

Laravel

Database

Department(1)

```
public function up(): void
{
    Schema::create('departments', function (Blueprint $table) {
        $table->id();
        $table->string("name");
        $table->string("faculty");
        $table->string("location");
        $table->timestamps();
    });
}
```

Employee(M)

```
public function up(): void
{
    Schema::create('employees', function (Blueprint $table) {
        $table->id();
        $table->string("name");
        $table->string("lastname");
        $table->decimal("salary", 8, 2);
        $table->unsignedBigInteger("department");
        $table->timestamps();

        $table->foreign("department")->references("id")->on(
            "departments")->onDelete("cascade");
    });
}
```

Model

Department(1)

```
class Department extends Model
{
  use HasFactory;

  protected $fillable = ["name", "faculty", "location"];

  public function employees() {
    return $this->hasMany(Employee::class);
  }
}
```

Employee(M)

```
class Employee extends Model
{
  use HasFactory;

  protected $fillable = ["name", "lastname", "salary", "
    department"];

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

Route

```
Route::get('/', function () {
  return view('welcome');
});

Route::resource("departments", DepartmentController::class);
Route::resource("employees", EmployeeController::class);
Route::get('employees/increaseSalary/{employee}/{percentage}', [EmployeeController::class, 'increaseSalary'])->name('employees.increaseSalary');
```

View

Welcome.blade.php

```
<html>
  <body>
    <h2>Welcome</h2>
    <a href="{{route('departments.index')}}"><button>
      Departments</button></a>
    <a href="{{route('employees.index')}}"><button>
      Employees</button></a>
  </body>
</html>
```

Department(1)

Index.blade.php

```
<html>
  <body>
    <h2>Index</h2>
    @foreach($departments as $d)
      <form>
        <p>Name: {{ $d->name }}</p>
        <button formation="{{route('departments.show',
          $d)}}">Show</button>
        <button formation="{{route('departments.edit',
          $d)}}">Edit</button>
      </form>
    @endforeach
    <br>
    <form action="{{route('departments.create')}}">
      <button>Create new deparment</button>
    </form>
    <br><a href="/"><button>Back at Welcome</button></a>
  </body>
</html>
```

Create.blade.php

```
<html>
  <body>
    <h2>Create</h2>
    <form action="{{route('departments.store')}}" method
      ="POST">
      @csrf
      Name:<input name="name" required>
      Faculty:<input name="faculty" required>
      Location:<input name="location" required>
      <button>Create</button>
    </form>

    <br><a href="{{route('departments.index')}}"><button
      >Back at Home</button></a>
  </body>
</html>
```

Show.blade.php

```
<html>
  <body>
    <h2>Show</h2>

    <p>ID: {{$d->id}}</p>
    <p>Name: {{$d->name}}</p>
    <p>Faculty: {{$d->faculty}}</p>
    <p>Location: {{$d->location}}</p>

    <br>
    <form action="{{route('departments.destroy', $d)}}"
      method="POST">
      @csrf
      @method("DELETE")
      <button>Delete</button>
    </form>

    <br><a href="{{route('departments.index')}}"><button
      >Back at Home</button></a>
  </body>
</html>
```

Edit.blade.php

```
<html>
<body>
  <h2>Edit</h2>
  <form action="{{route('departments.update', $d)}}"
    method="POST">
    @csrf
    @method("PUT")
    Name: <input name="name" value="{{ $d->name }}"><br>
    Faculty: <input name="faculty" value="{{ $d->faculty }}"><br>
    Location: <input name="location" value="{{ $d->location }}"><br><br>
    <button>Update</button>
  </form>
  <br><a href="{{route('departments.index')}}"><button>
    >Back at Home</button></a>
</body>
</html>
```

Employee(M)

Index.blade.php

```
<html>
<body>
  <h2>Index</h2>
  @foreach($employees as $e)
  <form>
    <p>Name: {{ $e->name }}</p>
    <button formation="{{route('employees.show', $e)}}">Show</button>
    <button formation="{{route('employees.edit', $e)}}">Edit</button>
    <button formation="{{route('employees.increaseSalary', [$e, 20])}}">Increase Salary
      of 20%</button>

