

Mi Digital Academy - Education CRM Features Document

1. USER MANAGEMENT SYSTEM

1.1 Super Administrator

- **Complete System Control**
 - Manage all user accounts (Sub Admins, Students, Parents, Affiliates, Institutes)
 - Configure system-wide settings and permissions
 - Access to comprehensive analytics dashboard
 - Financial overview and commission management
 - Content approval workflow management
 - System backup and data export capabilities
- **Course & Content Management**
 - Create/edit/delete Academic and Professional courses
 - Organize Education Boards, Grades, Subjects, Categories
 - Upload and manage video tutorials and podcasts
 - Set up exams, quizzes, and assessments
 - Manage resource libraries (guides, flashcards, mind maps)
- **Subscription & Pricing Control**
 - Create and modify membership plans
 - Set grade-wise and subject-wise pricing for Academic courses
 - Set course-wise pricing for Professional courses
 - Configure bulk license packages for institutes
 - Manage discount codes and promotional campaigns
 - Configure affiliate commission structures

1.2 Sub Administrator Roles

Billing Administrator

- View all transactions and payment history
- Generate invoices and receipts
- Process refunds and adjustments
- Manage subscription renewals and upgrades
- Track affiliate payouts
- Handle bulk license billing for institutes
- Generate financial reports

- Manage payment gateway configurations

Teacher/Content Creator

- Upload and manage assigned course content
- Create video tutorials and podcasts
- Design exams, quizzes, and assessments
- Create resource guides, flashcards, and mind maps
- Respond to student queries in assigned subjects
- View student performance analytics for their courses
- Schedule live sessions (if applicable)
- Access AI-generated insights about content effectiveness

Content Reviewer

- Review and approve newly uploaded content
- Check content quality and accuracy
- Ensure content meets curriculum standards
- Flag inappropriate or incorrect content
- Provide feedback to content creators
- Maintain content version history

Student Support Administrator

- Handle student queries and technical issues
- Manage parent communication
- Process account-related requests
- Monitor student engagement and send alerts
- Generate student progress reports
- Handle course access issues

1.3 Student Account

- **Profile Management**
 - Personal information and preferences
 - Learning style preferences (visual, auditory, kinesthetic)
 - Target exam setup (school exams, competitive exams, professional certifications)
 - Academic goals and milestones
 - Notification preferences
- **Course Access & Learning**
 - Academic Courses: Browse by Education Board → Grade → Subject
 - Professional Courses: Browse by Category → Sub Category → Course
 - Video tutorial player with playback controls
 - Podcast player with download option
 - Progress tracking (video completion, time spent)
 - Bookmark and notes feature

- Resume from last watched position
- **Assessment & Practice**
 - Video-wise online exams (AI-Powered Adaptive)
 - Practice quizzes and mock tests
 - View instant results and detailed explanations
 - Track performance analytics
 - Review wrong answers with solutions
 - Spaced Repetition System (SRS) for revision
- **Learning Tools**
 - Resource guides per video/topic
 - Interactive flashcards
 - Mind maps for visual learning
 - FAQ section for each topic
 - Personal Learning Assistant (AI-powered)
 - AI Mentor Mode for guidance
 - Smart Study Planner
- **Subscription Management**
 - View current subscription details
 - Upgrade/add new subjects to Academic subscription
 - Purchase additional Professional courses
 - View payment history
 - Auto-renewal settings
- **Target Exam Feature**
 - Create multiple target exams (with dates)
 - Attach relevant subjects/tutorials to each target
 - AI-powered score prediction based on:
 - Current performance in online exams
 - Activity levels and engagement
 - Practice test scores
 - Time spent on each topic
 - Customized study plan generation
 - Progress tracking towards target
 - Countdown timer to exam date

1.4 Parent Account

- **Child Monitoring Dashboard**
 - Link multiple children's accounts
 - View real-time learning activity
 - Track course progress and completion rates
 - Monitor time spent on platform daily/weekly
 - View assessment scores and performance trends
 - Check upcoming tests and deadlines
- **Parental Insights & Control**
 - Detailed performance reports (subject-wise)
 - Strengths and weaknesses analysis
 - Comparison with grade-level benchmarks
 - Learning pattern insights (peak performance times)

- Screen time management and limits
- Content access restrictions
- Session scheduling controls
- Notification settings for child's activity
- **Communication**
 - Message teachers directly
 - Receive automated alerts for:
 - Low performance in subjects
 - Missed assignments or tests
 - Login activity and engagement drops
 - Milestone achievements
 - Schedule parent-teacher meetings
 - Access teacher feedback and recommendations
- **Subscription Management**
 - Purchase and manage child's subscriptions
 - Add/remove subjects
 - View billing history
 - Set up parental approval for purchases

1.5 Affiliate Account

- **Affiliate Dashboard**
 - Unique referral link and QR code
 - Marketing materials (banners, social media posts)
 - Real-time sales tracking
 - Commission breakdown (pending, earned, paid)
 - Conversion analytics (clicks, signups, purchases)
 - Top-performing courses report
- **Sales & Commission Management**
 - View all referred customers
 - Track subscription renewals from referrals
 - Commission calculator
 - Payment request submission
 - Payment history and statements
 - Multi-tier commission tracking (if applicable)
- **Marketing Tools**
 - Downloadable promotional content
 - Email templates for outreach
 - Social media integration
 - Discount code creation (if permitted)
 - Performance leaderboard
 - Affiliate training resources

1.6 Training Institute Account

- **Bulk License Management**
 - Purchase bulk student licenses

- Manage student seat allocation
 - Add/remove student accounts
 - Transfer licenses between students
 - View license utilization report
 - Renewal and upgrade options
 - **Institute Dashboard**
 - Overview of all enrolled students
 - Aggregate performance analytics
 - Course completion rates
 - Top performers and struggling students
 - Batch-wise comparison reports
 - Export data for institute records
 - **Student Management**
 - Bulk student registration (CSV upload)
 - Assign courses to student groups
 - Create custom learning paths
 - Schedule batch assessments
 - Send batch-wide announcements
 - Generate batch reports
 - **Billing & Licensing**
 - View license usage and available seats
 - Purchase additional licenses
 - Billing history and invoices
 - Discount eligibility for bulk purchases
 - License expiry alerts
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2. COURSE STRUCTURE & CONTENT MANAGEMENT

2.1 Academic Courses

Hierarchy: Education Board → Grade → Subjects → Video Tutorial & Podcast

- **Education Boards**
 - Create multiple boards (e.g., CAPS, Cambridge, IB, etc.)
 - Board-specific curriculum mapping
 - Board-wise certification
- **Grade Organization**
 - Grade R to Grade 12+
 - Age-appropriate content tagging
 - Grade-specific learning objectives

- **Subject Management**

- Multiple subjects per grade
- Subject-wise curriculum breakdown
- Cross-subject linking for integrated learning
- Subject difficulty progression

- **Content Units**

- Video tutorials (HD quality, subtitles, multiple languages)
- Podcasts (downloadable audio lessons)
- Chapter/topic organization
- Prerequisite topic linking
- Estimated completion time per video
- Content difficulty tagging (beginner, intermediate, advanced)

2.2 Professional Courses

Hierarchy: Category → Sub Category → Courses → Tutorial

- **Category Management**

- Major categories (IT, Business, Languages, Creative, etc.)
- Category descriptions and objectives
- Industry-relevant skill tags

- **Sub Categories**

- Specialized domains within categories
- Career path suggestions
- Skill progression mapping

