

Barriers to accessible,  
interactive learning.



# EduSage

Presented By **BUILD WHEELS**

# PROBLEM STATEMENT

## Language Barriers in Education:

- Limited access to educational resources in non-native languages.
- Challenges for ESL students in understanding complex materials.

## Inefficient Manual Content Creation:

- Time-consuming process of creating and maintaining consistent content across platforms.
- Difficulty in generating high-quality, engaging educational materials.

## Complex Information Simplification:

- Students struggle with digesting lengthy or intricate content.
- Lack of tools to effectively summarize and interact with educational materials.

## Lack of Professional Profile-Building Tools for Students:

- Difficulty in showcasing skills and achievements.
- Limited opportunities for networking and career advancement.

# SOLUTION OVERVIEW

## **YOUTUBE TRANSLATION & Q&A:**

Translate videos and generate interactive questions from video links.

## **DOCUMENT INTERACTION:**

Upload teacher's notes, PDFs, and receive generated questions for study and discussion.

## **VIRTUAL BOARD:**

Interactive tool for collaborative teaching and learning among students.

## **PROFESSIONAL DEVELOPMENT :**

Automated LinkedIn and Twitter post generation to enhance online presence.

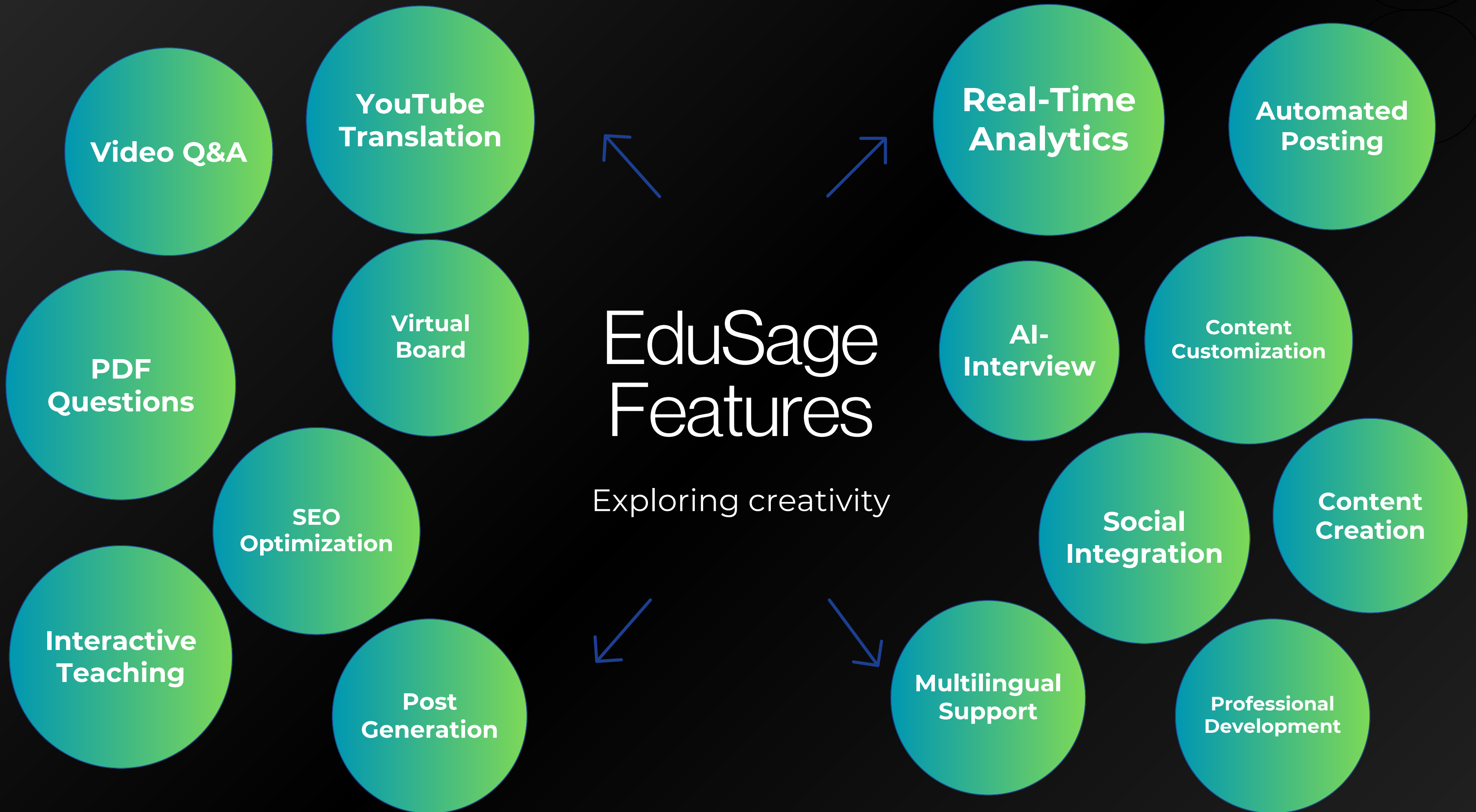
## **Key Benefits:**

Enhanced accessibility to educational content.

