STARTUP GPS:AI POWERED STARTUP IDEA-VALIDATION, TEAM BUILDING AND ROADMAP GENERATION PLATFORM

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Introduction:
Many individuals have innovative startup ideas but struggle to validate them due to lack of proper tools, guidance, and resources. This often leads to failure at early stages. Startup GPS is an AI-powered platform designed to bridge this gap by providing idea validation, research insights, team-building support, and roadmap generation. The platform uses advanced AI models and APIs to analyze trends, competitors, and feasibility of ideas.

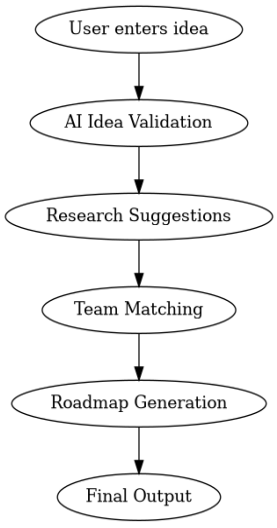

Figure 1: Workflow of Startup GPS

Objectives:

1. To develop an AI-powered system for validating startup ideas based on feasibility, trends, and market demand.
2. To provide real-time insights and research support using APIs such as ArXiv, Semantic Scholar, and Crossref.
3. To design an intelligent team-matching system that connects users with co-founders having complementary skills.
4. To generate a personalized roadmap guiding users from idea validation to startup launch and growth.
5. To build an integrated platform that simplifies the startup journey and reduces the risk of failure.

Methodology:

The system is developed using FastAPI for backend and React.js for frontend. It integrates AI models via Groq API for idea validation and roadmap generation. Research data is fetched using APIs such as ArXiv, Semantic Scholar, and Crossref. The platform analyzes user input and provides feasibility insights. A matching algorithm connects users with collaborators. MongoDB is used for data storage. The workflow includes idea input, validation, research suggestions, team matching, and roadmap generation.

Results and Conclusion:

The system successfully provides AI-driven validation of startup ideas with relevant insights. It generates research references and connects users with collaborators. The roadmap feature provides step-by-step guidance. The project demonstrates how AI simplifies entrepreneurship and improves decision-making.

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Future Scope

The future scope of this project includes:

1. Development of a mobile application to improve accessibility and user engagement.
2. Addition of investor and funding support features to connect startups with potential investors.
3. Enhancement of the platform with startup performance analytics and tracking tools.
4. Expansion to a global platform with multilingual support for wider reach and usability.