

1) Why is this project initiated?

This project is initiated to address the growing limitations of the current third-party CRM system, LeadSquared, and to align the CRM solution more closely with the evolving needs of the EdTech business. LeadSquared, while useful, is expensive and not fully adaptable to specific workflows across internal departments like Sales, Audit, IT, and Marketing. It also presents challenges with data integration, customization, and ownership. As the organization scales, it needs a system that offers full control over its features, workflows, and reporting capabilities.

The goal is to build a centralized, flexible, and scalable CRM solution that ensures better alignment with internal processes, supports compliance and audit tracking, integrates seamlessly with learning platforms and internal tools, and reduces long-term operational costs. Using the Waterfall model allows for a structured and clear development lifecycle, ensuring requirements from each team are fully documented and addressed upfront.

By bringing CRM development in-house, the company can create a purpose-driven tool that evolves with business needs, improves data visibility and ownership, and increases overall team efficiency. This initiative also supports digital transformation and data-driven decision-making, which are key priorities for sustainable growth in the competitive EdTech space.

2) What are the current problems in this project?

The current CRM system, LeadSquared, presents several critical challenges that hinder the efficiency and scalability of our EdTech operations. First, the platform incurs high recurring costs, making it financially burdensome as the organization grows. Second, it lacks the flexibility to fully adapt to our specific workflows—especially for teams like Audit and IT, which require specialized logging, role-based access, and data compliance features not supported out-of-the-box.

Third, integration with internal systems—such as our Learning Management System (LMS), communication platforms, and data dashboards—is limited, leading to fragmented processes and duplicated efforts. Sales and Marketing teams also face limitations in customizing lead stages, campaign automation, and reporting dashboards, which restricts visibility into performance and hinders strategic decision-making.

Additionally, because the system is externally managed, there are concerns about data control, ownership, and compliance with privacy regulations. As more user data is generated and stored, the risk of misalignment with internal IT and audit policies increases.

Finally, the user interface and workflows are not tailored to our team structures, leading to inefficient adoption, reduced productivity, and user frustration. These problems collectively justify the need for a custom-built, integrated CRM that better fits our organizational goals and operational needs.

3) With this project, how many problems could be solved?

This project is designed to address and solve multiple existing challenges across departments, potentially resolving at least **five to seven major operational problems** faced with the current CRM system. Firstly, it eliminates the high recurring licensing costs of LeadSquared, resulting in significant long-term savings. Secondly, it offers full customization, allowing the CRM to be tailored to specific workflows of Sales, Audit, IT, and Marketing teams—something not feasible with the current platform.

Third, it improves data integration by connecting seamlessly with internal systems like the Learning Management System (LMS), communication tools, and analytics dashboards. This will help eliminate data silos and reduce manual data entry or duplication. Fourth, the custom CRM will include built-in features to support audit logging, IT ticketing, and compliance tracking—features that are either absent or limited in the current CRM.

Fifth, the new system improves user experience by designing interfaces and processes aligned with internal roles, thus enhancing productivity and adoption. It also solves the issue of data control, enabling better security, privacy compliance, and ownership of customer and lead data. Lastly, it allows more flexible reporting and analytics, empowering better business decisions and performance visibility across departments.

4) What are the resources required for this project?

To successfully build and implement the custom in-house CRM, a mix of human, technical, and financial resources will be required.

Human Resources will include:

- A **Project Manager** to oversee execution and timelines
- **Business Analysts** to gather requirements from Sales, Audit, IT, and Marketing teams
- **Frontend and Backend Developers** to build the CRM interface and logic
- **UI/UX Designers** to ensure usability and user-friendly design
- **QA/Test Engineers** to conduct rigorous testing at each phase
- **DevOps Engineers** for deployment, CI/CD, and environment setup
- **Trainers/Change Management Experts** to ensure successful user adoption

Technical Resources will include:

- **Cloud infrastructure** (e.g., AWS, GCP, Azure) for hosting and scalability
- **Development tools** (IDEs, version control like GitHub/GitLab, project management tools like Jira)
- **API libraries and SDKs** for integration with internal systems
- **Data migration tools** to transfer existing data from LeadSquared

Financial Resources will be needed to cover:

- Salaries or vendor contracts for the above roles
- Subscription or licensing costs for tools used during development
- Training and support post-deployment

Careful planning and allocation of these resources will ensure the project is completed on time, within budget, and to specification.

5) How much organizational change is required to adopt this technology?

Adopting the new in-house CRM will require a **moderate level of organizational change**. While the core functions—like lead management, campaign execution, and audit tracking—will remain conceptually similar, the workflows, interfaces, and system interactions will be new. This necessitates structured **change management**, including stakeholder alignment, process mapping, and comprehensive **user training**.

Teams will need to transition from using LeadSquared to the new CRM, which may involve unlearning old habits and adapting to new dashboards, automation flows, and reporting mechanisms. The **Sales, Marketing, Audit, and IT departments** will all undergo minor adjustments to align their daily operations with the redesigned platform.

In addition, departments may need to refine their processes to match the CRM's optimized workflows—such as using more structured lead stages, centralized ticketing systems for IT, or automated compliance logging for audits. Managers and team leads will play a critical role in supporting adoption through early involvement, feedback collection, and reinforcing the benefits.

However, because the system is being custom-built with direct input from users, the **resistance to change is expected to be lower** compared to adopting an off-the-shelf CRM. A well-executed rollout plan, including training and phased onboarding, will ease the transition.

