NABU AI

FROM CHAOS TO CLARITY

SPRINT 1

presented by

PUSHTI, RUTHVIK, SRESHTA, SANJAY & VISHAL

overview

what

NabuAI is an AI-powered tool for academia, turning their scattered resources into a single, intelligent knowledge base.

why

Manual organization is messy and inefficient, creating a "saved content graveyard" that costs academia hours of productive work.

how

With three simple steps: capture, curate, converse. We save any content with a single click, our AI organizes it instantly, and you can then take action on your knowledge base.

functional requirements

content capture

Users can capture and save content (URL, text, PDF, image) via the browser extension or web interface.

semantic retrieval

The system must execute a semantic search that retrieves content chunks based on the meaning of the user's query

asynchronous ingestion

Upon content capture, the system must immediately return a 'Success' status, initiating asynchronous processing.

conversational ai

Allow users to input natural language queries into a chat interface and receive answers or generate content

content organization

The system must allow users to create, rename, and assign tags to the collections (Scribes)

collaboration & sharing

The system must allow a user to invite others to view and/or edit their Scribes, with defined access permissions (multi-user support).

non-functional requirements

performance (latency)

Capture Latency < 3 Seconds. The time from the user clicking "Save" to receiving the success status must be less than 3s

performance (retrieval)

Semantic search query results must be returned to the conversational AI within 500 milliseconds.

reliability (availability)

platform must maintain 99.9% uptime during standard academic work hours (7 AM – 11 PM local time).

scalability

The system must be designed to scale horizontally to support 100K active users without requiring major overhaul.