- **Course Structure**

- Course overview and learning outcomes
- Instructor profiles
- Course duration and effort estimate
- Prerequisites and recommendations
- Industry certifications alignment
- Real-world project integration

- **Tutorial Organization**

- Module-wise content breakdown
 - Sequential learning paths
 - Hands-on assignments and projects
 - Downloadable resources and templates
 - Code repositories (for tech courses)
 - Certificate upon completion
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3. MEMBERSHIP & SUBSCRIPTION SYSTEM

3.1 Academic Course Subscriptions

- **Grade & Subject-Wise Plans**
 - Single subject subscription
 - Multiple subjects bundle (discounted)
 - Full grade access (all subjects)
 - Custom subject combinations
 - Monthly, Quarterly, Semi-Annual, Annual options
- **Flexible Upgrade System**
 - Add new subjects anytime (prorated pricing)
 - Upgrade from single to multiple subjects
 - Upgrade from one grade to another
 - Retain access to previous content
 - Transfer unused duration to new subscription
- **Family Plans**
 - Multiple children under one account
 - Shared payment method
 - Individual progress tracking
 - Volume discount for siblings

3.2 Professional Course Subscriptions

- **Course-Wise Plans**
 - Pay-per-course model
 - Lifetime access option
 - Installment payment plans
 - Course bundles (related courses)
- **Skill Path Subscriptions**
 - Career track bundles (e.g., Full Stack Developer)
 - Industry-specific certifications
 - Monthly access to all professional courses
 - Premium tier with mentorship

3.3 Bulk Licensing (Training Institutes)

- **Tiered Pricing**
 - 10-50 licenses
 - 51-200 licenses
 - 201-500 licenses
 - 500+ licenses (custom enterprise pricing)
- **Features**
 - Volume discounts

- Dedicated account manager
- Custom branding options
- API integration for student management
- Priority support
- Custom reporting

3.4 Trial & Freemium Model

- **Free Trial**
 - 7-day full access trial
 - Limited content preview (first 2 videos of each subject)
 - Sample assessments
 - No credit card required for trial
 - **Freemium Content**
 - Selected free courses and tutorials
 - Community forum access
 - Basic study planner
 - Limited AI mentor interactions
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4. CORE LEARNING FEATURES

4.1 AI-Powered Adaptive Online Exams

- **Video-Wise Assessments**
 - Auto-generated quizzes after each video
 - Multiple choice, fill-in-the-blank, true/false
 - Short answer and essay questions (AI-graded)
 - Difficulty adapts based on performance
- **Adaptive Testing Engine**
 - Adjusts question difficulty in real-time
 - Focuses on weak areas
 - Efficient assessment of knowledge level
 - Reduces test anxiety with personalized pacing
- **Question Bank Management**
 - AI-generated questions from video content
 - Manual question curation by teachers
 - Question difficulty tagging
 - Bloom's Taxonomy alignment
 - Regular question refreshing
- **Exam Analytics**

- Instant results and feedback
- Time spent per question
- Topic-wise accuracy
- Peer comparison (anonymous)
- Historical performance trends

4.2 Resource Guide

- **Per-Video Resources**

- Downloadable PDF notes
- Key concepts summary
- Additional reading materials
- External links to relevant articles/videos
- Practice worksheets
- Solved example problems

- **Subject Resource Library**

- Formula sheets and cheat sheets
- Reference guides
- Case studies and real-world applications
- Research papers (for advanced courses)
- Multimedia resources (infographics, diagrams)

4.3 Interactive Flashcards

- **Smart Flashcard System**

- Auto-generated flashcards from video content
- Custom flashcard creation by students
- Image and audio support
- Categorized by topic and difficulty
- Shuffle and random mode

- **Spaced Repetition Integration**

- Cards appear based on memory retention algorithm
- Confidence rating per card
- Automatic scheduling for revision
- Progress tracking (mastered vs. learning)

- **Collaborative Features**

- Share flashcard decks with classmates
- Public flashcard library (community-created)
- Like and comment on flashcard sets
- Gamification (points for creating quality flashcards)

4.4 Mind Maps

- **Visual Learning Tools**
 - Pre-built mind maps for each topic
 - Interactive, clickable nodes
 - Links to related videos and resources
 - Color-coded by concept importance
 - Zoomable and navigable interface
- **Custom Mind Map Creator**
 - Student-created mind maps
 - Drag-and-drop interface
 - Add text, images, icons
 - Link to personal notes
 - Export as image or PDF
 - Share with teachers for feedback
- **AI-Generated Concept Maps**
 - Automatically map relationships between topics
 - Show prerequisite concepts
 - Suggest next topics to study
 - Identify knowledge gaps

4.5 FAQ System

- **Per-Video FAQs**
 - Common questions answered
 - Searchable FAQ database
 - Upvote helpful answers
 - Add new questions (moderated)
 - Teacher-verified responses
- **AI-Powered FAQ Chatbot**
 - Instant answers to common queries
 - Links to relevant video timestamps
 - Escalate to human support if needed
 - Learn from student interactions

4.6 Personal Learning Assistant (AI)

- **Conversational AI Tutor**
 - 24/7 availability
 - Answer subject-specific questions
 - Explain concepts in multiple ways
 - Provide examples and analogies
 - Simplify complex topics
 - Multi-language support
- **Context-Aware Assistance**
 - Knows student's current course and progress

- References recently watched videos
- Personalized explanations based on learning style
- Adaptive language level (grade-appropriate)
- **Study Buddy Features**
 - Quick quizzes on demand
 - Generate practice problems
 - Summarize long videos or texts
 - Create study guides automatically
 - Suggest related topics

4.7 AI Mentor Mode

- **Personalized Mentorship**
 - Career guidance based on interests and performance
 - Course recommendations aligned with goals
 - Motivational support and encouragement
 - Learning strategy suggestions
- **Goal Setting & Tracking**
 - Help set SMART goals (Specific, Measurable, Achievable, Relevant, Time-bound)
 - Break down big goals into milestones
 - Regular check-ins on progress
 - Celebrate achievements
- **Study Habit Development**
 - Identify ineffective study patterns
 - Suggest evidence-based learning techniques
 - Recommend optimal study environments
 - Time management coaching
- **Emotional Intelligence**
 - Detect frustration or confusion
 - Provide encouragement during challenges
 - Suggest breaks when needed
 - Connect with human support if struggling

4.8 Smart Study Planner

- **AI-Powered Scheduling**
 - Analyze student's availability and preferences
 - Auto-generate weekly/monthly study schedules
 - Balance subjects based on difficulty and importance
 - Factor in exam dates and deadlines
 - Adjust for school schedule and extracurriculars
- **Time Management**
 - Pomodoro technique integration

- Study session timers
- Break reminders
- Daily time budget allocation
- Track actual vs. planned study time
- **Focus Management**
 - Distraction-free mode
 - Website/app blocker integration (browser extension)
 - Focus music or white noise integration
 - Session goals and mini-challenges
 - Productivity analytics
- **Dynamic Adjustments**
 - Rescheduling based on missed sessions
 - Adapt to performance changes
 - Accommodate unexpected events
 - Prioritize weak subjects automatically

4.9 Automated Reports & Alerts

Student Reports

- **Weekly Progress Report**
 - Hours studied
 - Videos completed
 - Assessments taken and scores
 - Streak status
 - Areas of strength and improvement
- **Monthly Performance Report**
 - Subject-wise detailed analysis
 - Comparison with previous month
 - Goal achievement status
 - Predicted scores for upcoming exams
 - Personalized recommendations
- **Pre-Exam Summary**
 - Readiness assessment
 - Topics needing urgent revision
 - Recommended study focus
 - Confidence score per topic