6) Time frame to recover ROI in this project

The projected time frame to recover the **Return on Investment (ROI)** for the in-house CRM is estimated to be **12 to 18 months** after full deployment. This estimation is based on several cost-saving and efficiency-gaining factors compared to continuing with LeadSquared or purchasing another third-party CRM.

Firstly, eliminating recurring licensing fees from LeadSquared provides immediate savings. These funds can be redirected toward development and maintenance costs for the in-house solution. Secondly, the customized CRM is expected to increase operational efficiency across Sales, Audit, IT, and Marketing teams by reducing manual tasks, improving data visibility, and streamlining workflows. This results in time savings and higher team productivity.

Furthermore, better integrations with internal systems (such as LMS, communication tools, and data platforms) will reduce time spent on data entry, syncing issues, and error correction—translating into indirect financial gains. As internal adoption grows and the CRM stabilizes, the organization will also benefit from improved decision-making through enhanced reporting and analytics.

Long-term ROI includes not just financial savings but also improved data security, compliance readiness, and organizational agility. These strategic benefits add substantial value that extends beyond the immediate recovery period.

7) How to identify stakeholders in this project?

Identifying stakeholders for the in-house CRM project involves analyzing who will be directly or indirectly impacted by the system and who holds influence over its success. Start by categorizing stakeholders into three key groups: **end users, decision-makers, and support teams**.

End users include teams that will use the CRM daily:

- **Sales** (lead tracking, follow-ups, conversions)
- **Marketing** (campaign automation, lead segmentation)
- **Audit** (data trails, compliance logs)
- **IT** (support tickets, integrations)

Decision-makers include department heads, senior leadership, and the project sponsor. Their role is to approve budgets, define strategic priorities, and ensure alignment with organizational goals.

Support stakeholders include Business Analysts (for requirement gathering), HR or Training leads (for adoption planning), and DevOps/IT infrastructure teams (for deployment and maintenance).

To identify these individuals:

- Conduct stakeholder mapping sessions during project initiation
- Interview department leads to understand who depends on CRM outputs
- Review organizational charts and system access reports

Each stakeholder group should be engaged at the appropriate phase—requirement gathering, design review, testing, and rollout. Effective stakeholder identification ensures the CRM is well-aligned with real business needs, gains early buy-in, and facilitates a smoother implementation and adoption process.

BA Approach Strategy

The Business Analyst will follow a structured **Waterfall model**, progressing through phases: planning, elicitation, documentation, validation, development support, and UAT coordination. Key tasks include gathering detailed requirements, preparing BRD/FRS, ensuring stakeholder sign-off, maintaining traceability, and supporting testing. Emphasis will be on clear documentation, stakeholder alignment, and minimizing rework by locking requirements early.

Key Points:

- Waterfall methodology
- Phase-wise execution
- Detailed documentation (BRD, FRS)
- Formal sign-offs
- Traceability and change control

Elicitation Techniques

To gather accurate and complete requirements, multiple elicitation techniques will be used. These include **stakeholder interviews**, **requirement workshops**, **surveys**, **document analysis**, and **shadowing current CRM users**. Prototypes or mockups will be used to visualize complex features. Each technique ensures inputs from all relevant teams—Sales, Audit, IT, and Marketing—are captured effectively for a robust and user-focused CRM design.

The following techniques will be used to gather detailed and validated requirements:

- **Workshops:** Cross-departmental interactive sessions.
- **Interviews:** One-on-one with subject matter experts.
- **Surveys:** Broad input from operational users.
- **Shadowing:** Observe day-to-day CRM usage to identify gaps.
- **Document Analysis:** Review SOPs, reports, and current system workflows.
- **Prototyping:** Wireframes/mockups to confirm design assumptions.

Stakeholder Analysis & RACI (50–80 words)

Stakeholders include Sales, Marketing, Audit, IT teams, senior management, and CRM end users. A **RACI matrix** will clarify roles: who is Responsible, Accountable, Consulted, and Informed for each task. This ensures clear communication and accountability during requirement gathering, documentation, testing, and sign-off phases, minimizing confusion and delays.

Stakeholder Identification

Stakeholders include:

- Sales & Marketing Teams
- Audit & Compliance Team
- IT & Technical Support
- Senior Leadership
- CRM End Users

RACI Matrix Sample

Task	BA	Sales Head	IT Head	Marketing	Sponsor
Requirement Gathering	R	A/C	C	C	I
BRD Sign-Off	A	C	C	C	A
UAT Coordination	A	C	C	C	I

Documents to Prepare (80 words)

A Business Analyst will create comprehensive documents to ensure clear understanding, traceability, and successful delivery of the CRM project. Key documents include the **Business Requirements Document (BRD)**, **Functional Requirements Specification (FRS)**, **Process Flows**, **Stakeholder Matrix**, and the **Requirement Traceability Matrix (RTM)**. Additional documents like **UAT plans**, **status reports**, and a **Change Request Log** support project control and communication. These documents guide developers, align stakeholders, and serve as a reference throughout the project lifecycle.

? **Business Case**

? **Stakeholder Matrix**

? **Requirement Elicitation Plan**

? **Business Requirements Document (BRD)**

? **Functional Requirement Specification (FRS)**

? **Process Maps / Use Cases**

? **Change Request Log**

? **UAT Test Cases & Plan**

? **Requirement Traceability Matrix (RTM)**

? **Weekly Status Reports**

Document Sign-Off Process (80 words)

The sign-off process ensures stakeholder alignment and commitment to documented requirements. After preparing documents like BRD and FRS, the BA will conduct review sessions with relevant stakeholders to explain content and address questions. Once finalized, documents will be submitted for formal approval via email, e-signatures, or sign-off sheets. Approved documents will be version-controlled and stored in a central repository (e.g., SharePoint). This process ensures development starts with validated and agreed-upon requirements.