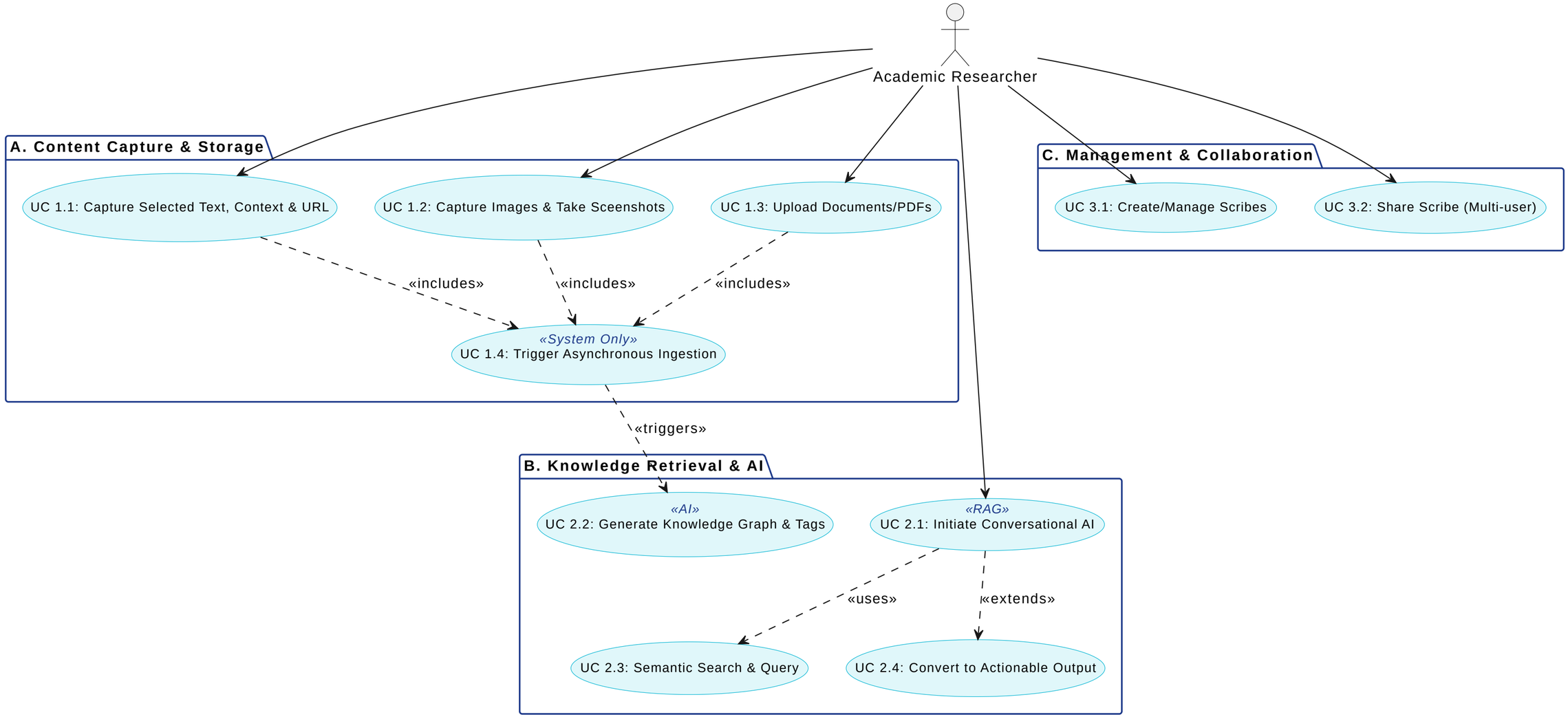
security

All data (content files, database records, vector embeddings) must be encrypted at rest and in transit (HTTPS/TLS), adhering to multi-tenant privacy isolation standards.

usability (ux)

The browser extension UI must be clean, minimalist, and use a maximum of three primary interaction steps to save content.

