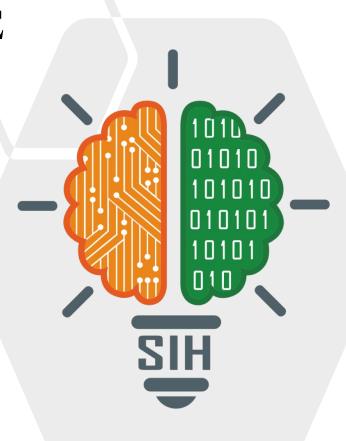
SMART INDIA HACKATHON 2025



TITLE PAGE

- Problem Statement ID 25094
- Problem Statement Title- One-Stop
 Personalized Career & Education Advisor
- Theme- Smart Education
- PS Category- Software
- Team ID- HariSentinels
- Team Name HariSentinels





EduCursus



Students struggle to choose the right career path due to lack of guidance – EduCursus solves this with AI + psychometrics + gamification.

- Interactive Aptitude & Interest Quiz for tailored career suggestions.
- Psychometric analysis incorporated for deep personalized insights.
- Dynamic Course-to-Career Mapping with intuitive visual flowcharts.
- Location-based Nearby College Directory highlighting programs and facilities.
- •Al-Driven Personalized Dashboard offering adaptive career & skill recommendations.
- •Real-Time Progress Tracking and milestone-based motivation(Gamification approach help engage and reward student progress)
- Conversational Al Mentor for instant, personalized career guidance(Chatbot).
- Integration with leading online course platforms for seamless upskilling.



TECHNICAL APPROACH



EduCursus FlowChart

TechStack Used:-

Frontend: React + Tailwind + Firebase

HostingBackend: FastAPI + Cloud Run + FirestoreAl/ML: Vertex AI (Gemini + Embeddings + Vector Search) or Self trained models(LLM & Prediction)

Database: BigQuery + Dataflow + Job Data

<u>APIsInfra:</u> Google Cloud (Workflows, Functions, IAM, Monitoring)

1	Data Storage Securely storing user data in the cloud	
2	Data Processing Generating personalized recommendations using	
3	Recommendation Display Presenting recommendations on the user dashboard	
4	Progress Tracking Allowing users to track and update achievements	
5	AI Guidance Providing real-time AI-powered career guidance	
6	API Integration Integrating with external learning and job resources	



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User Journey on EduCursus



User arrives
at website
with
login/register
options [
welcoming
homepage
with login
buttons

blue]

User takes
aptitude and
interest
assessment [
quiz screen
with multiplechoice
questions

green]

User explores
visual career
pathways [
flowchart
with career
icons

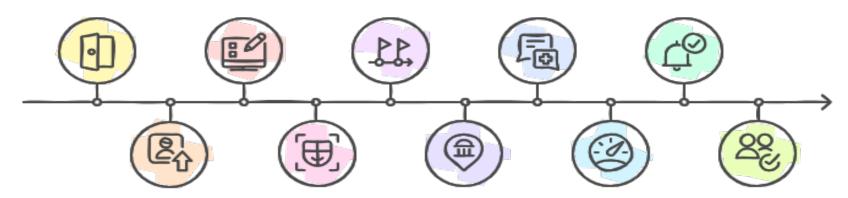
yellow]

User chats
with AI for
personalized
advice [chat
bubble with AI
avatar

red]

User receives milestone and opportunity alerts [notification bell with updates

purple]



User
completes
profile with
academic and
skill details [
registration
form with
profile fields

cyan]

AI analyzes user data to generate recommendations [AI brain processing data

lime]

User accesses local college listings [map with college markers

orange]

User views recommendations and progress [dashboard with charts and progress bar

magenta]

User updates
profile for
refined guidance
[profile edit
screen with
progress tracker

violet]

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FEASIBILITY AND VIABILITY



Feasibility

- •Built on proven, scalable Google Cloud infrastructure with enterprise-grade security
- •Utilizes managed AI services minimizing complex model development overhead
- •Cloud-native design allows rapid deployment, easy maintenance, and dynamic scaling
- •Open APIs and frameworks enable smooth integration with learning platforms and job data sources
- •Frontend technologies (React, Tailwind, Firebase) support cross-platform access and quick iterations
- •MVP focus on core features reduces time-to-market and development costs

Viability

- •Addresses a large, unmet need in Indian education and career guidance market
- •Personalized AI recommendations improve student outcomes and lifelong skill development
- •Potential for revenue through premium features, career services partnerships, and data insights
- •Scalable architecture supports expansion to new markets and user segments
- •Strong Al-powered differentiation offers competitive advantage and innovation leadership



IMPACT AND BENEFITS



Impact

- Empowers students with personalized career guidance
- Bridges gap between education & job market
- Boosts confidence, reduces indecision & dropouts
- Democratizes mentorship & career resources
- Promotes skill development for future roles

Benefits

- Tailored recommendations save time & effort
- Dynamic roadmaps evolve with progress & trends
- 24/7 interactive Al mentor support
- Seamless upskilling via learning platform integration
- Scalable platform with continuous improvement



RESEARCH AND REFERENCES



Research:-

Importance of Career Guidance

•Personalized counseling boosts satisfaction, skill alignment & reduces dropouts (NCERT, 2023)

AI in Education

•Al platforms improve skill recommendations & mentorship access (WEF, 2024)

Psychometric Assessments

•Enhance career fit, motivation & outcomes (JVB, 2023)

Cloud & AI Scalability

•Cloud AI enables scalable, secure & cost-effective platforms (Google Cloud, 2025)

Data Privacy & Ethics

•Compliance with PDP Bill & GDPR ensures student data security (DSCI, 2024)

Key References:-

- NCERT Report on Career Guidance in Indian Schools, 2023
- World Economic Forum: Al in Education Report, 2024
- Journal of Vocational Behavior, "Psychometric Tools for Career Development," 2023
- Google Cloud Vertex AI Documentation, 2025, Hugging Face Website.