>name('preipo_groups.add_manager');
});
...

```

### ### 5. Vistas

Crear las vistas necesarias en `resources/views/preipo\_groups/` para las operaciones CRUD y la gestión de gestores.

### ### 6. Middleware y Autorización

Agregar middleware para garantizar que solo los administradores puedan crear y gestionar grupos de pre-IPO:

```
```php
// app/Http/Middleware/CheckAdmin.php

namespace App\Http\Middleware;

use Closure;
use Illuminate\Http\Request;
use Illuminate\Support\Facades\Auth;

class CheckAdmin
{
    public function handle(Request $request, Closure $next)
    {
        if (Auth::check() && Auth::user()->role === 'admin') {
            return $next($request);
        }

        return redirect('/')->with('error', 'Access denied.');
```

  

```
    }
}

// En Kernel.php, registrar el middleware
protected $routeMiddleware = [

    // ...

    'admin' => \App\Http\Middleware\CheckAdmin::class,
```

];

...;