Key Points:

Conduct walkthrough meetings with stakeholders.

Provide finalized documents for review.

Use an approval form or digital tool (e.g., DocuSign) for sign-off.

Store signed copies in a central repository.

Maintain a version control log for all documents.

Client Approval Process

Client approval is essential to ensure alignment with business goals and expectations. After requirements and plans are finalized, the BA will present a summary and key highlights to the client in a walkthrough meeting. Any feedback will be addressed before requesting formal approval via email or digital signature tools (e.g., DocuSign). Approved documents will be logged and archived for audit and reference. This process builds trust and ensures clarity before moving into development.

Key Points:

Schedule a presentation or formal walkthrough.

Share a high-level summary for executive clarity.

Use formal email or signature tools to secure approval.

Document all approvals in a log for audit purposes.

Communication Channels (80 words)

Effective communication is vital for project success. The BA will establish formal and informal channels to keep all stakeholders informed. **Slack or Microsoft Teams** will be used for daily team interactions, while **Jira or Trello** will track tasks and progress. **Email** will handle formal communications and document sharing. Weekly **status reports** and **monthly review meetings** will update stakeholders on milestones, risks, and decisions. Clear, consistent communication ensures alignment and quick issue resolution throughout the project lifecycle.

To maintain clear and continuous communication:

- **Slack / MS Teams:** For team collaboration.
- **Jira / Trello:** For task management and tracking.
- **Email:** For formal communication and approvals.
- **Weekly Reports:** Email status updates to stakeholders.
- **Monthly Steering Reviews:** Summarize progress, risks, and next steps.

Change Request Handling (80 words)

Change requests (CRs) are managed through a structured process to ensure control and traceability. When a stakeholder submits a CR, the BA logs it in the Change Request Tracker, performs an impact analysis, and presents it to the Change Control Board (CCB) or project sponsor. Upon approval, the BA updates affected documents (BRD, FRS, RTM) and notifies the development team. This ensures all changes are properly reviewed, documented, and implemented without disrupting project scope or timelines.

Key Points:

Use a standardized Change Request Form.

Log all changes in a CR Tracker with status and impact analysis.

Review with the Change Control Board or sponsor.

Update BRD/FRS/RTM accordingly.

Seek formal approval before implementation.

Project Progress Updates (80 words)

Regular progress updates ensure transparency and stakeholder confidence. The BA will provide **weekly status reports** outlining completed tasks, upcoming activities, risks, blockers, and decisions required. Tools like **Jira dashboards** and **burndown charts** will visually track progress. Biweekly **check-in meetings** and **monthly executive summaries** will keep stakeholders engaged and informed. Clear and consistent reporting helps identify issues early, maintain accountability, and ensure alignment with the project timeline and goals.

Key Points:

Weekly Status Reports including tasks completed, blockers, and upcoming deliverables.

Burndown Charts / Dashboards for real-time visibility via Jira or project tracking tools.

Stakeholder Check-ins: Biweekly or monthly, depending on phase.

Executive Summary Reports for leadership.

UAT Planning & Sign-Off (80 words)

User Acceptance Testing (UAT) ensures the CRM meets business needs before go-live. The BA will prepare a **UAT plan**, define test scenarios, and coordinate with end users from each department. A **UAT tracker** will log issues, feedback, and fixes. After successful testing, users will provide formal **UAT sign-off** via email or signature. This process ensures the solution is fully validated by real users and ready for deployment, reducing post-launch risks.

Steps for UAT:

1. Draft and share the **UAT Plan** detailing test cases and ownership.
2. Train UAT participants and provide testing scenarios.
3. Track all results in a **UAT Log**.
4. Categorize issues and assign them for resolution.
5. Upon successful testing, issue a **UAT Completion Report**.
6. Obtain formal sign-off from each department head or stakeholder.

3- Functional Specifications

Project Name: In-House CRM Development for EdTech Operations

Customer Name: Byjus Think & Learn Pvt Ltd

Project Version: v1.0

Project Sponsor: Mr Byjus

Project Manager: Mr Sandesh Shankrod.

Project Initiation Date: 02/06/2025

Functional Requirement specifications:

Req ID	Req Name	Req Description	Priority
FRS001	User Login Function	Secure login using email/username and password; supports session management and 2FA.	High
FRS-002	User Profile Management	Allow users to view, edit, and manage their profile details and preferences	High
FRS-003	Role-Based Dashboard (Sales, etc.)	Display personalized dashboards for Sales, Audit, Marketing based on user role.	High
FRS-004	System Activity Logs	Record all user actions (login, edit, delete, etc.) for auditing and traceability.	High
FRS-005	Lead Management Module	Capture, assign, and track leads from multiple sources with auto-assignment rules.	High
FRS-006	Custom Workflow Engine	Enable creation and modification of workflows for Sales, Audit, IT, and Marketing.	High
FRS-007	Contact and Account Management	Maintain centralized records of contacts and accounts with interaction history.	High
FRS-008	Role-Based Access Control	Provide granular access rights and permissions for all CRM users and roles.	High
FRS-009	Email and SMS Campaigns	Manage targeted email and SMS campaigns with analytics.	High