  </form>
  @endforeach
  <br>
  <form action="{{route('employees.create')}}">
    <button>Create new employee</button>
  </form>
  <br><a href="/"><button>Back at Welcome</button></a>
</body>
</html>
```

Create.blade.php

```
<html>
<body>
    <h2>Create</h2>
    <form action="{{route('employees.store')}}" method="
        POST">
        @csrf
        Name:<input name="name" required>
        Lastname:<input name="lastname" required>
        Salary:<input name="salary" required>
        Department:
        <select name="department" required>
            @foreach($departments as $d)
                <option value="{{ $d->id }}">{{ $d->name }}</
                    option>
            @endforeach
        </select>
        <button>Create</button>
    </form>

    <br><a href="{{route('employees.index')}}"><button>
        Back at Home</button></a>
</body>
</html>
```

Show.blade.php

```
<html>
<body>
    <h2>Show</h2>

    <p>ID: {{ $e->id }}</p>
    <p>Name: {{ $e->name }}</p>
    <p>Lastname: {{ $e->lastname }}</p>
    <p>Salary: {{ $e->salary }}</p>
    <p>Department: {{ $e->department }}</p>

    <br>
    <form action="{{route('employees.destroy', $e)}}"
        method="POST">
        @csrf
        @method("DELETE")
        <button>Delete</button>
    </form>

    <br><a href="{{route('employees.index')}}"><button>
        Back at Home</button></a>
</body>
</html>
```

Edit.blade.php

```
<html>
  <body>
    <h2>Edit</h2>
    <form action="{{route('employees.update', $e)}}"
      method="POST">
      @csrf
      @method("PUT")
      Name:<input name="name" value="{{ $e->name }}">
      Lastname:<input name="lastname" value="{{ $e->
        lastname }}">
      Salary:<input name="salary" value="{{ $e->salary
        }}">
      Department:
      <select name="department">
        @foreach($departments as $d)
          <option value="{{ $d->id }}">{{ $d->name }}</
            option>
        @endforeach
      </select>
      <button>Update</button>
    </form>
    <br><a href="{{route('employees.index')}}"><button>
      Back at Home</button></a>
  </body>
</html>
```

Controller

Department(1)

```
class DepartmentController extends Controller
{
  public function index()
  {
    return view("departments.index", ["departments" =>
      Department::all()]);
  }

  public function create()
  {
    return view("departments.create");
  }

  public function store(Request $request)
  {
    Department::create($request->all());
    return redirect()->route("departments.index");
  }

  public function show(Department $department)
  {
    return view("departments.show", ["d" => $department
      ]);
  }

  public function edit(Department $department)
  {
    return view("departments.edit", ["d" => $department
      ]);
  }

  public function update(Request $request, Department
    $department)
  {
    $department->update($request->all());
    return redirect()->route("departments.index");
  }

  public function destroy(Department $department)
  {
    $department->delete();
    return redirect()->route("departments.index");
  }
}
```


Employee(M)

```
class EmployeeController extends Controller
{
  public function index()
  {
    return view("employees.index", ["employees" =>
      Employee::all()]);
  }

  public function create()
  {
    return view("employees.create", ["departments" =>
      Department::all()]);
  }

  public function store(Request $request)
  {
    Employee::create($request->all());
    return redirect()->route("employees.index");
  }

  public function show(Employee $employee)
  {
    return view("employees.show", ["e" => $employee]);
  }

  public function edit(Employee $employee)
  {
    return view("employees.edit", ["e" => $employee, "
      departments" => Department::all()]);
  }

  public function update(Request $request, Employee
    $employee)
  {
    $employee->update($request->all());
    return redirect()->route("employees.index");
  }

  public function destroy(Employee $employee)
  {
    $employee->delete();
    return redirect()->route("employees.index");
  }

  public function increaseSalary(Employee $employee,
    $percentage)
  {
    $employee->salary = $employee->salary * (1 +
```

```
        $percentage/100);  
$employee->save();  
  
return redirect()->route('employees.show', $employee  
    );  
    }  
}
```