

FINAL ASSIGNMENT — UML DIAGRAMS DISTRIBUTED TO 5 MEMBERS

Below is a balanced distribution, ensuring every member works on diagrams relevant to *their subsystem*.

Member 1 — Scraping, Data Ingestion & Source Management

(Aligned with proposal responsibilities: scraping, connectors, ingestion engine)

Assigned UML Diagrams:

1. Use Case Diagram – Scraping & Source Management
 2. Component Diagram – Scraper Engine + Cloud Ingestion Module
 3. Class Diagram Section – source, source_link, organization_source, raw_review
 4. Sequence Diagram – Scraping Workflow
(Scraper → Cloud API → raw_review → processing)
 5. Activity Diagram – Scraper Job Execution Flow
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Member 2 — AI/ML, NLP Pipeline, Embedding & RAG Engine

(Proposal includes AI inference, NLP engine, embeddings, pipelines)

Assigned UML Diagrams:

1. Use Case Diagram – AI Processing & Insights Generation
 2. Component Diagram – AI Pipeline (MiniLM, Embedding Engine, RAG, LLM Gateway)
 3. Class Diagram Section – processed_review, review_analysis, embedding_job, knowledgebase_item, entity
 4. Sequence Diagram – AI Reply Generation Flow
 5. Activity Diagram – AI Pipeline (Classify → Embed → Retrieve → Generate → Store)
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Member 3 — Competitor & Domain Analysis, Insight Analytics

(Proposal: domain comparisons, competitor evaluations, analytics UI)

Assigned UML Diagrams:

1. Use Case Diagram – Competitor Management & Domain Analytics
2. Component Diagram – Analytics Engine + Cache Layer
3. Class Diagram Section – domain, competitor tables, analytics-related entities

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- 4. Sequence Diagram – Competitor Comparison Flow
 - 5. Activity Diagram – Analytics Aggregation Process
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Member 4 — Reviews Module, AI Replies, Insights Dashboard

(Proposal: core customer-facing module – reviews, reply generation, insights)

✓ Assigned UML Diagrams:

- 1. Use Case Diagram – Reviews & AI Reply Editor
 - 2. Component Diagram – Review Module + UI + backend API
 - 3. Class Diagram Section – review_category, review_type, processed_review_review_type
 - 4. Sequence Diagram – Review Detail View + AI Reply Integration
 - 5. Activity Diagram – Review Filter + Detail View Flow
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Member 5 — Authentication, User/Organization Management, Admin System

(Proposal: User/org settings, admin console, RBAC)

✓ Assigned UML Diagrams:

- 1. Use Case Diagram – Authentication + User & Organization + Admin
- 2. Component Diagram – Auth System + Admin Backend/Frontend
- 3. Class Diagram Section – tenant, plan, group, group_tenant, organization
- 4. Sequence Diagram – Tenant Signup → Add Organization → Dashboard
- 5. Activity Diagram – Organization & Group Assignment Workflow