FRS-010	Audit Trail and Compliance Logs	Log all record changes with timestamps and user actions for compliance and auditing.	High
FRS-011	Reporting and Dashboards	Generate dynamic, customizable dashboards and reports with filters and scheduling.	High

Requirement Traceability Matrix

Req ID	Req Name	Req Description	Design D1	T1	D2	T2	UAT
FRS001	User Login Function	Secure login using email/username and password; supports session management and 2FA.	DD-Auth-001	yes	yes	no	no
FRS-002	User Profile Management	Allow users to view, edit, and manage their profile details and preferences.	DD-Profile-001	no	yes	no	no
FRS-003	Role-Based Dashboard	Display personalized dashboards for Sales, Audit, Marketing based on user role.	DD-Dashboard-001	no	no	no	no
FRS-004	System Activity Logs	Record all user actions (login, edit, delete, etc.) for auditing and traceability.	DD-Logging-001	Yes	yes	no	yes
FRS-005	Lead Management Module	Capture, assign, and track leads from multiple sources with auto-assignment rules.	DD-Lead-001	yes	yes	yes	yes
FRS-006	Custom Workflow Engine	Enable creation and modification of workflows for Sales, Audit, IT, and Marketing.	DD-Workflow-001	yes	yes	yes	yes
FRS-007	Contact & Account Mgmt.	Maintain centralized records of contacts and accounts with	DD-CRM-001	No	no	no	no

		interaction history.					
FRS-008	Role-Based Access Control	Provide granular access rights and permissions for all CRM users and roles.	DD-RBAC-001	yes	yes	No	yes
FRS-009	Email & SMS Campaigns	Manage targeted email and SMS campaigns with analytics.	DD-Campaign-001	yes	yes	yes	yes
FRS-010	Audit Trail & Compliance	Log all record changes with timestamps and user actions for compliance and auditing.	DD-Audit-001	yes	yes	yes	yes
FRS-011	Reporting & Dashboards	Generate dynamic, customizable dashboards and reports with filters and scheduling.	DD-Report-001	no	no	no	no

Document Revisions

Date	Version Number	Document Changes
10-06-2025	0.1	Initial Draft
10-10-2025	[0.2]	[Description]
10-01-2026	[1.0]	[Final Approval]

Approvals

Role	Name	Title	Signature	Date
Project Sponsor				
Business Owner				
Project Manager				
System Architect				
Development Lead				
User Experience Lead				

RACI Chart for BRD Document Changes

Role	Authorize	Responsible	Accountable	Supports	Consulted	Informed
Project Sponsor	A					I
Business Owner			A		C	I
Project Manager			A		C	I
Business Analyst		R		S	C	I
Sales/Admissions Head					C	I
Marketing Head					C	I
Academic Operations Head					C	I
System Architect					C	I
Development Lead					C	I
Quality Assurance Lead				S	C	I
User Experience Lead				S	C	I

Introduction

4.1. Business Goals

This project aims to directly support [Your EdTech Company Name]'s overarching strategic goals of becoming a leader in [e.g., personalized online education, global student enrollment, career-focused learning]. By replacing Leadsquad with a robust, integrated Academic Tracker and CRM, we intend to:

- **Expand Market Share:** Achieve significant growth in student enrollment by optimizing lead management and conversion processes.
- **Enhance Student Lifetime Value:** Improve student satisfaction and retention through personalized academic support and communication.
- **Boost Operational Efficiency:** Streamline internal processes across admissions, sales, marketing, and academic operations, reducing manual effort and costs.
- **Foster Data-Driven Growth:** Leverage comprehensive analytics to identify trends, optimize strategies, and make informed business decisions.

Need: The current reliance on Leadsquad, coupled with fragmented data across various spreadsheets and departmental tools, creates significant inefficiencies and hinders our ability to scale. We lack a unified view of our prospective and enrolled students, leading to disjointed communication, missed opportunities, and challenges in tracking academic progress and overall student success. A centralized, integrated solution is critically needed to consolidate data, automate workflows, and provide actionable insights for growth and student management.

4.2. Business Objectives

To provide an IT solution for:

- **Comprehensive Lead-to-Student Management:** A seamless platform to capture, nurture, convert, and manage the full lifecycle of prospective and enrolled students within a single system.
- **Cross-functional Collaboration:** Enable effective collaboration between Sales, Marketing, Admissions, and Academic Operations teams through shared data and automated workflows.
- **Personalized Student Engagement:** Facilitate targeted communication and tailored support throughout the student journey.

List what the functionalities are going to develop in software:

- Lead Management (Capture, Qualification, Assignment, Tracking)

- Contact and Account Management
- Student Profile and Academic Progress Tracking (Enrollment, Courses, Grades, Attendance)
- Email and SMS Campaign Management with Analytics
- Role-Based Access Control and User Management
- Customizable Dashboards and Reporting
- Workflow Automation Engine
- System Activity Logging and Audit Trails

Mobile application for Android and for iOS: The scope for this project focuses on a web-based application. A native mobile application for Android and iOS is **out of scope** for this initial phase. However, the web application will be designed to be responsive and accessible on mobile devices.

E LEARNING MANAGEMENT SYSTEM: While this project will include **Academic Tracking** functionalities (e.g., student enrollment, course allocation, grade, and attendance recording), a **full-fledged E-Learning Management System (LMS)** for content delivery, online assignments, quizzes, or interactive learning environments is **out of scope**. The system will integrate with existing or future LMS platforms if required, but it will not develop core LMS capabilities.