Streamlined and automated content creation.

Improved understanding through interactive learning tools.

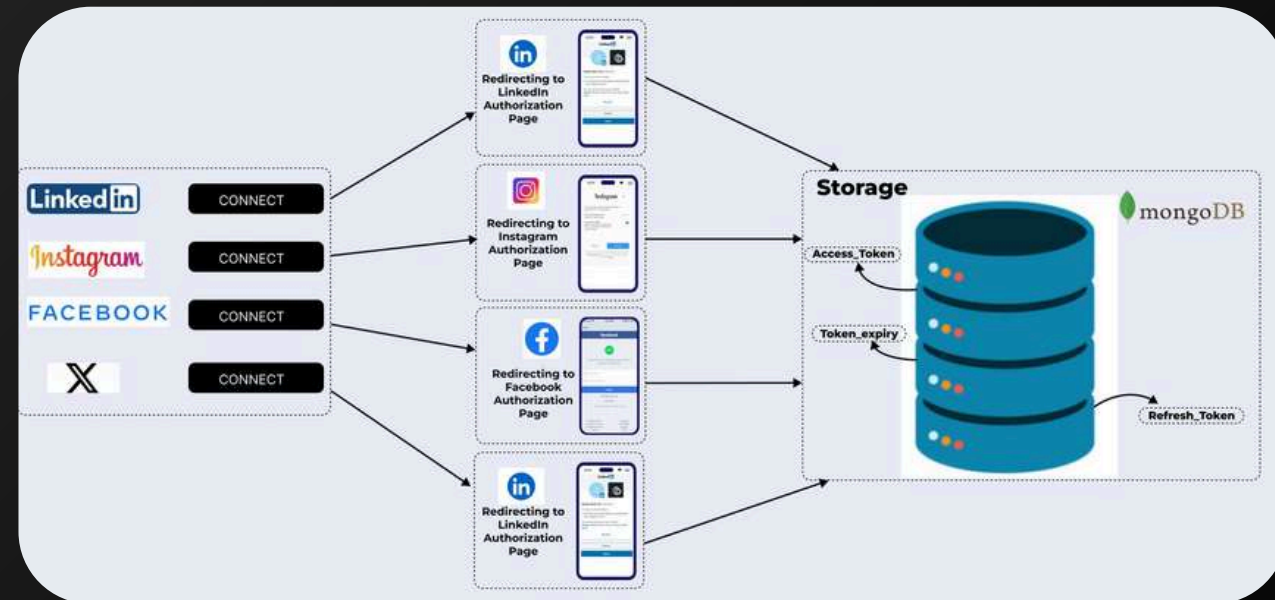
Enhanced professional visibility and career opportunities for students.



