



Team – Code Wode

- Prakhar Batwal
- Yuvraj Dwivedi
- Uttkarsh

INSIGHTLOOP.AI — AUTONOMOUS WEB RESEARCH AGENT

Autonomous Agent | Web Research | Report Generation | AI Automation

Give it a question. It explores the web, extracts structured insights, and delivers a PDF report—autonomously.

PROBLEM UNDERSTANDING

The Current Problem

Research today is:

- Time-consuming
- Manual (search → read → extract → summarize)
- Requires expertise
- Easily biased or incomplete
- Takes hours to generate a structured report

Who suffers from this?

- Founders & product teams
- Students & researchers
- Analysts, consultants
- Businesses making decisions

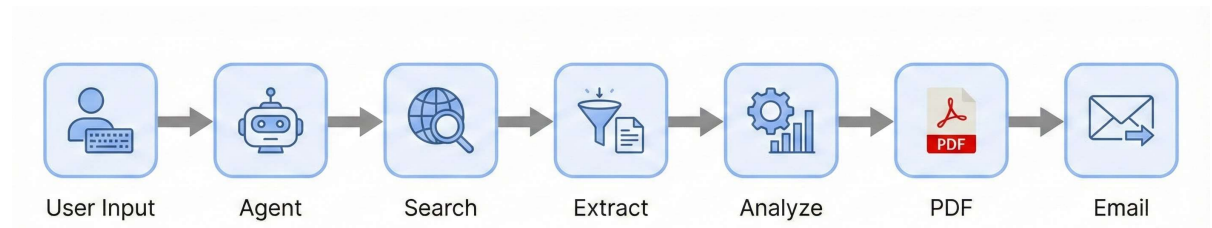


PROPOSED SOLUTION

InsightLoop.AI

An **autonomous web researcher** that:

- Browses the web
- Gathers credible information
- Extracts structured data
- Creates comparison tables
- Generates a ready-made PDF report
- Emails it automatically



ChatGPT + Web Scraper + Analyst + PDF generator — all in one autonomous agent

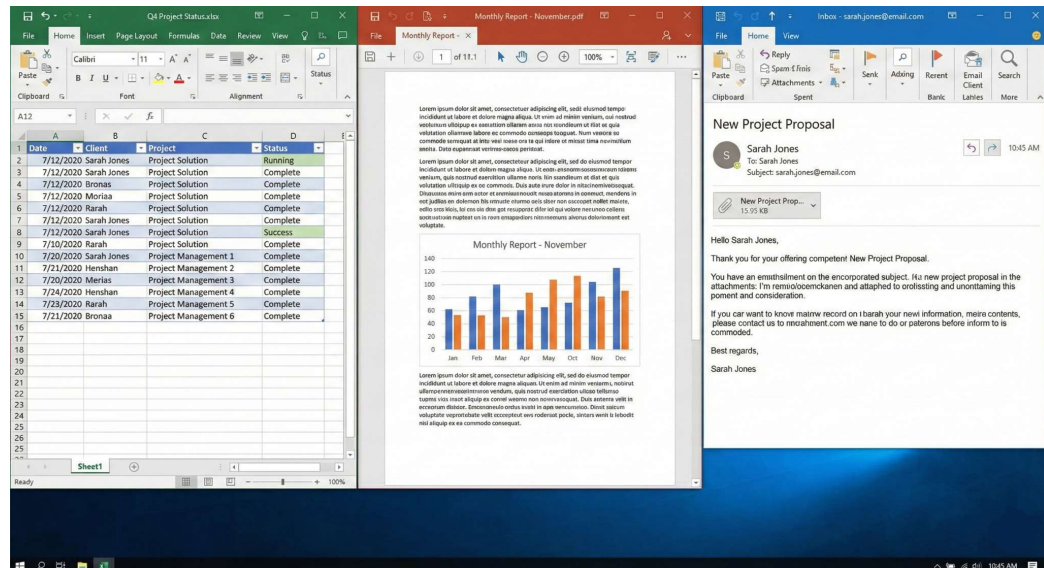
USE CASE DEMO EXAMPLE

Example Query

“Find top 10 fintech apps that failed; compare UI, UX, problems, revenue.”

InsightLoop.AI

- Identifies 10 failed fintech apps
- Extracts 8–10 attributes per app
- Creates a comparison table
- Summarizes reasons for failure
- Generates a PDF report
- Emails it to the user

