

DETAILED SCOPE OF WORK

School Skill Development & Holistic Progress Tracking SaaS Platform

A centralized SaaS platform for schools to manage skill-development programs, extra-curricular activities, activity-wise performance, semester/stage tracking, student portfolios, teacher observations, parent visibility and school-level impact analytics.

Prepared By	Delivery Model	Platform Type	Commercials
Caz Brain Group	SaaS + Role-Based Panels	Web + Mobile-Ready System	To be finalized separately

Company Brief

Caz Brain Group is an India-UK multinational technology company delivering AI-enabled software, SaaS platforms, CRM/ERP systems, mobile applications, automation products and enterprise digital transformation solutions. The company works across education, healthcare, real estate, fintech, legal-tech, logistics, hospitality and AI-driven business automation. Caz Brain Group brings product strategy, UI/UX design, backend engineering, cloud deployment, data security and long-term platform scalability together in one implementation approach.

Websites: cazbraingroup.com | cazbrain.com | cazbrain.in | cazbrain.co.uk

1. Project Understanding

- The proposed platform is not a traditional fee-management or administration ERP. It is a specialized SaaS platform for schools to plan, execute, track and report skill-development and extra-curricular learning outcomes across students, teachers, parents and school leadership.
- The platform will help schools map co-scholastic activities, clubs, competitions, life skills, vocational exposure, creativity, communication, leadership, teamwork, sports, arts, innovation and other competency-based development areas into structured progress records.
- The solution will support semester-wise, term-wise, class-wise and student-stage-wise performance tracking so that schools can monitor continuous growth instead of only academic marks.

2. Strategic Product Vision

The platform can be positioned as a "School Skill OS" - a digital layer that complements existing school ERP/fee systems by focusing on holistic student development, skill evidence, activity records, performance insights and parent-school engagement.

For Schools	For Teachers/Mentors	For Parents & Students
Centralized skill records, activity programs, dashboards, reports and school-level quality tracking.	Capture observations, evidence, ratings, remarks and improvement plans for every learner.	View progress, certificates, activity history, skill badges, feedback and growth journey.
NEP-aligned holistic progress visibility and data-backed decision making.	Reduce manual registers and create structured skill portfolios.	Understand strengths, interests, gaps and next recommended activities.

3. Education Policy & Skill Development Alignment

Context: The platform is designed to support holistic, experiential, skill-based learning visibility. NEP 2020 emphasizes holistic development, 21st-century skills, experiential learning and holistic progress reporting. The software will provide the digital evidence, rubrics and analytics layer required by schools to operate such programs at scale.

- Life skills, creativity, communication, collaboration, leadership, sports, arts and vocational exposure can be mapped as measurable skill domains.
- Student progress can be captured using teacher observations, activity participation, competition outcomes, project evidence, self-reflection and parent feedback.
- Holistic progress cards can be generated as school-branded PDF reports with semester-wise and yearly skill development trends.