Parent Reports

- **Daily Activity Summary** (optional)
 - Time spent online
 - Completed activities
 - Assessment scores
 - Any concerns flagged

- **Weekly Parent Newsletter**
 - Child's progress overview
 - Upcoming tests and deadlines
 - Suggested ways to support learning
 - Platform updates and new features
- **Critical Alerts** (immediate)
 - Low performance on assessments
 - Missed scheduled study sessions
 - Engagement drop
 - Account access issues

Teacher/Admin Reports

- **Content Effectiveness Reports**
 - Video completion rates
 - Drop-off points in videos
 - Question accuracy rates
 - Student feedback scores
- **Student Cohort Analysis**
 - Class/batch performance comparison
 - Struggling students identification
 - High achievers recognition
 - Common error patterns

4.10 Spaced Repetition System (SRS)

- **Scientific Revision Scheduling**
 - Optimal intervals for review (1 day, 3 days, 1 week, 2 weeks, 1 month)
 - Based on Ebbinghaus forgetting curve
 - Adjust intervals based on recall success
 - **Content Integration**
 - Flashcards with SRS
 - Practice quiz questions resurface
 - Video revision reminders
 - Key concept reinforcement
 - **Mastery Tracking**
 - Visual progress of concept mastery
 - Confidence ratings per topic
 - Predict retention rates
 - Graduation of mastered concepts
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5. TARGET EXAM FEATURE (ADVANCED)

5.1 Exam Creation & Management

- **Create Multiple Target Exams**
 - Exam name and type (school, board, competitive, professional)
 - Exam date and countdown
 - Target score/grade
 - Importance level (priority)
- **Subject & Topic Mapping**
 - Attach relevant subjects from subscriptions
 - Select specific topics/chapters for exam
 - Mark topic importance (high, medium, low)
 - Add custom study materials
 - Link to external resources

5.2 AI-Powered Score Prediction

- **Data Inputs for Prediction**
 - Historical performance in online exams
 - Practice test scores
 - Video completion rates
 - Time spent per topic
 - Assessment accuracy trends
 - Study consistency and patterns
 - Current mastery level of topics
- **Prediction Algorithm**
 - Machine learning model trained on historical data
 - Considers difficulty level of target exam
 - Factors in time remaining until exam
 - Updates prediction in real-time as student progresses
 - Confidence interval for prediction
- **Prediction Dashboard**
 - Current predicted score (with confidence range)
 - Gap analysis (predicted vs. target)
 - Subject-wise score breakdown
 - Trend graph (prediction improvement over time)
 - "What-if" scenarios (e.g., "If I improve Math by 10%...")

5.3 AI-Generated Study Plan

- **Personalized Plan Creation**

- Based on predicted score and target gap
- Prioritizes weak subjects/topics
- Balances study load across time remaining
- Includes revision cycles
- Adapts to learning pace

- **Study Plan Components**

- Daily/weekly task breakdown
- Video tutorials to watch
- Practice questions to solve
- Mock tests schedule
- Revision sessions
- Rest days

- **Progress Tracking**

- Task completion checklist
- Daily goal achievement
- Plan adherence percentage
- Automatic plan adjustments if falling behind
- Milestone celebrations

5.4 Mock Tests & Simulation

- **Exam-Like Environment**

- Timed tests matching real exam format
- Full-length and sectional tests
- Previous year papers (if available)
- Difficulty level matching target exam

- **Post-Test Analysis**

- Detailed answer key with explanations
- Time management analysis
- Accuracy vs. speed insights
- Comparison with top scorers
- Improvement suggestions

6. PARENTAL INSIGHTS & CONTROL (DETAILED)

6.1 Comprehensive Dashboard

- **At-a-Glance Metrics**

- Total study time (today, week, month)
- Active days this month
- Current streak
- Subjects studied
- Tests taken and average score
- Progress towards goals
- **Visual Analytics**
 - Time spent chart (by subject and day)
 - Performance trend graphs
 - Comparison with grade-level peers
 - Engagement heatmap (most active times)

6.2 Deep Performance Insights

- **Subject-Wise Analysis**
 - Mastery level per subject (%)
 - Topics excelling vs. struggling
 - Assessment score trends
 - Time allocation per subject
 - Recommended focus areas
- **Cognitive Insights**
 - Learning style identification (visual, auditory, kinesthetic)
 - Attention span patterns
 - Optimal study times (when most productive)
 - Common mistake patterns
 - Conceptual gaps identification
- **Behavioral Insights**
 - Study habits (consistency, cramming, etc.)
 - Engagement level trends
 - Response to challenges (persistence, giving up)
 - Peer interaction patterns (if collaborative features)

6.3 Control Features

- **Screen Time Management**
 - Set daily/weekly time limits
 - Schedule allowed study hours
 - Break enforcement
 - Bedtime auto-logout
- **Content Restrictions**
 - Age-appropriate content filtering
 - Block specific courses/subjects (if needed)

- Require approval for new subscriptions
- Monitor communication (if messaging enabled)
- **Study Schedule Control**
 - Approve/modify AI-generated study plans
 - Set mandatory study sessions
 - Enforce exam preparation schedules
 - Reward system for goal completion

6.4 Communication & Collaboration

- **Parent-Teacher Messaging**
 - Direct messaging with subject teachers
 - Request progress updates
 - Discuss concerns and strategies
 - Schedule virtual meetings
 - **Parent Community**
 - Connect with other parents (optional)
 - Share experiences and tips
 - Support groups by grade/subject
 - Expert webinars and Q&A sessions
 - **Automated Notifications**
 - Customize alert preferences
 - Push notifications, email, SMS options
 - Alert types: performance drops, missed sessions, achievements, upcoming tests, new content
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7. ADDITIONAL RECOMMENDED FEATURES

7.1 Gamification & Engagement

- **Point System**
 - Earn points for watching videos
 - Complete assessments for bonus points
 - Daily login streaks
 - Maintain study consistency
 - Help peers (answer questions)
- **Badges & Achievements**
 - Subject mastery badges
 - Streak milestones (7, 30, 100 days)

- Challenge completion badges
- Top performer recognition
- Special seasonal badges
- **Leaderboards**
 - Class/grade level rankings
 - Subject-specific leaderboards
 - Weekly, monthly, all-time leaders
 - Anonymous or opt-in display
 - Filter by friends/connections
- **Challenges & Competitions**
 - Weekly subject challenges
 - Quiz competitions with prizes
 - Collaborative group challenges
 - Seasonal tournaments
 - Real-world rewards (certificates, merchandise)

7.2 Social Learning Features

- **Study Groups**
 - Create or join study groups by subject
 - Group chat and discussion forums
 - Share notes and resources
 - Schedule group study sessions
 - Collaborative projects
- **Peer-to-Peer Learning**
 - Ask questions to community
 - Answer peers' questions (earn reputation)
 - Tutor mode (advanced students help beginners)
 - Upvote helpful answers
 - Moderation and quality control
- **Discussion Forums**
 - Subject-wise forums
 - Topic-based threads
 - Pinned important discussions
 - Teacher moderation
 - Search functionality

7.3 Live & Interactive Sessions

- **Live Classes (Optional)**
 - Scheduled live teaching sessions
 - Real-time Q&A
 - Interactive whiteboard