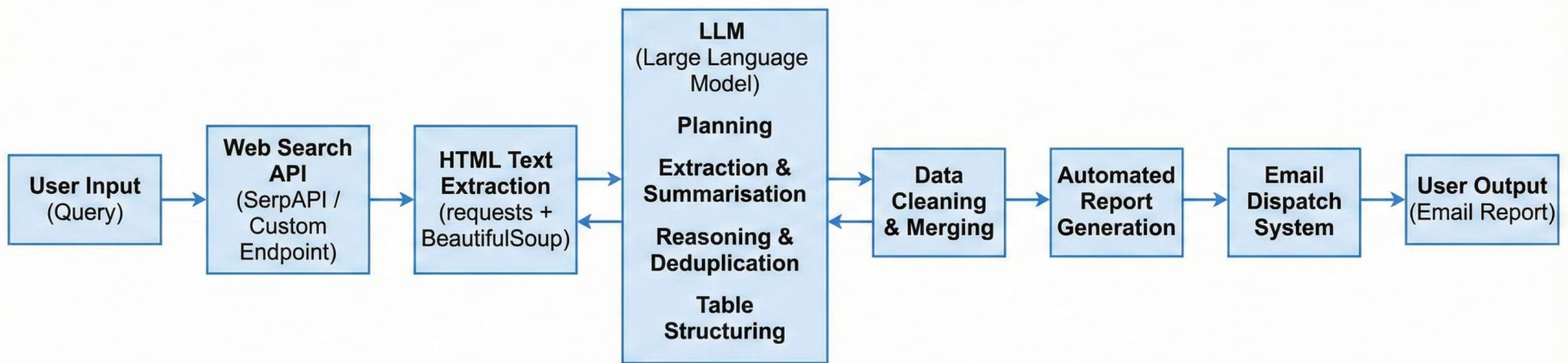


SOLUTION APPROACH

How InsightLoop.AI Works (Human Words)

- 1. Task Planning:**
AI agent breaks query into sub-tasks
- 2. Search Engine Query:**
Gets top relevant links
- 3. Web Crawling:**
Fetches HTML content
- 4. AI Extraction:**
LLM pulls structured facts from messy text
- 5. Aggregation:**
Combines data from multiple pages
- 6. Analysis:**
Highlights patterns & insights
- 7. Report Creation:**
PDF + tables + summaries
- 8. Delivery:**
Sent via email

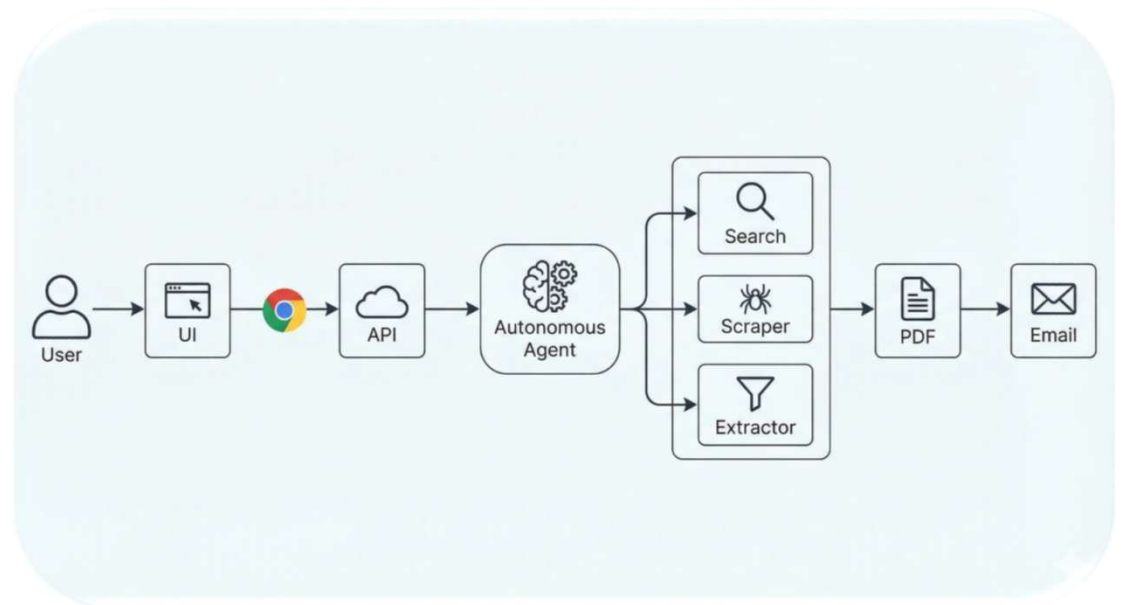
TECHNICAL METHODOLOGY



TOOLS, MODELS & ARCHITECTURE

Tools & Libraries

- **Backend:** Python, FastAPI/Flask
- **Frontend:** Streamlit / HTML
- **Agents:** OpenAI / Groq LLM
- **Search:** SerpAPI / Bing API
- **Scraping:** Requests, BeautifulSoup
- **PDF:** ReportLab / FPDF
- **Email:** SMTP or SendGrid
- **Database :** Firebase / MongoDB



EXPECTED IMPACT

Impact by Category

1. Productivity

Reduces 5 hours of research → 5 minutes

Automates analyst-level work

Generates consistent reports

2. Business Value

Useful for founders, analysts, investors

Can generate market research, competitor analysis, trend reports

3. Scalability

Works for ANY topic:
fintech, health, edtech, politics, business, startups

Can be deployed as SaaS

4. Innovation

Fully autonomous → agent decides actions

Not just a chatbot → real tool interactions