4.3. Business Rules

These represent the core policies, procedures, and regulations governing the EdTech company's operations that the new system must enforce or align with:

- **Lead Assignment:** New leads must be automatically assigned to a Sales/Admissions Representative within [e.g., 15 minutes] of capture based on predefined criteria (e.g., course interest, geographic location, source).
- **Lead Qualification:** A lead is considered "qualified" only after [e.g., a discovery call has been completed and interest confirmed].
- **Communication Frequency:** Automated email/SMS campaigns must adhere to specific daily/weekly limits per contact to avoid over-communication.
- **Data Privacy:** All student and lead personal identifiable information (PII) must be handled in compliance with [e.g., GDPR, local data protection laws, FERPA if applicable in the region].

- **Role-Based Access:** Sales representatives can only view leads assigned to them or within their team; academic counselors can only view academic data for their assigned students. Administrators have full access.
 - **Audit Trail:** Every change to a student's academic record (e.g., grades, enrollment status) must be logged with the user, timestamp, and old/new values.
 - **Student Status Changes:** A lead can only be converted to "Student" status after successful payment confirmation or scholarship approval.
 - **Grade Entry:** Only authorized faculty or academic administration staff can enter or modify student grades.
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4.4. Background

For the past [X years], [Your EdTech Company Name] has primarily relied on Leadsquad for initial lead capture and basic tracking. While Leadsquad provided a starting point for managing prospective students, its limitations have become increasingly apparent as our operations have scaled and diversified. The current system is a standalone tool, lacking seamless integration with our internal academic management processes and sophisticated CRM functionalities. This has led to:

- **Manual Data Transfer:** Significant time and resources are wasted on manually transferring lead data from Leadsquad into spreadsheets or other systems once they convert or require academic tracking.
- **Disconnected Communication:** Communication history with leads and students is fragmented across multiple platforms, making it difficult to maintain a consistent and personalized engagement strategy.
- **Limited Student Lifecycle Visibility:** We lack a unified view of a student's journey from initial inquiry through enrollment, academic progress, and completion, impeding our ability to proactively support them.
- **Inefficient Reporting:** Generating comprehensive reports on sales pipeline, marketing campaign effectiveness, or student success metrics requires cumbersome data consolidation from disparate sources.

The proposal for this new Academic Tracker with a built-in CRM stems directly from these business issues. By developing this integrated product, we expect to achieve substantial improvements in operational efficiency, lead conversion rates, student satisfaction, and overall business growth. This project is a strategic investment to consolidate our data, automate key processes, and empower our teams with actionable insights to achieve our organizational goals.

4.5. Project Objective

The overall goal in developing the Academic Tracker with a Built-in CRM is to establish a **unified, scalable, and intelligent platform** that centralizes lead, contact, and student management, streamlines operational workflows, and enhances data-driven decision-making for [Your EdTech Company Name].

High-level descriptions of what the product will do:

- It will serve as the **single source of truth** for all lead, contact, and student data.
- It will **automate lead nurturing** and assignment processes, from initial capture to conversion.
- It will enable **comprehensive academic tracking**, including course enrollment, grades, and attendance, for all enrolled students.
- It will facilitate **targeted communication** and marketing campaigns through integrated email and SMS functionalities.
- It will provide **real-time, customizable dashboards and reports** to monitor key performance indicators across sales, marketing, and academic operations.

This product is fundamentally aligned with our business objectives to increase student enrollment, improve operational efficiency, and elevate the student experience. It will eliminate the need for Leadsquad and reduce reliance on manual data handling.

For interaction with other systems, the product will primarily function as a standalone CRM/Academic Tracker. However, it will require integration with:

- **Website Forms:** To automatically capture new lead inquiries.
- **Email Service Provider (ESP) / SMS Gateway:** For sending out automated and manual communications.
- **[Optional: Future integration points, e.g., an existing Student Information System (SIS) for deep academic data sync, or an external payment gateway for tracking payment status.]**

4.6. Project Scope

This section defines the boundaries of the current project, outlining what will and will not be developed.

4.6.1. In-Scope Functionality

The following core functionalities are included in the current project:

- **Lead Management:** Full lifecycle management from capture (via forms, import, manual) to conversion, including auto-assignment rules, lead scoring, and status tracking.
- **Contact and Account Management:** Centralized database for all contacts (leads, students, parents/guardians) and accounts (if applicable), including interaction history.
- **Student Profile & Academic Tracking:** Comprehensive student profiles, course enrollment management, basic grade and attendance tracking, and academic document uploads.
- **User Management & Role-Based Access Control (RBAC):** Ability to manage users, assign roles, and provide granular permissions based on those roles.
- **Communication Module:** Integrated email and SMS communication with templating, campaign management, and basic analytics.
- **Reporting & Dashboards:** Customizable, role-based dashboards and dynamic reporting tools with filtering, export, and scheduling capabilities.
- **Workflow Automation:** A configurable engine for creating and managing automated business processes (e.g., lead follow-ups, student onboarding tasks).
- **System Administration & Audit:** Tools for system configuration, activity logging, and detailed audit trails for compliance.
- **Security:** Secure login (with 2FA), session management, and data encryption.