- Recording available after session
- Small group sessions for personalized attention
- **Doubt Clearing Sessions**
 - Book 1-on-1 sessions with teachers
 - Group doubt solving sessions
 - Drop-in office hours
 - AI-assisted doubt resolution before escalating
- **Webinars & Guest Lectures**
 - Industry expert sessions (for professional courses)
 - Exam preparation strategies
 - Career guidance talks
 - Study skill workshops
 - Motivational sessions

7.4 Advanced Analytics & AI

- **Predictive Analytics**
 - Early warning system for at-risk students
 - Dropout risk prediction
 - Success probability modeling
 - Career aptitude prediction (based on interests and performance)
- **Recommendation Engine**
 - Next best course/subject to learn
 - Related topics for deeper understanding
 - Career paths aligned with strengths
 - Study resources tailored to learning style
 - Peer connections (study buddies with similar goals)
- **Learning Path Optimization**
 - AI suggests optimal sequence of topics
 - Identifies prerequisite gaps
 - Suggests accelerated paths for strong students
 - Remedial paths for struggling students

7.5 Offline Learning Support

- **Download for Offline**
 - Download videos for offline viewing
 - Offline access to notes and resources
 - Sync progress when back online
 - Downloadable practice worksheets
- **Mobile App Features**
 - iOS and Android apps
 - Push notifications
 - Mobile-optimized video player
 - Data saver mode
 - Picture-in-picture video

7.6 Accessibility Features

- **Multi-Language Support**
 - Interface in multiple languages
 - Subtitle options for videos
 - Dubbed videos in regional languages
 - AI translation of resources
- **Inclusivity Features**
 - Text-to-speech for visually impaired
 - Closed captioning for hearing impaired
 - Dyslexia-friendly fonts and layouts
 - Color blind friendly design
 - Keyboard navigation support

7.8 Integration & Ecosystem

- **Calendar Integration**
 - Sync with Google Calendar, Outlook
 - Export study schedule
 - Exam dates and reminders
 - Live session scheduling
 - **Learning Management System (LMS) Integration**
 - For training institutes using external LMS
 - Single Sign-On (SSO)
 - Grade passback
 - Roster sync
 - **Third-Party Tool Integration**
 - Google Drive for file storage
 - Zoom/Teams for live sessions
 - Payment gateway (Stripe, PayPal, local options)
 - Email marketing tools (Mailchimp)
 - CRM integration (Salesforce, HubSpot)
 - **API for Developers**
 - Public API for content access
 - Webhooks for events
 - Embed widgets for external sites
 - Custom integrations for enterprises
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8. TECHNICAL FEATURES FOR CRM BACKEND

8.1 Dashboard & Analytics

- **Super Admin Dashboard**

- Total users by type (students, parents, affiliates, institutes)
- Active subscriptions and revenue
- Content library statistics
- System health monitoring
- User engagement metrics
- Support ticket overview
- **Custom Reports**
 - Revenue reports (by course, time period, region)
 - User acquisition and churn analysis
 - Content performance reports
 - Affiliate performance tracking
 - Institute license utilization

8.2 Marketing & Communication

- **Email Campaigns**
 - Drip campaigns for onboarding
 - Re-engagement emails for inactive users
 - Promotional email blasts
 - Personalized course recommendations
 - A/B testing for campaigns
- **In-App Notifications**
 - Targeted push notifications
 - Banner announcements
 - Popup messages for offers
 - Scheduled notifications
- **SMS Integration**
 - OTP for login verification
 - Important alerts via SMS
 - Bulk SMS for promotions
 - Regional language support

8.3 Payment & Billing

- **Payment Gateway Integration**
 - Multiple payment options (credit card, debit card, UPI, wallet, bank transfer)
 - Recurring billing for subscriptions
 - Failed payment retry logic
 - Refund processing
 - Invoice generation
- **Revenue Management**
 - Revenue recognition tracking

- Tax calculation (GST, VAT)
- Multi-currency support
- Commission calculation for affiliates
- Financial reconciliation tools

8.4 Security & Data Privacy

- **User Authentication**

- Secure login (password + OTP)
- Social login options (Google, Facebook)
- Two-factor authentication
- Session management
- IP-based access control

- **Data Protection**

- Encrypted data storage
- Secure video streaming (DRM)
- Personal data anonymization
- GDPR/privacy compliance
- Regular security audits
- Backup and disaster recovery

8.5 Performance & Scalability

- **Content Delivery Network (CDN)**

- Fast video streaming globally
- Reduced latency
- Automatic quality adjustment

- **Scalable Infrastructure**

- Cloud-based hosting (AWS, Azure)
- Auto-scaling for traffic spikes
- Load balancing
- 99.9% uptime SLA

- **Caching & Optimization**

- Database query optimization
- Page load speed optimization
- Progressive web app (PWA) capabilities

8.6 Customer Support System

- **Ticketing System**

- Multi-channel support (email, chat, phone)
- Priority-based ticket routing

- SLA tracking
 - Knowledge base integration
 - Ticket escalation workflow
 - **Live Chat Support**
 - Real-time chat for urgent issues
 - Chatbot for common queries
 - Human handoff when needed
 - Chat history and transcripts
 - **Help Center**
 - FAQs and tutorials
 - Video guides for platform usage
 - Troubleshooting articles
 - Community forum
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9. MOBILE APP SPECIFIC FEATURES

9.1 Optimized Learning Experience

- **Adaptive Video Quality**
 - Auto-adjust based on network speed
 - Manual quality selection
 - Data usage tracker
- **Offline Mode**
 - Download videos and resources
 - Offline quiz taking (sync later)
 - Sync queue management
- **Gesture Controls**
 - Swipe to skip forward/backward
 - Double tap to bookmark
 - Pinch to zoom on diagrams

9.2 Mobile-First Features

- **Dark Mode**
 - Easy on eyes for night study
 - Battery saving
 - Auto-switch based on time
- **Picture-in-Picture**

- Watch videos while taking notes
- Multitask within app
- Floating video player
- **Smart Notifications**
 - Study reminders
 - Streak preservation alerts
 - Achievement notifications
 - Customizable quiet hours

9.3 Quick Actions

- **Home Screen Widgets**
 - Daily study goal progress
 - Quick access to current course
 - Upcoming tests reminder
 - Streak counter
- **Voice Commands**
 - "Resume last video"
 - "Start practice quiz"
 - "Show my progress"
 - Voice search for content

10.1 AI Study Companion with Emotional Intelligence

- **Mood Tracking & Adaptation**
 - Daily mood check-in
 - Adjust study plan based on emotional state
 - Motivational content when feeling low
 - Celebrate wins to boost confidence
 - Suggest breaks when detecting stress patterns
- **Learning Burnout Prevention**
 - Monitor study intensity
 - Detect signs of burnout (declining performance, reduced engagement)
 - Suggest rest days or lighter study sessions
 - Recommend stress-relief activities
 - Connect with counselor if needed

10.2 Virtual Study Rooms

- **Live Co-Study Sessions**
 - Join virtual rooms with peers studying same subject
 - Video optional, focus on presence
 - Pomodoro timer synchronized for all
 - Minimal chat to reduce distraction

- Background ambient sounds (library, coffee shop, rain)
- **Accountability Partners**
 - Match with study buddies with similar goals
 - Check in on each other's progress
 - Friendly competition
 - Support during tough topics

10.3 AR/VR Learning (Future-Ready)

- **Augmented Reality Features**
 - Point camera at textbook for additional content
 - 3D models for science/geometry concepts
 - Virtual lab experiments
 - Historical figure animations
 - Interactive anatomy models
- **Virtual Reality Classrooms**
 - Immersive learning environments
 - Virtual field trips
 - Simulated real-world scenarios
 - Professional skill practice (for technical courses)