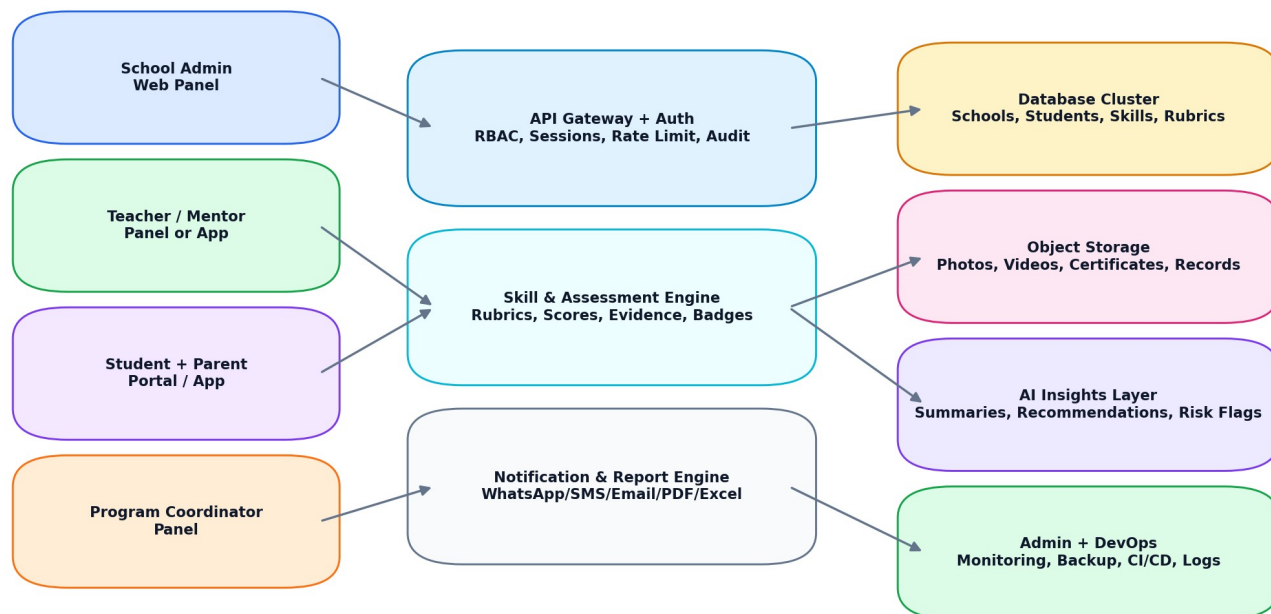
4. Proposed Platform Users & Panels

User / Panel	Scope & Access
SaaS Super Admin	Manage schools, subscriptions, modules, feature access, master skill library, reports, support and platform settings.
School Admin / Principal Panel	Configure classes, sections, sessions, teachers, skills, activity calendars, rubrics, reports and school-level dashboards.
Skill Coordinator Panel	Create skill programs, clubs, activities, competitions, workshops, evaluation cycles and performance review schedules.
Teacher / Mentor Panel	Record attendance/participation, skill observations, remarks, ratings, evidence uploads, student review and improvement suggestions.
Student Portal / App	View activities, assigned tasks, badges, certificates, self-reflection forms, skill profile and participation history.

Parent Portal / App	View child progress, activity timeline, teacher remarks, reports, achievements, alerts and improvement recommendations.
External Trainer / Evaluator Access	Optional limited access for guest instructors, activity partners or evaluators to submit observations and scores.
Management Dashboard	Board/management-level insights across schools, grades, skill categories, participation, performance and program outcomes.

5. High-Level Technical Architecture

High-Level SaaS Architecture



- The SaaS architecture will be multi-tenant-ready so multiple schools can be onboarded with isolated data access.
- The system will use role-based access control so every school user sees only the relevant modules and records.
- A structured assessment engine will manage skill domains, rubrics, stages, score bands, remarks, evidence and reports.
- AI assistance can be added for summary generation, progress insights, improvement recommendations and report drafting.

6. Detailed Module Scope

6.1 SaaS Admin & School Onboarding

- School/branch onboarding
- Subscription and package configuration
- Academic year / session setup
- Module enable/disable
- School branding for reports and certificates
- Support ticket and admin logs

6.2 Skill Domain & Activity Master

- Skill categories: life skills, communication, leadership, creativity, arts, sports, STEM, innovation, social service, entrepreneurship, environmental awareness and vocational exposure
- Activity master with class eligibility, objectives, duration, evaluation method and evidence type
- Club/house/team/group mapping
- Semester/term-wise activity calendar
- Activity capacity and batch allocation

6.3 Student Skill Profile & Portfolio

- Student skill passport/profile
- Activity participation history
- Evidence uploads: photos, videos, PDFs, certificates and project files

- Badges, achievements and milestones
- Stage-wise growth graph
- Strengths, interests, gaps and improvement path

6.4 Teacher/Mentor Evaluation Panel

- Class/section-wise student list
- Activity attendance and participation marking
- Rubric-based evaluation
- Qualitative remarks and improvement notes
- Evidence upload and verification
- Pending evaluation dashboard
- Mentor sign-off and review workflow

6.5 Semester / Stage Wise Tracking

- Term, semester and yearly cycles
- Skill-stage mapping: beginner, developing, proficient, advanced
- Activity-wise score and remarks
- Comparison across semesters
- Class-wise and school-wise aggregated insights
- Progress lock and approval before publishing

6.6 Parent & Student Engagement

- Progress timeline
- Skill report card download
- Activity recommendations
- Achievement badges/certificates
- Notifications for activities, feedback and reports
- Parent acknowledgement / feedback where enabled

