Laravel Admin Panel with Bootstrap 4 for a steel Manufacturer company

| **Table** | **Key Columns** | **Notes** |
| --- | --- | --- |
| users | id, name, email, password, last\_login\_at | For admin login |
| social\_links | id, platform, url | Manage social media links |
| categories | id, name, type (product, service, project) | Dynamic type field |
| products | id, category\_id, title, description, photos (JSON), facilities (TEXT/JSON), seo\_title, seo\_keywords |  |
| services | id, category\_id, title, description, photos (JSON), facilities (TEXT/JSON), seo\_title, seo\_keywords |  |
| projects | id, category\_id, title, description, photos (JSON), facilities (TEXT/JSON), seo\_title, seo\_keywords |  |
| testimonials | id, client\_name, feedback, photo (optional) | Converted from enquiries |
| photo\_gallery | id, title, photo\_path | Gallery Management |
| awards | id, title, description, photo\_path | Awards/Certificates |
| enquiries | id, name, email, phone, message, created\_at | Contact form submissions |
| sliders | id, title, subtitle (optional), image\_path, link (optional) | Home page sliders |
| seo\_settings | id, page\_name, meta\_title, meta\_keywords, meta\_description, geo\_location | Per page SEO |
| blogs | id, title, slug, content, feature\_image, seo\_title, seo\_keywords, seo\_description | Blog Management |
| steel\_rates | id, product\_id, steel\_rate\_value, effective\_date | Steel price for products |

**Admin Features Overview**

| **Feature** | **Notes** |
| --- | --- |
| **Social Media Links** | CRUD table for links (Facebook, Instagram, LinkedIn, etc.) |
| **Categories Management** | CRUD for Products, Projects, Services categories |
| **Products Management** | Title, Description, Photos (multi-upload), Facilities, SEO fields |
| **Services Management** | Same structure as Products |
| **Projects Management** | Same structure as Products |
| **Client Feedback to Testimonials** | Admin can review client feedback and approve it as a testimonial |
| **Photo Gallery** | Unlimited photo uploads, sorting, delete, edit |
| **Awards & Certifications** | CRUD for awards/certifications (title, description, image upload) |
| **Client Enquiry** | Form submissions saved in DB + Email notification to admin |
| **Home Slider** | CRUD for slides: title, image, order |
| **Basic SEO Management** | Add/Edit SEO fields (meta title, meta description, keywords, geo tags) per page/post |
| **Blog Management** | CRUD for blog posts, including SEO fields and featured image |
| **Steel Rate Submission** | Admin can update steel product rates dynamically |

**Application Structure (Laravel)**

**Directories & Organization**

* /app/Models/
  + User.php
  + SocialLink.php
  + Category.php
  + Product.php
  + Service.php
  + Project.php
  + Testimonial.php
  + PhotoGallery.php
  + Award.php
  + Enquiry.php
  + Slider.php
  + SeoSetting.php
  + Blog.php
  + SteelRate.php
* /app/Http/Controllers/Admin/
  + AuthController (Login, Change Password)
  + DashboardController
  + SocialLinkController
  + CategoryController
  + ProductController
  + ServiceController
  + ProjectController
  + TestimonialController
  + PhotoGalleryController
  + AwardController
  + EnquiryController
  + SliderController
  + SeoSettingController
  + BlogController
  + SteelRateController
* /routes/
  + web.php (admin panel routes grouped with prefix('admin') and middleware('auth'))
* /resources/views/admin/
  + Auth (Login, Forgot Password, Change Password)
  + Dashboard
  + SocialLinks
  + Categories
  + Products
  + Services
  + Projects
  + Testimonials
  + Gallery
  + Awards
  + Enquiries
  + Sliders
  + SEO Settings
  + Blogs
  + SteelRates

**🔐 Authentication**

* Use **Laravel Breeze** or **Laravel Fortify** for clean authentication.
* **Guard**: Admin-only guard for login.