10.4 Voice Note Learning

- **Audio Note Taking**
 - Record voice notes during video
 - Auto-transcription of voice notes
 - Link notes to specific video timestamps
 - Convert notes to flashcards
 - Share audio notes with study group
- **Podcast-Style Summaries**
 - AI-generated audio summaries of chapters
 - Listen while commuting or exercising
 - Adjustable playback speed
 - Download for offline listening

10.5 Parent-Student Collaboration Tools

- **Shared Goal Setting**
 - Parents and students set goals together
 - Track progress collaboratively
 - Celebration milestones together
 - Parent challenges (e.g., "Read alongside your child")
- **Reward System**

- Parents set real-world rewards for achievements
- Digital reward tokens
- Unlock privileges (screen time, outings)
- Achievement showcase for family

10.11 Exam Hall Simulator

- **Practice Under Pressure**
 - Simulate exact exam conditions
 - Time pressure training
 - Mock exam environment
 - No pausing or hints
 - Realistic scoring
- **Stress Management Training**
 - Pre-exam anxiety reduction techniques
 - Breathing exercises
 - Positive visualization
 - Performance psychology content

10.12 Learning Analytics for Self-Improvement

- **Personal Insights Dashboard**
 - Strengths and weaknesses analysis
 - Learning velocity (pace of progress)
 - Efficiency metrics (learning per hour)
 - Attention span patterns
 - Best performing times/days
- **Peer Benchmarking (Anonymous)**
 - Compare progress with similar students
 - Percentile ranking
 - Growth rate comparison
 - Inspiring success stories

11. AFFILIATE PROGRAM - ADVANCED FEATURES

11.1 Multi-Tier Affiliate System

- **Recruitment Rewards**
 - Earn from direct referrals (Tier 1)
 - Earn from sub-affiliates' sales (Tier 2)

- Build affiliate teams
- Leadership bonuses

11.2 Performance-Based Incentives

- **Achievement Milestones**
 - Bronze, Silver, Gold, Platinum levels
 - Increasing commission rates
 - Exclusive promotional materials
 - Priority support
- **Seasonal Campaigns**
 - Back-to-school campaigns
 - Exam season bonuses
 - Holiday promotions
 - Quarterly contests with prizes

11.3 Marketing Automation

- **Auto-Responder Sequences**
 - Follow-up emails to referred users
 - Nurture campaign for non-converters
 - Win-back campaigns
 - Testimonial collection
- **Social Media Integration**
 - One-click sharing to social platforms
 - Pre-designed posts and graphics
 - Hashtag suggestions
 - Track social media conversions

11.4 Training & Resources

- **Affiliate Academy**
 - Sales training modules
 - Digital marketing courses
 - Best practices and case studies
 - Certification program
- **Webinars & Support**
 - Monthly affiliate training webinars
 - Dedicated affiliate manager
 - Private affiliate community
 - Co-marketing opportunities

12. TRAINING INSTITUTE - ENTERPRISE FEATURES

12.1 White-Label Options

- **Custom Branding**
 - Institute logo and colors
 - Custom domain (learn.institutename.com)
 - Branded certificates
 - Customized email templates

12.2 Advanced Institute Analytics

- **Cohort Analysis**
 - Batch-wise performance comparison
 - Dropout rate tracking
 - Engagement metrics
 - ROI measurement
- **Predictive Insights**
 - At-risk student identification
 - Success probability modeling
 - Resource allocation recommendations
 - Capacity planning

12.3 Integration & APIs

- **LMS Integration**
 - Single sign-on
 - Grade synchronization
 - Automated roster updates
 - Assignment passback
- **Student Information System (SIS) Sync**
 - Automatic student enrollment
 - Demographic data import
 - Schedule integration
 - Report card integration

12.4 Custom Learning Paths

- **Institute-Specific Curriculum**
 - Upload proprietary content
 - Blend with platform content

- Custom assessment creation
- Certification programs

12.5 Enhanced Support

- **Dedicated Account Manager**
 - Onboarding assistance
 - Regular check-ins
 - Custom training for staff
 - Optimization recommendations
 - **Priority Technical Support**
 - 24/7 support hotline
 - Faster response times
 - On-site support (if needed)
 - Technical consultation
-

13. COMPLIANCE, SECURITY & LEGAL

13.1 Data Privacy & Protection

- **Regulatory Compliance**
 - GDPR (Europe)
 - POPIA (South Africa)
 - COPPA (Children's Online Privacy)
 - FERPA (Educational Records)
- **Data Handling**
 - Encrypted data storage (at rest and in transit)
 - Right to access personal data
 - Right to deletion (be forgotten)
 - Data portability
 - Consent management

13.2 Content Protection

- **Digital Rights Management (DRM)**
 - Prevent unauthorized video downloads
 - Watermarking for piracy prevention
 - Screen recording detection
 - Geo-restrictions (if needed)

- **Copyright Protection**
 - DMCA compliance
 - Content licensing management
 - Attribution tracking
 - Plagiarism detection for student submissions

13.3 Child Safety

- **Safe Environment**
 - Age verification
 - Parental consent for minors
 - Monitored communication channels
 - Content moderation
 - Reporting system for inappropriate content
- **Background Checks**
 - Verify teacher credentials
 - Screen content creators
 - Regular audits

13.4 Terms of Service & Policies

- **Clear Policies**
 - Terms of service
 - Privacy policy
 - Refund policy
 - Acceptable use policy
 - Cookie policy
 - **User Agreements**
 - Click-through acceptance
 - Version control
 - Notification of changes
 - Easy-to-understand language
-

15. IMPLEMENTATION ROADMAP

Phase 1: MVP (Minimum Viable Product) - Months 1-3

Priority Features:

- User management (all 6 user types)

- Course structure (Academic & Professional)
- Video player with basic features
- Membership & subscription system
- Online exams (basic version)
- Payment gateway integration
- Super admin dashboard
- Mobile responsive web app

Phase 2: Core Features - Months 4-7

Enhanced Learning:

- AI-powered adaptive exams
- Resource guides, flashcards, mind maps
- Personal Learning Assistant (AI chatbot)
- Smart Study Planner
- Spaced Repetition System
- Target Exam feature with AI prediction
- Parental controls and insights
- Automated reports and alerts
- Affiliate program launch
- Training institute portal

Phase 3: Advanced Features - Months 8-12

Engagement & Growth:

- Gamification (points, badges, leaderboards)
- Social learning features
- Live sessions capability
- Advanced analytics
- Recommendation engine
- Offline learning support
- Mobile apps (iOS & Android)
- Multi-language support
- Integration APIs
- Career guidance module

Phase 4: Innovation & Scale - Months 13-18

Future-Ready:

- AI Mentor Mode (advanced)
- Virtual study rooms
- Voice note learning
- AR/VR features (pilot)
- Microlearning content
- Portfolio builder

- Brain training games
 - Community marketplace
 - White-label solutions
 - Enterprise features
 - International expansion
-

Mi Digital Academy - User Journey & User Stories

PART 1: STUDENT USER JOURNEY

1.1 DISCOVERY & ONBOARDING

Journey Stage: Awareness

Scenario: Ravi, a Grade 10 student from Johannesburg, is struggling with Mathematics and Physics. His friend tells him about Mi Digital Academy.