4.6.2. Out-of-Scope Functionality

The following functionalities are explicitly NOT included in the current project phase:

- **Full-fledged Learning Management System (LMS) capabilities:** No course content hosting, online assignment submission, grading rubrics, or interactive learning modules.
- **Native Mobile Applications:** No dedicated iOS or Android apps; the focus is on a responsive web application.
- **Direct Payment Processing:** The system will not handle payment transactions or direct integration with payment gateways, though it may track payment status received from other systems.
- **Advanced AI/ML Predictive Analytics:** Basic lead scoring is in scope, but complex predictive modeling beyond that is not.

- **Integration with External Financial/ERP Systems:** No deep, real-time integration with accounting or enterprise resource planning systems beyond potential data export/import capabilities.
 - **Social Media Management/Listening Tools:** No integration with social media platforms for direct posting, monitoring, or lead generation.
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5. Assumptions

All requirements for this Academic Tracker with Built-in CRM are based on the following assumptions:

- **Data Availability:** All necessary historical lead and student data from Leadsquad and other existing sources will be available in a structured, exportable format for migration.
 - **Stakeholder Engagement:** Key business stakeholders (e.g., Sales, Marketing, Academic Ops heads) will be available for regular requirements clarification, feedback, and user acceptance testing (UAT).
 - **Technical Infrastructure:** The necessary cloud services, hosting environment, and database resources will be provisioned in time for development and deployment.
 - **Third-Party Services:** Any required third-party services (e.g., SMS gateway API, web form integration APIs) will be stable, well-documented, and have accessible development environments.
 - **User Training:** Adequate time and resources will be allocated for training end-users on the new system prior to launch.
 - **Regulatory Compliance:** The requirements are based on the understanding of current data privacy laws relevant to our operating regions. Any significant changes in regulations may impact scope.
 - **Budget & Timeline:** The project will adhere to the agreed-upon budget and timeline; significant deviations will require re-evaluation of scope.
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6. Constraints

The following constraints will influence the design, development, and implementation of this project:

- **Budget Limit:** The total project budget is capped at [e.g., ₹X Lakhs / \$Y USD], which includes all development, infrastructure, and licensing costs.

- **Timeline:** The Minimum Viable Product (MVP) of the system must be launched by [e.g., October 31, 2025], to align with the upcoming admissions cycle.
- **Technology Stack:** The solution should primarily be developed using [e.g., specific programming languages like Python/Django, or frameworks like React/Angular, and a specific cloud platform like AWS/Azure] to leverage existing team expertise and infrastructure.
- **Data Security Policies:** The system must strictly adhere to [Your EdTech Company Name]'s internal data security policies, including encryption standards, access control protocols, and data retention policies.
- **Integration Dependencies:** The project's timeline is partially dependent on the readiness and availability of APIs from [e.g., website content management system] for lead capture.
- **Existing Infrastructure:** The new system must be compatible with and integrate non-disruptively into the existing IT infrastructure where applicable.

Risks

This section identifies potential risks that could affect the success or failure of the Academic Tracker & CRM project. For each risk, the likelihood, potential cost/impact, and a proposed strategy are outlined.

Risk management is a critical aspect of the Academic Tracker and CRM project. We've identified several potential risks that could impact the project's success. **Data migration issues** pose a high risk, as complexities or inconsistencies when transferring historical lead and student data from Leadsquad could lead to significant delays and data loss. To counter this, we'll implement thorough data audits, develop robust migration scripts, and perform multiple test migrations. Another concern is **scope creep**, where the project's features expand beyond the initial definition. This has a medium likelihood but a high impact, potentially causing budget overruns and missed deadlines. Our strategy here is to enforce strict change control processes and prioritize features ruthlessly.

We also anticipate a medium risk of **user adoption resistance**, as end-users might find the new system complex or disruptive. If this occurs, it could severely limit the return on our investment. Our approach is to involve key users early, provide comprehensive training, and highlight the benefits of the new system to encourage acceptance. **Integration difficulties** with third-party systems like website forms or SMS gateways present a medium risk of delays and functionality gaps. We plan to mitigate this by conducting thorough technical feasibility studies and building robust error handling. Finally, while less likely, **performance degradation** under heavy user load is a high-impact risk that could lead to a poor user experience. To avoid this, we're designing the system for scalability from the outset and will conduct regular performance testing. Regularly analyzing these risks and preparing for them beforehand will help us minimize their impact on the project's overall success.

Technological Risks

This subsection specifies new technology issues that could affect the project.

- **Integration Complexity with Existing Systems:** There is a risk that integrating the new CRM/Academic Tracker with existing systems (e.g., website forms, email service providers, or future LMS/SIS) proves more complex or resource-intensive than anticipated. This could be due to outdated APIs, undocumented functionalities, or incompatible data structures, leading to delays and increased development costs.
- **Scalability Challenges:** While the system is designed for scalability, unforeseen technical bottlenecks or architectural limitations might emerge under peak user loads or high data volumes, impacting performance and user experience.

- **Third-Party Tool Dependency:** Reliance on specific third-party libraries, frameworks, or cloud services introduces a risk if these tools change their pricing models, cease support, or introduce breaking changes, potentially requiring significant rework or migration.
- **Data Security Vulnerabilities:** Despite planned security measures, new or evolving cyber threats could expose the system to vulnerabilities, leading to data breaches or compliance failures.

Skills Risks

This subsection specifies the risk of not getting staff with the required expertise for the project.