6.7 Reports & Holistic Progress Card

- Student skill report card
- Class-wise skill distribution
- Participation vs performance report
- Skill gap analysis
- Teacher evaluation completion report
- School dashboard and management MIS
- PDF/Excel exports

6.8 AI-Enabled Insights

- AI-generated student progress summary
- Teacher remark refinement assistance
- Personalized improvement suggestions
- Risk/gap flagging based on low participation or decline in score
- Management-level program effectiveness summary
- AI usage logs and human review before publishing

6.9 Communication & Notification

- Email, SMS, WhatsApp and push notification readiness
- Activity reminders
- Evaluation pending alerts
- Report publication alerts
- Parent communication templates
- Notification log and delivery status

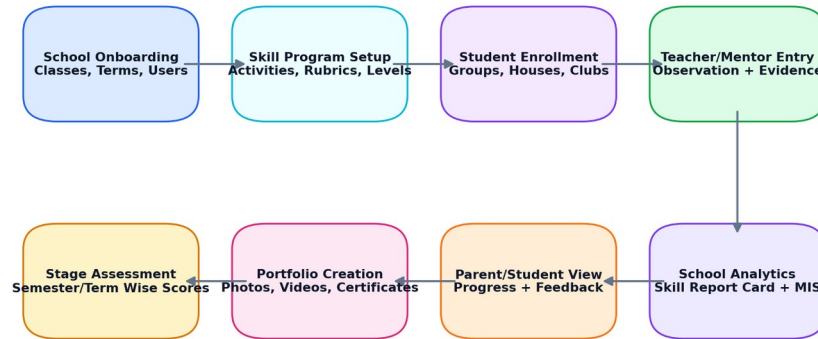
6.10 Security, Audit & Controls

- RBAC and permission matrix

- School-wise data isolation
- Audit trail for score changes and report publishing
- Secure file storage
- Admin approval for sensitive changes
- Backup and restore process
- Data export and handover readiness

7. Functional Workflow

Skill Development Tracking Workflow



Continuous Improvement Loop: Teacher feedback -> Student practice -> Parent visibility -> School intervention -> Next stage assessment

Workflow Stage	Description
Step 1 - School Setup	Admin configures school, academic year, classes, sections, teachers, students and role permissions.
Step 2 - Skill Program Setup	Skill coordinator creates skill domains, activities, clubs, batches, evaluation rubrics and calendar.
Step 3 - Activity Execution	Students participate in activities; teachers/mentors record participation and collect evidence.
Step 4 - Evaluation	Teacher/mentor assigns rubric score, remarks, strengths, improvement notes and stage level.
Step 5 - Review & Publish	Coordinator/principal reviews records and publishes progress to parent/student portal.
Step 6 - Reporting & Analytics	Management reviews dashboards, semester-wise reports, gap analysis and school-level impact.

8. Recommended Technology Stack

Layer	Technology / Approach
Frontend Web	Next.js / React.js, responsive UI, Tailwind CSS or equivalent
Mobile / PWA	Flutter / React Native / PWA depending on final requirement; mobile-first parent/student access
Backend API	Node.js with NestJS / Express.js or Laravel API framework
Database	PostgreSQL / MySQL with indexed reporting tables and tenant separation
Cache & Queue	Redis for notifications, queues and report jobs

File Storage	AWS S3 / DigitalOcean Spaces / equivalent object storage
AI Layer	OpenAI / Gemini / approved AI provider for assisted summaries and insights
Notifications	WhatsApp Business API, SMS gateway, SMTP/email, Firebase push notifications
DevOps	Docker, Nginx, PM2, CI/CD, SSL, backup automation and monitoring
Reporting	PDF/Excel exports, dashboard charts, scheduled MIS reports

9. Core Database Entities

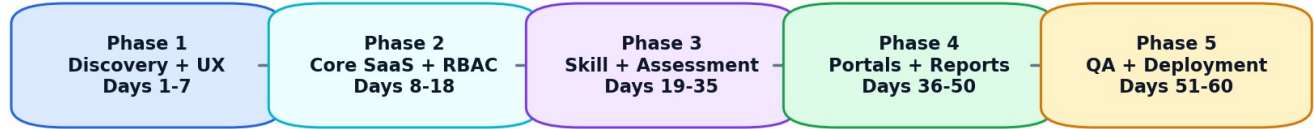
Tenant, School, Branch, AcademicYear, Class, Section, Student, Parent, Teacher, Coordinator, Role, Permission, SkillDomain, SkillIndicator, Activity, ActivityBatch, Enrollment, Attendance, Rubric, RubricLevel, Evaluation, EvidenceFile, Certificate, Badge, ReportCard, Notification, AuditLog, AllInsight, ImprovementPlan, ExportJob, SupportTicket.