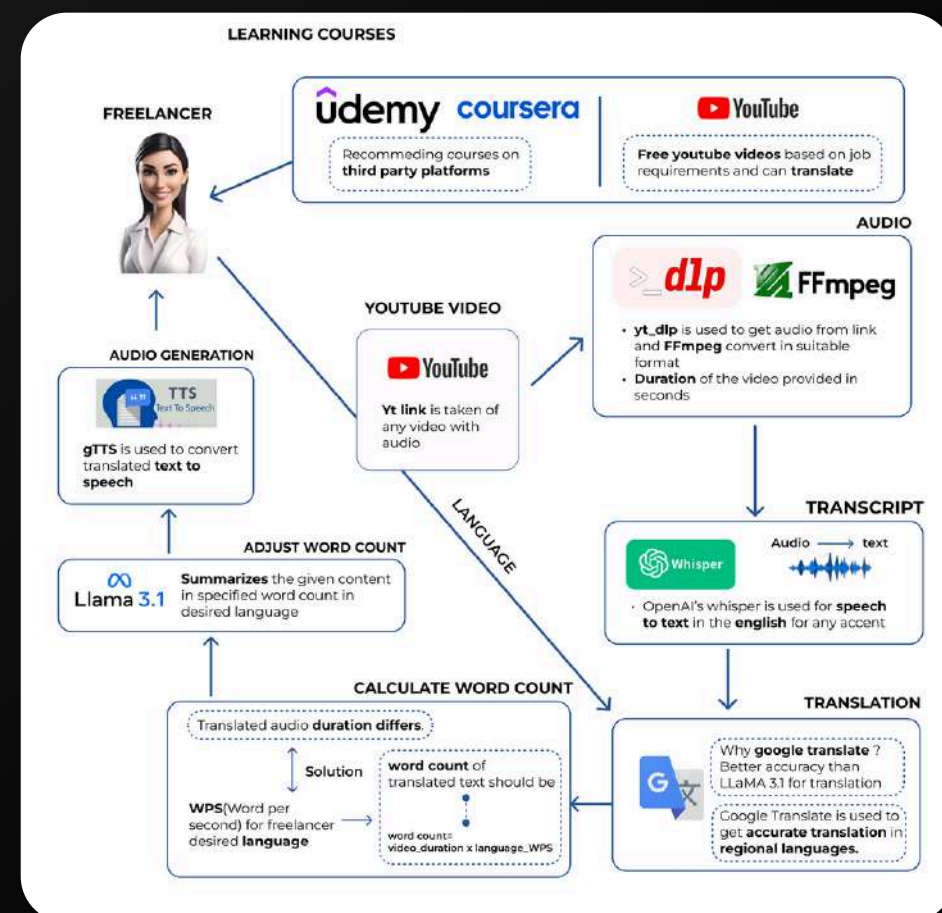


# TECHNICAL ARCHITECTURE

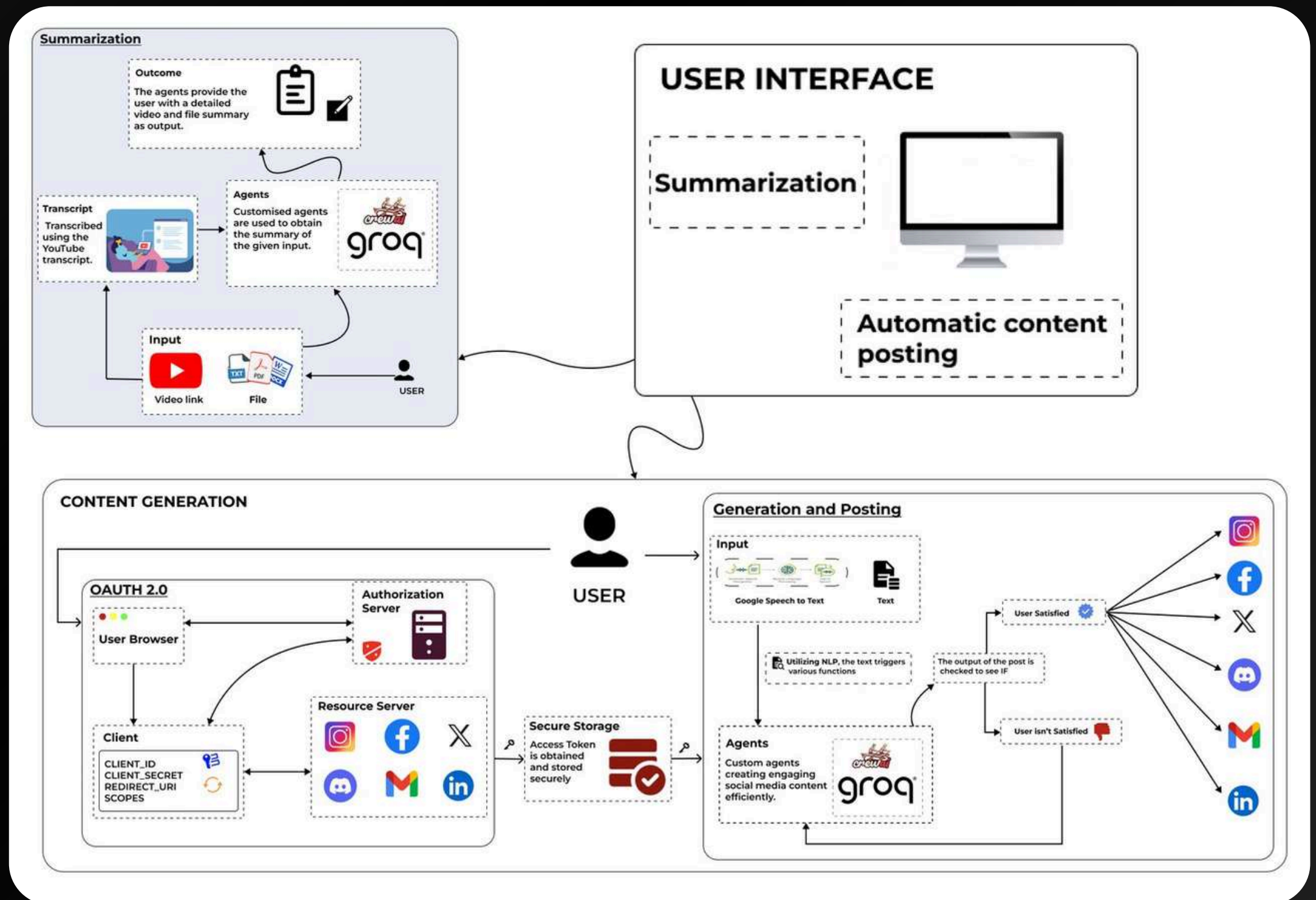