- **Talent Acquisition Challenges:** There is a risk of difficulty in acquiring or retaining skilled professionals (e.g., specialized CRM developers, cloud architects, or QA automation engineers) who possess the exact expertise required for the chosen technology stack and project scope within the project timeline and budget.
- **Knowledge Transfer Gap:** If key project personnel (e.g., the primary Business Analyst or lead developer) depart during critical phases, there's a risk of knowledge loss and significant delays due to the time required for new team members to ramp up.
- **Insufficient Domain Expertise:** The development team may lack sufficient deep domain knowledge in EdTech-specific CRM processes or academic tracking nuances, leading to misinterpretations of requirements or less-than-optimal feature implementations.

Political Risks

This subsection identifies political forces that could derail or affect the project.

- **Stakeholder Alignment Drift:** Initial strong stakeholder alignment might erode over time due to conflicting priorities from different departments (e.g., Sales vs. Academics on feature prioritization), leading to project delays or compromises on core functionalities.
- **Organizational Resistance to Change:** Powerful individuals or groups within the organization might resist adopting the new system, preferring existing manual processes or favoring alternative solutions, which could undermine user adoption and system effectiveness.
- **Regulatory Changes Impact:** Unexpected changes in educational policies, data privacy laws (e.g., new amendments to FERPA, GDPR, or local regulations), or industry standards could necessitate significant rework or re-prioritization of features.

- **Budget Reallocation:** Internal political decisions could lead to a reallocation of project budget or resources to other initiatives, jeopardizing the project's ability to deliver its full scope.

Business Risks

This subsection describes the business implications if the project is canceled.

- **Continued Operational Inefficiency:** Without the new system, the company would continue to suffer from fragmented data, manual processes, and duplicated efforts, leading to ongoing high operational costs and reduced productivity.
- **Missed Growth Opportunities:** Inability to effectively manage leads, nurture prospects, and provide personalized student support would hinder enrollment growth and competitive positioning in the EdTech market.
- **Suboptimal Student Experience:** The lack of a unified academic tracker and communication platform would lead to a disjointed student experience, potentially impacting student satisfaction, retention rates, and brand reputation.
- **Increased Compliance Risk:** Without centralized audit trails and robust data management, the risk of non-compliance with data privacy and educational regulations would persist or increase.
- **Competitive Disadvantage:** Competitors leveraging more advanced CRM and academic management systems would continue to outperform [Your EdTech Company Name] in terms of efficiency, student acquisition, and student success metrics.
- **Financial Impact:** The investment already made in project initiation, analysis, and early development would be lost without delivering the intended benefits.

Requirements Risks

This subsection describes the risk that you have not correctly described the requirements.

List areas whose requirements were most likely to have been incorrectly captured.

- **Complex Workflow Misinterpretation:** Requirements for the "Custom Workflow Engine" (FRS-006) might be overly generalized, leading to an implementation that doesn't fully capture the nuances of specific sales, audit, or marketing processes.
- **Granular Access Control Ambiguity:** The level of "granular access rights and permissions" (FRS-008) might be underspecified, leading to security gaps or an overly complex and unusable permissions system.
- **Reporting & Dashboard Misalignment:** While "dynamic, customizable dashboards and reports" (FRS-011) are requested, the specific KPIs, data sources, and

customization options might not be fully articulated, leading to reports that don't meet actual analytical needs.

- **Integration Data Mapping:** The precise data fields and their transformations required for lead capture from website forms or for interaction history logging (FRS-007) might be misinterpreted, leading to data quality issues.
- **Audit Trail Granularity:** The level of detail required for "Audit Trail and Compliance Logs" (FRS-010) could be insufficient, potentially failing to meet future compliance needs.

Other Risks

In this subsection, document any other risks not covered in the prior subsections.

- **Vendor Lock-in (if using specific SaaS/PaaS):** If the chosen platform or specific services lead to high switching costs or difficult data portability, it could limit future flexibility.
- **Over-reliance on Customization:** A push for excessive customization rather than leveraging out-of-the-box features could lead to higher maintenance costs and difficulty in upgrading.
- **Unexpected Technical Debt:** Pressure to meet deadlines might lead to compromises in code quality, resulting in increased technical debt that slows down future development and maintenance.

8. Business Process Overview

8.1. Legacy System (AS-IS)

Currently, the process of managing prospective and enrolled students at [Your EdTech Company Name] is fragmented and heavily reliant on manual hand-offs and disparate systems.

Lead Management (AS-IS): Leads are primarily captured through website forms or manual entry into **Leadsquad**. Once in Leadsquad, sales representatives manually review and qualify leads. Lead assignment is often done manually by a team lead based on simple criteria. Communication with leads typically occurs via personal email clients or generic SMS tools, with notes manually added back into Leadsquad, leading to incomplete communication histories. There's limited visibility into the lead's journey beyond initial contact.

Student Enrollment & Academic Tracking (AS-IS): When a lead converts, their basic information is manually extracted from Leadsquad and re-entered into a separate **Student Information System (SIS)** or a combination of spreadsheets and departmental databases for enrollment. Course allocations, grade recording, and attendance tracking are managed in

separate, often disparate, academic tools or local spreadsheets maintained by academic staff. This creates significant data silos, requires redundant data entry, and makes it challenging to get a holistic view of a student's academic progress or past interactions.

Reporting (AS-IS): Generating reports on lead conversion rates, student enrollment trends, or academic performance requires manually extracting data from Leadsquad, SIS, and various spreadsheets, then consolidating and analyzing it using tools like Microsoft Excel. This process is time-consuming, prone to errors, and provides outdated insights.