User Journey:

1. Discovers Platform

- Hears about Mi Digital Academy from a friend/social media
- Searches "online tutoring South Africa" on Google
- Clicks on Mi Digital Academy advertisement
- Lands on homepage

2. Explores Homepage

- Reads about features: AI-powered learning, affordable pricing
- Watches introductory video (2 minutes)
- Browses course categories: Academic (CAPS Curriculum) and Professional
- Sees testimonials from other students
- Notices "Free Trial" button prominently displayed

3. Browses Courses Without Registration

- Clicks "Academic Courses"
- Selects "CAPS Curriculum" → "Grade 10"

- Sees list of subjects: Mathematics, Physics, Chemistry, Biology, etc.
 - Clicks on "Mathematics" to see course outline
 - Views sample video (first 2 minutes unlocked)
 - Sees pricing: R299/month for Mathematics only, R499/month for 3 subjects
- 4. Decision to Sign Up**
- Clicks "Start Free Trial" button
 - Sees value proposition: "7 days full access, no credit card required"

Journey Stage: Registration

User Journey:

1. Registration Page

- Chooses "Sign Up as Student"
- Enters basic information:
 - Full Name: Ravi Kumar
 - Email: ravi.kumar@email.com
 - Phone: +27 XX XXX XXXX
 - Password: (creates secure password)
 - Confirm Password
- Accepts Terms & Conditions (checkbox)
- Accepts Privacy Policy (checkbox)
- Optional: Parental email (if under 18)

2. Email Verification

- Receives verification email
- Clicks verification link
- Redirected to welcome page

3. Profile Setup (Onboarding Flow)

Step 1: Basic Information

- Date of Birth: 15/06/2009
- Grade/Level: Grade 10
- Education Board: CAPS (South African Curriculum)
- School Name: Johannesburg High School (optional)
- City: Johannesburg
- Province: Gauteng

4. Step 2: Learning Preferences

- What subjects need most help? (Select multiple)
 - ☒ Mathematics
 - ☒ Physical Sciences
 - ☐ Life Sciences
 - ☐ English
- Preferred learning style:

- ☐ Visual (videos, diagrams)
- ☐ Auditory (podcasts, audio explanations)
- ☐ Kinesthetic (interactive, hands-on)
- ☒ Mixed
- Study time preference:
 - ☐ Morning (6 AM - 12 PM)
 - ☐ Afternoon (12 PM - 6 PM)
 - ☒ Evening (6 PM - 12 AM)
 - ☐ Late Night (12 AM - 6 AM)
- Daily study time available:
 - Slider: 2 hours

5. Step 3: Goals & Motivation

- What are your academic goals?
 - ☒ Improve grades
 - ☒ Prepare for final exams
 - ☐ Learn new skills
 - ☐ Catch up on missed lessons
- Target grade/score for this year:
 - Mathematics: 75% (currently at 55%)
 - Physical Sciences: 70% (currently at 60%)
- Important exam dates:
 - Mid-year Exams: 15th June 2025
 - Final Exams: 20th November 2025

6. Choose Subscription Plan

- Sees three options for Grade 10:

Option 1: Single Subject - R299/month

- Choose 1 subject
- Full access to all videos, exams, resources
- AI Learning Assistant (10 questions/day)
- **Option 2: 3 Subjects Bundle - R499/month** ★ Most Popular
 - Choose 3 subjects
 - Everything in Option 1
 - AI Learning Assistant (Unlimited)
 - Smart Study Planner
 - Save 44%
- **Option 3: All Subjects - R699/month** 🏆 Best Value
 - All Grade 10 subjects (8 subjects)
 - Everything in Option 2
 - 1-on-1 doubt clearing sessions (2/month)
 - Priority support
 - Save 60%

- Ravi selects **Option 2: 3 Subjects Bundle**
- Chooses subjects: Mathematics, Physical Sciences, English
- Sees: "Start with 7-day FREE TRIAL"

7. Free Trial Activation

- Clicks "Start Free Trial"
- No payment information required
- Account activated instantly
- Receives welcome email with tips

1.2 FIRST-TIME USER EXPERIENCE

Journey Stage: Initial Exploration

User Journey:

1. Welcome Dashboard

- Sees personalized greeting: "Welcome, Ravi! 🙌"
- Quick stats displayed:
 - 📚 3 Subjects Unlocked
 - 🎯 7 Days Free Trial Remaining
 - 🕒 0 Hours Studied
 - 🎓 0 Lessons Completed

2. Interactive Tutorial (Optional but Recommended)

- Popup: "Want a quick tour? (2 minutes)"
- Ravi clicks "Yes, show me around"

3. Tutorial Steps:

- Highlights navigation menu
- Shows how to browse courses
- Demonstrates video player features
- Explains AI Learning Assistant
- Shows where to find exams and quizzes
- Points to progress tracking
- Skip option available at each step

4. Personalized Recommendations

- AI suggests starting point:
 - "Based on your goals, we recommend starting with:"
 - 📐 Mathematics → Grade 10 → Algebra → Introduction to Functions

- Reason: "This is a fundamental topic for your upcoming exams"
- Shows alternative starting points if preferred

5. First Lesson Experience

- Ravi clicks "Start Learning" on recommended video
- Video player opens with:
 - Progress bar (0%)
 - Playback controls (play, pause, 10s skip)
 - Speed control (0.75x, 1x, 1.25x, 1.5x, 2x)
 - Quality settings (Auto, 720p, 480p, 360p)
 - Subtitles toggle
 - Full screen option
 - Volume control

6. During Video Watching

- **Timestamp: 2:30** - Important concept appears
 - Ravi clicks bookmark icon
 - Adds note: "Remember this formula for exam"
- **Timestamp: 5:00** - Confusing point
 - Ravi pauses video
 - Clicks "Ask AI Assistant" button
 - Types: "I don't understand how to find the domain"
 - AI responds with simplified explanation and example
 - Option to continue video or ask follow-up question
- **Timestamp: 12:00** - Video ends
 - Shows completion message: "Great job! 🎉"
 - Progress updated: 1 lesson completed
 - Automatic prompt: "Ready for a quick quiz?"

7. First Assessment Experience

- Ravi clicks "Take Quiz"
- **Quiz Introduction Screen:**
 - Topic: Introduction to Functions
 - Questions: 10
 - Duration: 15 minutes
 - Type: Multiple choice and short answer
 - Passing score: 60%
 - Can retake: Yes
- Starts quiz
- **Question 1:** Multiple choice
 - Timer visible (top right)
 - Question text clearly displayed
 - 4 options (A, B, C, D)
 - Can mark for review
 - Navigation buttons (Previous, Next, Submit)
- **Question 5:** Struggles with answer
 - Uses "Mark for Review" flag
 - Continues to next question

- **Question 10:** Final question
 - Clicks "Review Answers" before submitting
 - Sees overview: 8 answered, 2 marked for review
 - Goes back to review marked questions
 - Submits quiz
- 8. **Quiz Results & Feedback**
 - **Results Screen:**
 - Score: 7/10 (70%) 
 - Message: "Good job! You passed! 🎉"
 - Time taken: 12 minutes
 - Accuracy: 70%
 - **Detailed Analysis:**
 - Correct answers: Green checkmark
 - Wrong answers: Red X with correct answer shown
 - Explanation for each question
 - Related video timestamps for wrong answers
 - **Performance Insights:**
 - Strengths: Domain and Range (100%)
 - Needs improvement: Function notation (50%)
 - Recommendation: "Review video at 8:30 for function notation"
 - **Next Steps:**
 - Add to flashcards (wrong questions)
 - Retake quiz
 - Move to next lesson
 - Ask AI for clarification
- 9. **Post-Quiz Actions**
 - Ravi clicks "Add to Flashcards"
 - Wrong questions automatically converted to flashcards
 - Clicks "Next Lesson"
 - Returns to course page

