

Daycare Website High-Level Design (HLD)

1. Project Overview

Goal:

Deliver a modern, attractive, and informative daycare website to drive parent inquiries and boost business growth. The site is static, content-managed (via Form CMS), and includes a backend only for handling form submissions (e.g., contact, admissions).

2. Technical Architecture

Frontend: Next.js (TypeScript) for fast, SEO-friendly static pages.

CMS: Form CMS for easy content updates (text, images, sections).

Backend: Node.js/Express.js API (for form submissions only).

Database: MongoDB (self-hosted) to store form submissions.

Deployment: Frontend: VPS; Backend: On-premise server or VPS

Authentication: No user authentication or dynamic user portals.

3. Website Pages & Key Features

Page	Purpose & Key Sections
Home	Hero banner, key USPs, program highlights, testimonials, CTA (Book a Tour/Contact Us)
About Us	Daycare mission, vision, values, staff bios, accreditations, facility overview
Programs	Detailed info on age groups (Infant, Toddler, Preschool), curriculum, daily schedule
Admissions	Step-by-step admissions process, downloadable forms, fee structure, FAQs
Contact Us	Contact form (integrated with backend), map, address, phone/email, business hours
Gallery	Photos/videos of facilities, classrooms, events, outdoor play
Safety & Policies	Health & safety protocols, security measures, pickup/drop-off procedures
CMS Login	For CMS Login and content management
CMS Dashboard	For CMS features display
CMS Forms	Main management area with CRUD features (4-5 pages)

4. Conversion & Growth Features

Prominent CTAs: Book a Tour, Request Info, Enroll Now

Trust signals: Certifications, awards, parent reviews

Easy navigation: Sticky menu, clear page hierarchy

Mobile-first design: Fully responsive for all devices

SEO optimized: Fast load, structured data, meta tags

5. Security & Compliance

Form security: Backend validation, anti-spam (honeypot/CAPTCHA)
Data privacy: Store only necessary info, comply with local child data laws
No user accounts: Reduces risk, simplifies compliance

6. Project Roadmap

Day	Tasks	Duration
1	Project setup and architecture planning Build Home, About Us, and Programs pages Integrate Form CMS for content management Build Admissions, Contact Us, and Gallery pages Build Safety & Policies and Events pages Set up backend for form submissions and connect to MongoDB	1.0h 1.5h 2.0h 1.0h 1.0h 1.0h
2	Finalize content, images, and CMS integration Test all forms and backend endpoints Security review, anti-spam, and privacy compliance Mobile responsiveness and SEO checks Cross-browser QA and performance optimization Deployment, documentation, and stakeholder review	1.0h 1.0h 1.0h 1.0h 1.0h 2.0h

7. Final Deliverables

- Fully responsive, static daycare website (10–12 pages)
- Editable content via Form CMS
- Secure backend for form submissions
- Deployment and handover documentation