*(Note: In a real BRD, this section would typically be accompanied by **process flow diagrams** that visually depict the AS-IS processes for lead management, student enrollment, and potentially communication.)*

```
pgsql

Start
|
v
Login to CRM System
|
v
Navigate to 'Add Lead/Customer' Section
|
v
Enter Lead Details
- Name
- Contact Number
- Email
- Source (e.g., website, campaign, referral)
- Product/Service of Interest
|
v
Validate Data (Format Check, Duplicates)
|
v
→ If Duplicate Found?
  ↳ Yes: Show Alert & Options (Update Existing / Cancel)
  ↳ No: Proceed
|
v
Assign Lead to Sales Executive / Auto-assignment
|
v
Set Follow-Up Date & Time
|
v
Save Lead to Database
|
v
Show Confirmation Message
|
v
Notify Assigned Salesperson (via Email/SMS/In-App)
|
v
End
```

8.2. Proposed Recommendations (TO-BE)

The proposed Academic Tracker with Built-in CRM will consolidate these fragmented processes into a single, integrated platform, significantly streamlining operations and enhancing efficiency.

Lead Management (TO-BE): New leads from website forms will automatically flow into the CRM, triggering pre-configured auto-assignment rules (e.g., based on course interest, region) and initiating automated nurturing workflows (e.g., welcome emails, follow-up tasks). Sales representatives will have a 360-degree view of each lead, including all communication history (email/SMS sent via the system), activity logs, and status progression. The system will support lead scoring for prioritization.

Student Enrollment & Academic Tracking (TO-BE): Upon conversion, a lead's profile will seamlessly transition to "Student" status within the same system. Academic staff can then manage course enrollments, record grades, track attendance, and upload relevant academic documents directly within the student's unified profile. Automated workflows will facilitate student onboarding and notifications for academic milestones. This eliminates redundant data entry and provides a real-time, comprehensive view of every student's academic journey.

Reporting & Automation (TO-BE): The new system will offer role-based dashboards providing real-time KPIs relevant to each department (Sales pipeline, Marketing campaign performance, Student progress). Users can generate dynamic, customizable reports with extensive filtering options and schedule automated report delivery. The custom workflow engine will automate routine tasks, such as sending follow-up reminders, assigning leads, or triggering academic notifications, drastically reducing manual effort and ensuring process consistency.

*(Note: This section would also ideally include **TO-BE process flow diagrams** to visually represent the optimized, automated workflows enabled by the new system, showing how it addresses the challenges identified in the AS-IS state.)*

9. Business Requirements

The specific business requirements elicited from stakeholders are listed, categorized by both priority and area of functionality to smooth the process of reading and tracking them. These requirements form the foundation for the development of the Academic Tracker with a Built-in CRM.

For a detailed breakdown of the functional and non-functional requirements, please refer to the "**7. Functional Requirements**" and "**8. Non-Functional Requirements**" sections of this document (as provided in our previous discussion).

Each requirement is intended to be complete and understandable. For further detail or context, specific requirements may link to external documentation such as:

- **Use Case Documentation:** [Link to Use Case Document, e.g., "UC-001: Lead Qualification Process"]
- **User Stories:** [Link to User Story Backlog, if applicable]
- **Data Models:** [Link to High-Level Data Model]
- **Wireframes/Mockups:** [Link to UI/UX Design Prototypes]

It is highly recommended that these functional and non-functional requirements be incorporated into a **traceability matrix** (as discussed earlier) that can be followed throughout the project lifecycle to ensure all requirements are addressed in design, development, testing, and user acceptance.

Appendices

10.1. List of Acronyms

Acronym	Definition
2FA	Two-Factor Authentication
API	Application Programming Interface
BRD	Business Requirements Document
CRM	Customer Relationship Management
ESP	Email Service Provider
FRS	Functional Requirement Specification
GDPR	General Data Protection Regulation
KPI	Key Performance Indicator
LMS	Learning Management System
MVP	Minimum Viable Product
NFR	Non-Functional Requirement
PII	Personally Identifiable Information
QA	Quality Assurance
RBAC	Role-Based Access Control
RTO	Recovery Time Objective
RPO	Recovery Point Objective
SIS	Student Information System
SMS	Short Message Service
UAT	User Acceptance Testing
UI	User Interface
UX	User Experience
WCAG	Web Content Accessibility Guidelines

Glossary of Terms

1	Term	Definition
2	Account	An organization or institutional entity associated with contacts/leads.
3	Contact	An individual (lead, student, parent, faculty) stored in the system.
4	Dashboard	A visual display of key performance indicators and data points.
5	Lead	A prospective student/enrollee interested in courses or programs.
6	Nurturing	The process of engaging a lead through targeted communication to guide them towards conversion.
7	Role	A defined set of permissions and access rights within the system.
8	Session Mgmt.	The process of tracking user interactions during a single login period.
9	Student	An individual who is formally enrolled in a course or program.
10	Workflow	A sequence of automated tasks or steps to complete a business process.

Related Documents

- **Project Charter:** [Link to Project Charter Document]
- **High-Level Design Document:** [Link to High-Level Design Document (if available)]
- **User Interface (UI) Wireframes/Mockups:** [Link to UI/UX Design Documentation]
- **Test Plan:** [Link to Project Test Plan (if available)]
- **Data Migration Strategy Document:** [Link to Data Migration Strategy (if available)]
- **Current Leadsquad Data Export:** [Link to sample Leadsquad data export or documentation]

