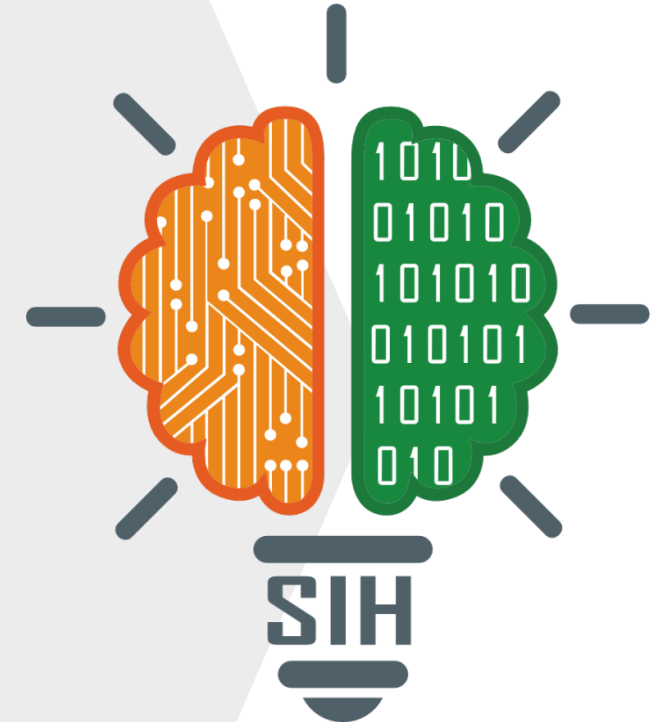


SMART INDIA HACKATHON 2025



“LUMO” – Learn, Upgrade, Match and Opportunities

- Problem Statement ID – **25034**
- Problem Statement Title- **AI Internship Recommender**
- Theme- **Smart Education**
- PS Category- **Software**
- Team ID-
- Team Name – **Angaari Paltan** 🔥





LUMO



An **AI-driven recommendation engine** that **analyzes** user profiles (skills, education, interests) and **matches** them with **verified internships** under the PM Internship Scheme. It uses **Natural Language Processing (NLP)** to **extract data** from resumes to provide personalized recommendations. **Fraud detection** modules will flag fake or low-quality listings.

❖ Solution:

- 1.AI-Powered Matching:** Our AI **suggests** relevant **internships** to user based on their skill set.
- 2. Profile Analysis:** Evaluates user's skills, education, and interests for better alignment.
- 3. Start to End:** Our platform not only suggest but also helps them to **prepare and crack internships**.
- 4. Personalized Recommendations:** Delivers customized internship options to user's profile.
- 5. Dynamic Learning:** Improves recommendations.

❖ Approach:

- 1.Data Collection:** Collect **internship data** from verified sources.
- 2.Smart Profile Building:** Extracting skills from user's resumes using **NLP and AI based analysis**.
- 3.Hybrid Model: Matches opportunities** via a hybrid engine combining behavior patterns and **skill-based matching**.
- 4. Recommendations: Ranks and filters opportunities** based on relevance, location, and industry needs.
- 5.Mock Interview:** AI based mock interview system to **enhance user's communication skills**.



TECHNICAL APPROACH



1. Data Collection Layer:

- APIs and web scrapping from verified platforms.
- Cleanse, deduplicate, and normalize datasets to ensure only authentic and structured listings.

2. User Profiling:

- NLP based **extraction of skills** and interests Cleanse, deduplicate, and normalize datasets to ensure only authentic and structured listings.

3. Recommendation Engine:

- **Hybrid-Model:** Collaborative filtering + skill matching.
- Ranking feature to provide **location-relevant opportunities.**

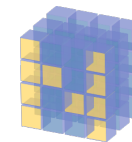
4. Deployment:

- **Web Dashboard** for ministries and organizations.

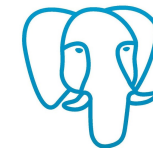
❖ Tech Stack:



React



NumPy



PostgreSQL



django



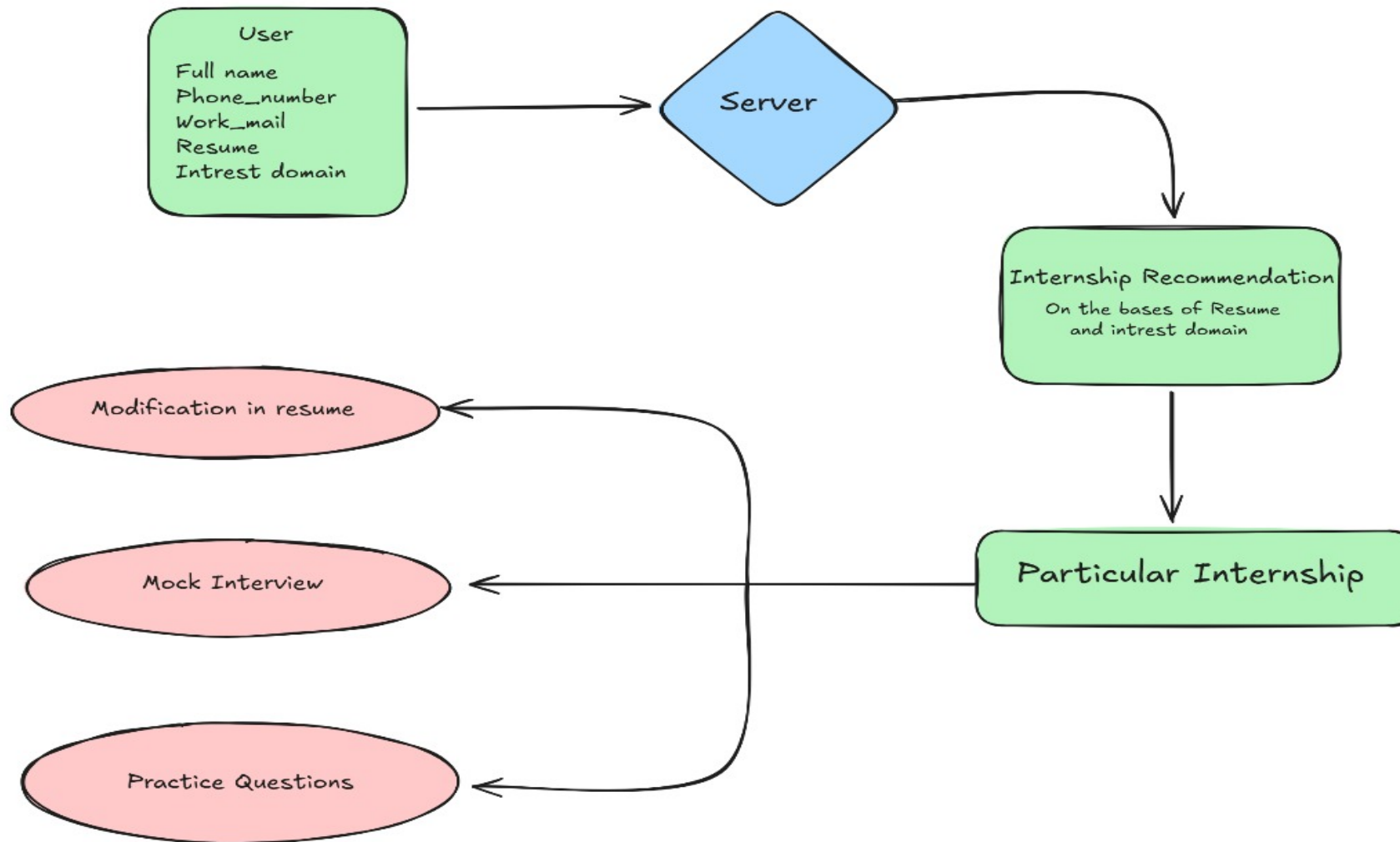
redis



WORKING FLOWCHART



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2025





FEASIBILITY AND VIABILITY



Feasibility Analysis



Technical

High, due to ML-light approach; less data-intensive & compute-heavy.



Operational

Easy integration with existing portals without major changes.



Economic

Low development and maintenance costs from lightweight architecture.

Challenges & Strategies

Data Quality

Challenge: Inaccurate user data or vague internship descriptions.

Strategy: Implement simple verification steps and user feedback loops.

Data and Engagement Gaps

Challenge: Some internships get no action, and govt listings may not appear.

Strategy: Send smart notifications, show info cards, and integrate verified govt data.



IMPACT AND BENEFITS



IMPACT

Empowerment

Provides a clear, manageable path for first-generation learners to their first internship.

Social Equity

Reduces the digital divide and offers equitable access to opportunities for youth from diverse areas.

STRENGTH

Operational Efficiency

Enhances Scheme by providing timely updates, personalized opportunities, and efficient application experience.

Economic Growth

Increases the efficiency of the PM Internship Scheme, leading to a more skilled youth workforce.



RESEARCH AND REFERENCES



<https://www.chatgpt.com>

<https://gemini.google.com>

<https://pminternship.mca.gov.in>

<https://in.linkedin.com>