1.3 REGULAR LEARNING JOURNEY

Journey Stage: Daily Usage (Week 2 onwards)

User Journey:

1. Login Experience

- Visits midigitalacademy.com
- Clicks "Login"
- Enters email and password
- Optional: "Remember me" checkbox

- Two-factor authentication (if enabled)
- Lands on personalized dashboard

2. Dashboard Overview (Logged In)

- **Welcome Banner:**
 - "Good evening, Ravi! 🌙"
 - Current time: 7:30 PM
 - Motivational message: "You're on a 5-day streak! Keep it up! 🔥"
- **Today's Study Plan Widget:**
 - AI-generated daily tasks:
 - ✅ Mathematics: Functions (30 min) - COMPLETED
 - 📝 Physical Sciences: Newton's Laws (45 min) - IN PROGRESS
 - 📖 English: Grammar Review (20 min) - PENDING
 - Progress bar: 40% complete
- **Quick Stats:**
 - 🔥 Streak: 5 days
 - 🕒 This Week: 8.5 hours
 - 📊 Average Score: 72%
 - 🎯 Goals Progress: 65%
- **Continue Where You Left Off:**
 - Thumbnail of last watched video
 - "Physical Sciences - Newton's Second Law"
 - Progress: 65% complete (8:30 / 13:00)
 - "Continue Watching" button
- **Upcoming Events:**
 - 📅 Mid-year Math Exam in 45 days
 - 📝 Physics Quiz due tomorrow
 - 🎓 New content: Trigonometry (Released today)
- **Performance Snapshot:**
 - Mini graph showing weekly performance trend
 - Subject-wise progress bars:
 - Mathematics: 45% 
 - Physical Sciences: 38% 
 - English: 52% 

3. Continuing Previous Lesson

- Ravi clicks "Continue Watching"
- Video resumes at exact timestamp (8:30)
- Watches remaining 4.5 minutes
- Video ends
- Completion message + 50 points earned 🎉

4. Post-Lesson Resources Access

- Automatic prompt: "Explore resources for this lesson?"
- Options displayed:
 - 📄 Download PDF Notes
 - 📇 View Flashcards (8 cards)

-  Interactive Mind Map
-  FAQs (5 common questions)
-  Take Quiz

- Ravi clicks "View Flashcards"

5. Flashcard Study Session

- **Flashcard Interface:**
 - Card 1 of 8 displayed
 - Front: "State Newton's Second Law"
 - Ravi thinks about answer
 - Clicks card to flip
 - Back: " $F = ma$ (Force equals mass times acceleration)"
- **Self-Assessment:**
 - Buttons appear: "Too Easy" | "Good" | "Hard"
 - Ravi clicks "Good"
 - Next card appears automatically
- **Spaced Repetition Logic:**
 - "Too Easy" → Card won't appear for 7 days
 - "Good" → Card reappears in 3 days
 - "Hard" → Card reappears tomorrow
- Completes all 8 flashcards
- Summary: "Great session! Next review in 2 days"

6. Using AI Learning Assistant

- While studying, Ravi has a question
- Clicks "AI Assistant" icon (bottom right)
- Chat window opens

7. Conversation:

- **Ravi:** "How does friction affect Newton's Second Law?"
- **AI Assistant:** "Great question, Ravi!  Friction is an external force that opposes motion..."
 - Provides detailed explanation
 - Includes diagram (generated)
 - Links to relevant video timestamp
- **Ravi:** "Can you give me an example?"
- **AI Assistant:** "Sure! Imagine pushing a box across the floor..."
 - Provides worked example with numbers
- **Ravi:** "Thanks!"
- **AI Assistant:** "You're welcome! Want a practice problem on this? 
- **Ravi:** "Yes"
- **AI Assistant:** Generates custom practice problem
- Ravi solves it and submits
- AI provides instant feedback and explanation

8. Taking a Practice Quiz

- Ravi navigates to "Assessments" section
- Sees available quizzes:

-  Functions Quiz - Completed (70%)
-  Newton's Laws Quiz - Available
-  Momentum Quiz - Locked (complete previous lessons)
- Clicks "Newton's Laws Quiz"
- Quiz settings page:
 - Difficulty: ☒ Adaptive (recommended) | ☐ Easy | ☐ Hard
 - Number of questions: 15
 - Estimated time: 20 minutes
- Starts quiz
- AI-Adaptive behavior:
 - First question: Medium difficulty
 - Ravi answers correctly → Next question slightly harder
 - Ravi answers incorrectly → Next question slightly easier
- Completes quiz: 12/15 (80%) ★
- Detailed feedback provided
- Score added to performance tracking

9. Checking Progress & Analytics

- Ravi clicks "My Progress" in navigation

10. Progress Dashboard Shows:

- **Overall Progress:**
 - Total hours: 42.5 hours
 - Lessons completed: 87/210 (41%)
 - Average quiz score: 74%
 - Current streak: 5 days 🔥
 - Longest streak: 12 days
- **Subject-Wise Breakdown:**
 - Mathematics:
 - Progress: 45% complete
 - Time spent: 18 hours
 - Average score: 72%
 - Current topic: Functions and Graphs
 - Mastery level: Intermediate
 - Physical Sciences:
 - Progress: 38% complete
 - Time spent: 16 hours
 - Average score: 75%
 - Current topic: Newton's Laws
 - Mastery level: Intermediate
 - English:
 - Progress: 52% complete
 - Time spent: 8.5 hours
 - Average score: 78%
 - Current topic: Grammar and Composition
 - Mastery level: Advanced
- **Performance Trends:**
 - Line graph showing weekly quiz scores

- Upward trend visible 
- Best subject: English
- Needs attention: Mathematics
- **Study Patterns:**
 - Heatmap showing study activity
 - Most active: Weekday evenings (7-9 PM)
 - Least active: Weekend mornings
 - Peak performance time: 8 PM
- **Strengths & Weaknesses:**
 -  Strengths:
 - English grammar (92%)
 - Basic physics concepts (88%)
 - Linear functions (85%)
 -  Needs Improvement:
 - Quadratic equations (58%)
 - Force calculations (62%)
 - Essay writing (65%)
- **Goal Progress:**
 - Mid-year exam goal: 75% in Math
 - Current projection: 71%
 - Status:  On track with effort
 - Mid-year exam goal: 70% in Physics
 - Current projection: 76%
 - Status:  Exceeding expectations

11. End of Study Session

- Ravi studies for 90 minutes total
- Clicks profile icon → "End Session"
- Session summary appears:
 - Time today: 1.5 hours 
 - Lessons completed: 3
 - Quizzes taken: 1
 - Points earned: 150
 - New badges: None
 - Tomorrow's recommendation: "Continue with Trigonometry"
- Logout button
- "Same time tomorrow?" reminder option

1.4 TARGET EXAM PREPARATION JOURNEY

Journey Stage: Goal-Oriented Learning

User Journey:

1. Creating Target Exam

- Ravi navigates to "Target Exams" section
- Clicks "Create New Target Exam"

