Week-I Project Milestone 1 -

Startup Idea Validator

1. Abstract Reading

The Startup Idea Validator is a comprehensive evaluation platform that transforms subjective startup assessments into data-driven insights, helping founders make informed decisions before investing significant time and resources.

Key Points:

- **Purpose**: Early-stage startup idea validation for entrepreneurs
- **Core Functionality**: AI based algorithmic scoring
- **Technology Stack**: MERN Stack (MongoDB, Express.js, React.js, Node.js)
- **Unique Feature**: Input system (structured forms)

2. Presentation of Abstract

"The Startup Idea Validator helps entrepreneurs validate business ideas through data-driven analysis. Using a scoring algorithm, it evaluates concepts across technical feasibility, market potential, and revenue viability. The platform offers dual input methods - forms or PDF upload - and provides actionable feedback with improvement suggestions."

Key Points:

- Problem: Gap between entrepreneurial enthusiasm and market reality
- Solution: Algorithmic evaluation platform with dual input system
- Technology: MERN stack for scalability
- Impact: Reduce startup failure rates through informed decisions

3. Group Discussion of Abstract

Discussion Topics:

- Market demand for startup validation tools
- Platform differentiation from existing solutions
- Technical feasibility of dual input methods
- Scalability and monetization potential

Key Questions:

1. How will the scoring algorithm ensure reliability?
2. What challenges exist in PDF text extraction?
3. How to maintain relevance across different industries?

4. Feature Finalization

Mandatory Features

1. **User Authentication**: Registration, login, profile management
2. **Dual Input System**: Multi-tab forms + PDF upload with text extraction
3. **Core Scoring Algorithm**: Technical feasibility, market potential, competitive advantage assessment
4. **Basic Reporting**: Viability scores, strengths, improvement areas
5. **Responsive Interface**: Mobile-friendly design

Optional Features

- Advanced analytics and benchmarking
- Team collaboration tools
- External API integrations
- Mobile application

5. Functional Requirements

User Management

- User registration with email verification and secure login
- Profile management and project history tracking

Idea Input Processing

- Multi-tab form interface with 5 structured sections

- PDF upload (max 10MB) with automatic text extraction
- Data validation and draft saving functionality

Assessment Engine

- Evaluation using predefined scoring algorithm
- Assessment of technical feasibility, market potential, and revenue viability
- Generate scores and feedback within 30 seconds

Reporting

- Comprehensive reports with visual charts
- Actionable improvement recommendations
- PDF export capability

6. Non-Functional Requirements

Performance

- System response time under 3 seconds
- Support for 100+ concurrent users
- Page load times under 2 seconds

Security

- Encrypted passwords and JWT authentication
- Rate limiting and input sanitization
- HTTPS enforcement

Usability & Reliability

- Intuitive interface with mobile responsiveness
- 99.5% uptime with automated backups
- Cross-browser compatibility