use case diagram

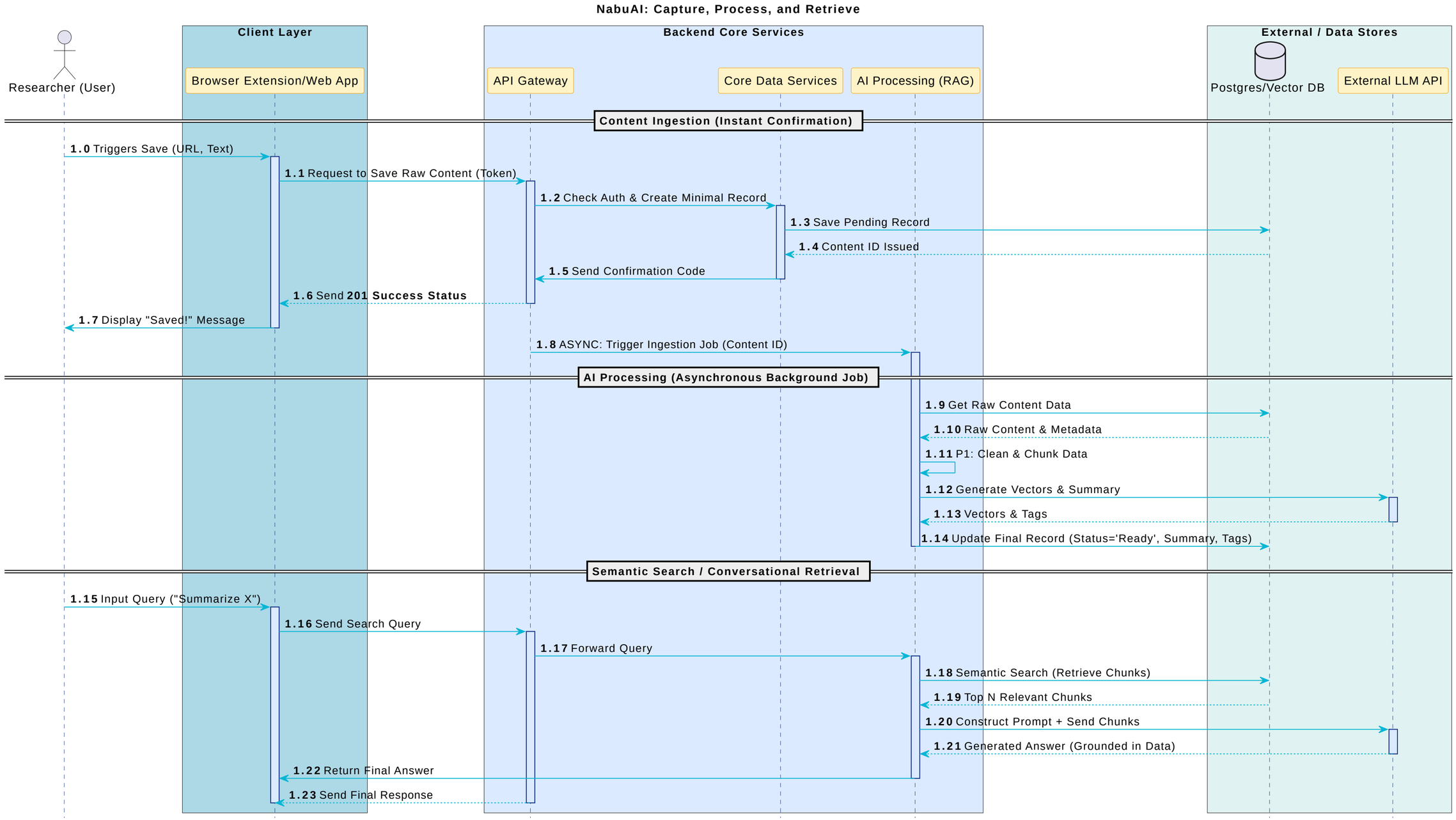


sequence diagram

This Sequence Diagram provides a visual roadmap showing exactly how NabuAI delivers its promise of turning chaos into clarity. It is designed to be highly streamlined, highlighting the chronological sequence of actions and guaranteeing that our service is both instant and intelligent.

- **Content Capture:** We show how the system ensures you get an instant "Saved!" confirmation in the browser, even while the heavy, complex AI analysis/tagging is triggered asynchronously in the background.

- **Knowledge Retrieval & Generation:** This illustrates the RAG flow, showing how a user's question travels to the AI Service, retrieves only the most relevant content chunks from the scribes, and returns a trusted, accurate answer or generate content that is directly tied to their research.


NabuAI: Capture, Process, and Retrieve
Client Layer
Backend Core Services
External / Data Stores
Researcher (User)
Browser Extension/Web App
API Gateway
Core Data Services
AI Processing (RAG)
Postgres/Vector DB
External LLM API
Content Ingestion (Instant Confirmation)
1.0 Triggers Save (URL, Text)
1.1 Request to Save Raw Content (Token)
1.2 Check Auth & Create Minimal Record
1.3 Save Pending Record
1.4 Content ID Issued
1.5 Send Confirmation Code
1.6 Send 201 Success Status
1.7 Display "Saved!" Message
1.8 ASYNC: Trigger Ingestion Job (Content ID)
AI Processing (Asynchronous Background Job)
1.9 Get Raw Content Data
1.10 Raw Content & Metadata
1.11 P1: Clean & Chunk Data
1.12 Generate Vectors & Summary
1.13 Vectors & Tags
1.14 Update Final Record (Status='Ready', Summary, Tags)
Semantic Search / Conversational Retrieval
1.15 Input Query ("Summarize X")
1.16 Send Search Query
1.17 Forward Query
1.18 Semantic Search (Retrieve Chunks)
1.19 Top N Relevant Chunks
1.20 Construct Prompt + Send Chunks
1.21 Generated Answer (Grounded in Data)
1.22 Return Final Answer
1.23 Send Final Response

user stories & product backlog

The Product Backlog for NabuAI, serves as the **single source of truth** for all future development. It translates our **user research, business goals,** and **system architecture** into prioritized, actionable **User Stories**, each with **clear** and **testable acceptance criteria.**

We will manage this entire backlog using the **Scrum** framework. All stories are tracked in **Jira** to provide full **transparency** on the workload, **monitor team velocity** across short sprints, and ensure continuous delivery of value. This iterative process allows us to rapidly test features, gather feedback from our academic users, and quickly adapt the product vision.

The backlog is organized into three distinct **EPICS**:

- **Content Capture**
- **Content Ingestion, Storage**
- **Knowledge Graph, Information Retrieval & Conversational AI**

These work items are prioritized to ensure we deliver maximum business value and achieve product-market fit with a lean, effective product.

content capture

As a Researcher, I **want** a Chrome extension icon that shows a dedicated NabuAI save button, **so** I can initiate capture quickly.

WHEN I click the NabuAI icon, **THEN** the core capture modal must appear instantly (NFR 1.0) and display a "Save" button.

As a Researcher, I want to select text on any webpage and save it via the context menu, so I can capture key quotes instantly.

GIVEN I have selected text, WHEN I right-click, THEN a "Save to NabuAI" option must appear and open the modal with the text pre-populated.

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As a System, I must store the raw content text, URL, and metadata in the database upon successful ingestion, so it is ready for AI processing.

content ingestion & storage

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knowledge graph, information retrieval & conversational AI

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sprint backlog – 1

burndown chart

THANK YOU

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