10. API & Integration Scope

- /api/auth - login, OTP, refresh token, logout, password reset
- /api/schools - tenant/school setup and configuration
- /api/students - student profile, parent link and class mapping
- /api/skills - skill domains, indicators and rubric setup
- /api/activities - activity creation, batches, calendar and enrollments
- /api/evaluations - score, evidence, remarks, approval and publishing
- /api/reports - report cards, dashboards, PDF/Excel exports
- /api/notifications - SMS/WhatsApp/email/push templates and logs
- /api/ai - progress summary, remark assistance and recommendations
- /api/audit - activity logs, score change logs and export logs

11. Indicative Implementation Timeline

Indicative Delivery Roadmap



Timeline may vary based on final feature freeze, data migration volume, integrations, approvals and pilot feedback.

Phase	Deliverables	Timeline
Phase 1: Discovery & UX	Final requirement discussion, user roles, wireframes, module mapping, data model and UI direction.	Days 1-7
Phase 2: SaaS Foundation	Login, school setup, RBAC, student/teacher/parent masters, admin dashboard.	Days 8-18
Phase 3: Skill & Activity Engine	Skill domains, activity calendar, enrolment, participation, rubrics and evaluation workflow.	Days 19-35
Phase 4: Portals & Reports	Teacher panel, parent/student view, progress card, dashboards, notifications and exports.	Days 36-50
Phase 5: AI, QA & Deployment	AI insight layer, testing, security review, deployment, training and handover.	Days 51-60

12. Commercial Note

Commercials, final delivery cost, hosting cost, third-party API usage, SMS/WhatsApp charges, AI API cost, domain/SSL, app store console charges and post-delivery AMC can be finalized separately after confirming exact platform surfaces, number of schools, data migration volume, mobile app requirement and third-party integrations.

13. Suggested Value-Added Features

- Student Skill Passport with lifetime activity history
- School Skill Health Score and class-wise heatmap
- Personalized activity recommendation engine
- Digital badges and certificate builder
- Parent-friendly progress explanations
- Coordinator task dashboard for pending evaluations
- Teacher workload and evaluation completion analytics
- Inter-school competition/event tracking
- Skill-based leaderboard with privacy controls
- AI-generated holistic progress card summary with human approval

14. Data Security, Privacy & Compliance Approach

- Role-based access control with school-wise data separation
- Secure password hashing, OTP readiness and session control
- HTTPS/SSL encrypted traffic
- Audit logs for score changes, report publishing, exports and admin activity
- Permission-controlled document/evidence visibility
- Daily backup and restore procedure
- Data export option for school-owned records
- No AI-generated output to be auto-published without authorized human review
- Parent/student privacy and age-appropriate access controls

15. Assumptions, Dependencies & Exclusions

- School will provide final logo, brand guidelines, user roles, sample report card format and assessment rubric details.
- Student, teacher and parent master data will be shared in an agreed Excel/CSV format for initial upload.
- Third-party API charges such as SMS, WhatsApp, AI, email and storage will be separate at actuals.
- Existing fee/accounting ERP integration is excluded unless separately approved.
- Native Android/iOS applications, if required beyond responsive PWA, can be scoped separately.
- Final UI, report formats and data fields will be frozen during discovery phase.
- The platform will track holistic skill development and activity performance; it will not replace the school's statutory academic board result system unless scoped separately.

16. Acceptance Criteria & Handover

- Role-wise login and permissions tested
- School/class/student/teacher master setup completed
- Skill and activity creation flow tested
- Teacher evaluation and evidence upload tested
- Semester-wise student progress records generated
- Parent/student progress visibility tested
- PDF/Excel reports generated successfully
- Admin audit logs verified
- Deployment, backup and admin training completed
- Source code, deployment notes and user guide handed over as per agreement

Prepared By

Caz Brain Group

India-UK Multinational Technology Company

AI | SaaS | ERP | CRM | Mobile Applications | Automation | Cloud Engineering

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