2. Exam Setup Form:

- **Basic Information:**
 - Exam name: "Mid-Year Mathematics Exam"
 - Exam type: ☒ School Exam | ☐ Board Exam | ☐ Competitive Exam
 - Date: 15th June 2025
 - Target score: 75%
 - Current estimated score: 55%
 - Importance: ☒ High | ☐ Medium | ☐ Low
- **Select Relevant Subjects & Topics:**
 - Subject: Mathematics
 - Topics covered in exam (select from curriculum):
 - ☒ Functions and Graphs (Chapter 1-3)
 - ☒ Algebra (Chapter 4-5)
 - ☒ Trigonometry (Chapter 6)
 - ☒ Geometry (Chapter 7-8)
 - ☒ Probability (Chapter 9)
 - Estimated topic weightage:
 - Functions: 25%
 - Algebra: 25%
 - Trigonometry: 20%
 - Geometry: 20%
 - Probability: 10%
- **Exam Pattern (Optional):**
 - Multiple choice: 20 questions (40 marks)
 - Short answer: 10 questions (30 marks)
 - Long answer: 3 questions (30 marks)
 - Total: 100 marks
 - Duration: 3 hours
- Clicks "Create Target Exam"

3. AI Analysis & Initial Assessment

- AI analyzes Ravi's profile:
 - Current performance in selected topics
 - Time available until exam (45 days)
 - Study patterns and consistency
 - Historical learning pace
 - Difficulty level of topics
- **Initial Prediction Screen:**
 - "Based on your current performance, here's our prediction:"
 - Predicted Score: 71% ($\pm 5\%$)
 - Confidence: Medium
 - Gap to target: -4%

- Message: "You're close! With focused effort, you can reach your goal."



- **Breakdown by Topic:**

- Functions: Predicted 68% | Target 75% | Gap -7%
- Algebra: Predicted 75% | Target 75% | Gap 0% ✓
- Trigonometry: Predicted 65% | Target 75% | Gap -10% ⚠
- Geometry: Predicted 72% | Target 75% | Gap -3%
- Probability: Predicted 78% | Target 75% | Gap +3% ✓

- "Generate AI Study Plan" button prominent

4. AI-Generated Study Plan

- Ravi clicks "Generate Study Plan"
- AI creates personalized 45-day plan

5. Study Plan Overview:

- **Phase 1: Foundation (Days 1-15)**
 - Focus: Strengthen weak fundamentals
 - Priority topics: Functions, Trigonometry
 - Daily commitment: 2 hours
 - Activities: Video lessons + practice problems
- **Phase 2: Practice (Days 16-35)**
 - Focus: Problem-solving and application
 - All topics covered
 - Daily commitment: 2.5 hours
 - Activities: Mixed quizzes + timed tests
- **Phase 3: Mastery & Revision (Days 36-45)**
 - Focus: Exam simulation and revision
 - Full-length mock tests
 - Daily commitment: 3 hours
 - Activities: Mock exams + error analysis

6. Weekly Breakdown (Week 1 Example):

- **Monday:**
 - 📺 Watch: Functions - Domain & Range (30 min)
 - 📝 Practice: 10 problems (30 min)
 - 📇 Flashcard review (15 min)
 - 🎯 Quiz: Domain & Range (15 min)
- **Tuesday:**
 - 📺 Watch: Functions - Composite Functions (35 min)
 - 📝 Practice: 12 problems (35 min)
 - 🎯 Quiz: Composite Functions (20 min)
- **Wednesday:**
 - 📺 Watch: Trigonometry - Basic Ratios (40 min)
 - 📝 Practice: 15 problems (45 min)
 - 🗺 Create mind map (15 min)
- **Thursday:**
 - 📝 Mixed practice: Functions + Trig (60 min)
 - 🎯 Adaptive quiz (30 min)

- **Friday:**
 - 📺 Watch: Algebra - Quadratic Equations (35 min)
 - 📝 Practice: 10 problems (35 min)
 - 🎯 Quiz: Quadratics (20 min)
- **Saturday:**
 - 📝 Weekly test (All topics covered) (90 min)
 - 📊 Review mistakes (30 min)
- **Sunday:**
 - 🔄 Revision day (use SRS flashcards) (60 min)
 - 🧘 Rest and light review (30 min)
- Ravi can:
 - Accept plan as-is
 - Customize daily time commitment
 - Adjust priorities
 - Skip topics already mastered

7. Following the Study Plan Daily

- Each day, Ravi logs in
- Dashboard shows "Today's Target Exam Tasks"
- Tasks clearly listed with estimated time
- Checkboxes to mark completion
- Progress bar for the day
- Ravi completes tasks:
 - ✅ Watch: Functions video (30 min)
 - ✅ Practice: 10 problems (30 min)
 - ⌚ Flashcard review (pending)
 - ⌚ Quiz (pending)
- If Ravi misses a task:
 - Plan automatically adjusts next day
 - Redistributes workload
 - Sends gentle reminder notification

8. Weekly Progress Check-In

- Every Sunday, AI generates progress report

9. Week 1 Report:

- Tasks completed: 28/30 (93%) ★
- Study time: 14.5 hours / 14 hours planned ✅
- Quiz performance:
 - Average score: 76% (+4% from last week)
- Prediction update:

- New predicted score: 72% (was 71%)
- Confidence: Medium → High
- Message: "Great progress! Keep it up!" 🎉
- Topics mastered this week:
 - ✅ Domain & Range
 - ✅ Composite Functions
- Topics needing attention:
 - ⚠️ Trigonometric identities
- Next week focus: Trigonometry intensive

10. Mid-Preparation Check (Day 22)

- Halfway point to exam
- AI triggers comprehensive assessment

11. Mid-Term Evaluation:

- Takes 90-minute practice exam
- Simulates actual exam conditions
- Covers all topics with proper weightage

12. Results:

- Score: 68/100 (68%)
- Time taken: 2 hours 45 minutes
- Detailed breakdown by topic

13. Updated Prediction:

- New predicted score: 73% ($\pm 3\%$)
- Gap to target: -2%
- Confidence: High
- Message: "You're almost there! Focus on these areas..."

14. AI Recommendations:

- Increase Trigonometry practice (weak area)
- Work on time management (exam lasted too long)
- Strengthen Geometry proofs
- Continue current pace for other topics

15. Adjusted Study Plan:

- Phase 2 modified to include:
 - Extra 3 hours/week on Trigonometry
 - Timed practice sessions (work on speed)
 - More geometry proof practice
- Ravi accepts updated plan

16. Final Week Preparation

- **Days 39-42: Mock Exams**
 - Takes 3 full-length mock exams
 - Mock 1: 72%
 - Mock 2: 74%

- Mock 3: 76% 🎉
- **Days 43-44: Targeted Revision**
 - AI identifies final weak spots
 - Custom flashcards for formulae
 - Quick video reviews of complex topics
- **Day 45: Exam Day**
 - Receives motivational message:
 - "You're ready, Ravi! You've completed 98% of your study plan and scored 76% on your last mock. Trust your preparation. Good luck! 🍀"
 - Light revision recommendations (1 hour)
 - Relaxation techniques
 - Exam day checklist

17. Post-Exam Reflection

- After exam (next day), prompted to:
 - Rate exam difficulty
 - Estimate your performance
 - Identify topics that were harder than expected
 - Provide feedback on study plan effectiveness
- Ravi estimates: "I think I scored around 77%"
- AI records this for future accuracy improvement
- When official results come out:
 - Ravi updates actual score: 79% 🎉
 - AI compares: Predicted 73% | Actual 79%
 - Learns from this to improve future predictions
 - Celebrates achievement with badge: "Goal Crusher" 🏆
 - Shares success story (optional) with community