**⚙️ Key Features & Functions**

| **Feature** | **Method/Endpoint** | **Notes** |
| --- | --- | --- |
| Admin Login | /admin/login |  |
| Change Password | /admin/change-password |  |
| Social Media Links | CRUD | Only 1 per platform |
| Category Management | CRUD | type field: "product", "service", "project" |
| Product/Service/Project Management | CRUD | Photos upload (multiple, JSON field) |
| Client Feedbacks → Testimonials | Convert enquiry to testimonial |  |
| Photo Gallery | CRUD | Multiple upload |
| Awards and Certifications | CRUD |  |
| Enquiries | View/List/Mark as Read | Send notification to admin email |
| Home Slider | CRUD | Title, Subtitle, Image |
| Basic SEO Settings | Manage SEO fields for pages |  |
| Blog Management | CRUD | Slug auto-generate |
| Steel Rates | Submit/update rates for products |  |

**🛠️ Miscellaneous**

* Use **Spatie Laravel MediaLibrary** for photo upload management (optional, clean).
* All admin routes **protected by middleware**.
* Use **Form Requests** for validation (example: StoreProductRequest, UpdateProductRequest).
* **SEO Settings** editable per page (saved in database).
* Notifications: Email notifications for new enquiries (simple).

**🗂 Suggested DB Relationships**

* Category has many Products, Services, Projects
* Product has many SteelRates
* Enquiry can be converted to Testimonial
* SEO Settings optional per Blog, Page

**API endpoints** served by Laravel backend to power a **simple PHP/JS frontend**.  
The frontend will **fetch data via API**, not direct Blade rendering.

I’ll extend your **plan** accordingly:

**🛠️ API Structure Plan**

**API Routes (prefix /api/)**

| **Method** | **URL** | **Purpose** |
| --- | --- | --- |
| GET | /api/home | Home data (projects + calculator config) |
| GET | /api/about | About Us main content |
| GET | /api/management | Our Management details |
| GET | /api/awards | List of awards |
| GET | /api/products | List all products |
| GET | /api/products/{id} | Product details |
| GET | /api/services | List all services |
| GET | /api/services/{id} | Service details |
| GET | /api/projects | List all projects |
| GET | /api/projects/{id} | Project details |
| GET | /api/gallery | Photos gallery list |
| POST | /api/contact | Contact us form submission |

**📚 API Controllers**

* /app/Http/Controllers/Api/
  + HomeController.php
  + AboutController.php
  + ProductController.php
  + ServiceController.php
  + ProjectController.php
  + GalleryController.php
  + ContactController.php
  + AwardController.php

**🔒 API Authentication**

* **No auth** required for frontend APIs (public access)
* **Rate limit** optional via Laravel throttle middleware (throttle:60,1)

**📩 Contact Form API (POST /api/contact)**

Request fields:

* name
* email
* phone
* message

Backend behavior:

* Save into enquiries table.
* Send notification email to admin.

**✨ Frontend Consumption Plan**

* Use **AJAX** or **Fetch API** (vanilla JS) to call Laravel API.
* If using PHP: Call API with file\_get\_contents('https://yourdomain.com/api/products') and json\_decode().
* Bootstrap theme + dynamic data via JavaScript injection.

**📈 Optional Enhancements**

| **Feature** | **How** |
| --- | --- |
| Caching API responses | Laravel Cache (home, about, awards pages) |
| SEO Friendly URLs | Frontend handles clean URLs, API delivers data by ID/Slug |
| Calculator on Home | Deliver project options or config via /api/home |

**🧩 Final Structure Overview**

/routes/web.php -> Admin Panel Routes (protected)

/routes/api.php -> Frontend API Routes (public)

/app/Http/Controllers/Admin/\* -> Admin Controllers

/app/Http/Controllers/Api/\* -> Public API Controllers

/resources/views/admin/\* -> Admin Bootstrap UI

Frontend -> Static HTML + JS (fetch data from API)