Product Requirement Document: EduVoyage AI (v1.1)

***Status:** Ready for Development | **Target:** Indian Engineering Students (B.Tech/BE)*

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1. Executive Summary

*EduVoyage AI is a hybrid intelligence platform designed to eliminate the confusion engineering students face when selecting foreign universities. By combining **AI-driven data analysis** with **human counselor validation**, the platform provides hyper-personalized university shortlists and **Return on Investment (ROI) forecasts** tailored specifically for the Indian engineering demographic.*

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2. Success Metrics (KPIs)

To measure the impact of the platform, we will track the following:

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3. Core Features & "Engineering DNA"

3.1. The DNA Analyzer (Input)

- ***Academic Scoping:** Captures 10th/12th/UG marks, STEM-specific grades, and standardized test scores (GRE/IELTS).*
- ***The Backlog Tracker:** Specifically tracks the number of subjects failed and cleared—a critical data point for Indian applicants.*
- ***Normalization Engine:** Automatically converts 10-point CGPA into specific 4.0 scales for US, German, and Australian requirements.*

3.2. AI "Dream-Catch" Recommendations

- ***Tiered Results:** Outputs 9 universities categorized into **Dream (20% chance)**, **Moderate (50% chance)**, and **Safe (80%+ chance)**.*

- ***ROI Radar:*** *Calculates the "Payback Period" using average tuition vs. engineering-specific starting salaries in the destination country.*

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4. Technical Feature Brief: The Backlog Filter

This is the unique selling point (USP) of the platform.

- ***Logic:*** *The system cross-references* `backlog_count` *against a database of university admissions policies.*
- ***Tier 1 (Strict):*** *Auto-hides universities with zero-tolerance policies if backlogs > 0.*
- ***Tier 2 (Flexible):*** *Highlights schools (e.g., in Australia or the UK) that accept up to 5-10 cleared backlogs.*
- ***User UI:*** *Provides a "Eligibility Confidence" badge so students don't waste application fees on schools that will auto-reject them.*

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5. User Journey (The Flow)

1. ***Onboarding:*** *Student signs up (LinkedIn/Google) and completes the* ***Engineering DNA*** *form.*
2. ***AI Processing:*** *The engine runs a match against the EduVoyage database and live scrapers.*
3. ***Output:*** *Student receives a* ***University Compatibility Report*** *with ROI forecasts.*
4. ***Human Validation:*** *A counselor reviews the AI's work on the* ***Counselor Dashboard****, adds manual notes, and approves the list.*
5. ***Execution:*** *The final list is "Locked," and the student begins the document submission process (SOP, LOR, Visas).*

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6. Technical & Ethical Requirements

- ***Scalability:*** *Must handle traffic spikes during* ***May/June*** *(Indian result season).*
- ***Security:*** *GDPR and Indian Data Protection compliance for PII (Personally Identifiable Information).*
- ***Bias Mitigation:*** *AI logic must not discriminate based on the student's tier-city or socioeconomic status in the "Safe" recommendations.*

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7. Implementation Roadmap

- ***Phase 1 (MVP):*** *DNA Form, GPA Converter, Triage Algorithm, and Basic Counselor Dashboard.*
- ***Phase 2:*** *Live ROI Payback Calculator, Backlog-Specific University Badges, and Alumni Outcome Tracking.*
- ***Phase 3:*** *Automated Visa Success Predictor and AI-powered SOP Feedback.*
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