

Team Structure:

- **Admin:** Raghav (Project management, coordination, final review)
- **Contributor 1:** Deepak (Technical implementation, research)
- **Contributor 2:** Keshava (Documentation, outreach, testing)

Sub-Components & Task Distribution:

1. Research & Planning (Raghav + Deepak)

- Identify key trends in AI-driven content recommendation for OTT platforms.
- Research existing ML models used in OTT recommendations.
- Define use cases and benchmarks for personalized content recommendations.

2. Data Collection & Preprocessing (Deepak)

- Gather and preprocess user behavior data from OTT platforms.
- Ensure data cleaning, handling missing values, and feature engineering.
- Maintain data privacy and comply with streaming platform regulations.

3. Model Development & Implementation (Deepak)

- Select suitable machine learning models (Collaborative Filtering, Content-Based, Hybrid).
- Train and fine-tune models using real-world OTT datasets.
- Develop an API for integrating recommendations into the OTT platform.

4. Testing & Evaluation (Keshava)

- Test model performance using precision, recall, and user engagement metrics.
- Conduct A/B testing with different recommendation strategies.
- Document model improvements and gather user feedback.

5. Documentation & Reporting (Keshava)

- Create technical documentation for model architecture and implementation.
- Prepare reports for stakeholders, explaining model effectiveness.
- Draft case studies on AI-driven recommendations' impact on user retention.

6. Deployment & Public Outreach (Raghav + Keshava)

- Deploy the recommendation system on the OTT platform.
- Conduct knowledge-sharing sessions on AI-powered content recommendations.
- Engage with OTT providers and industry professionals for feedback and adoption.