## Content generation and posting



### OAUTH 2.0

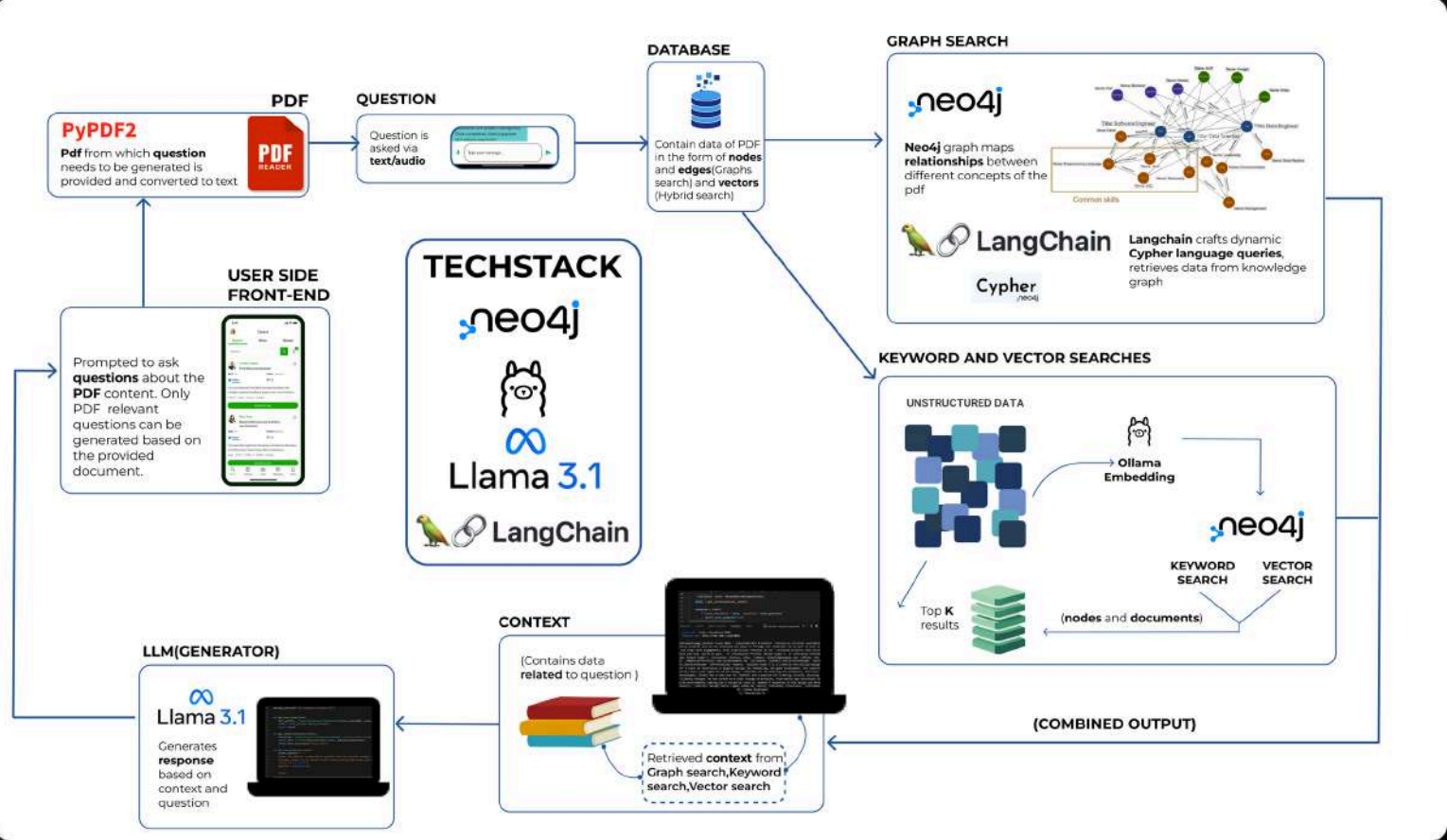


## YouTube content translation

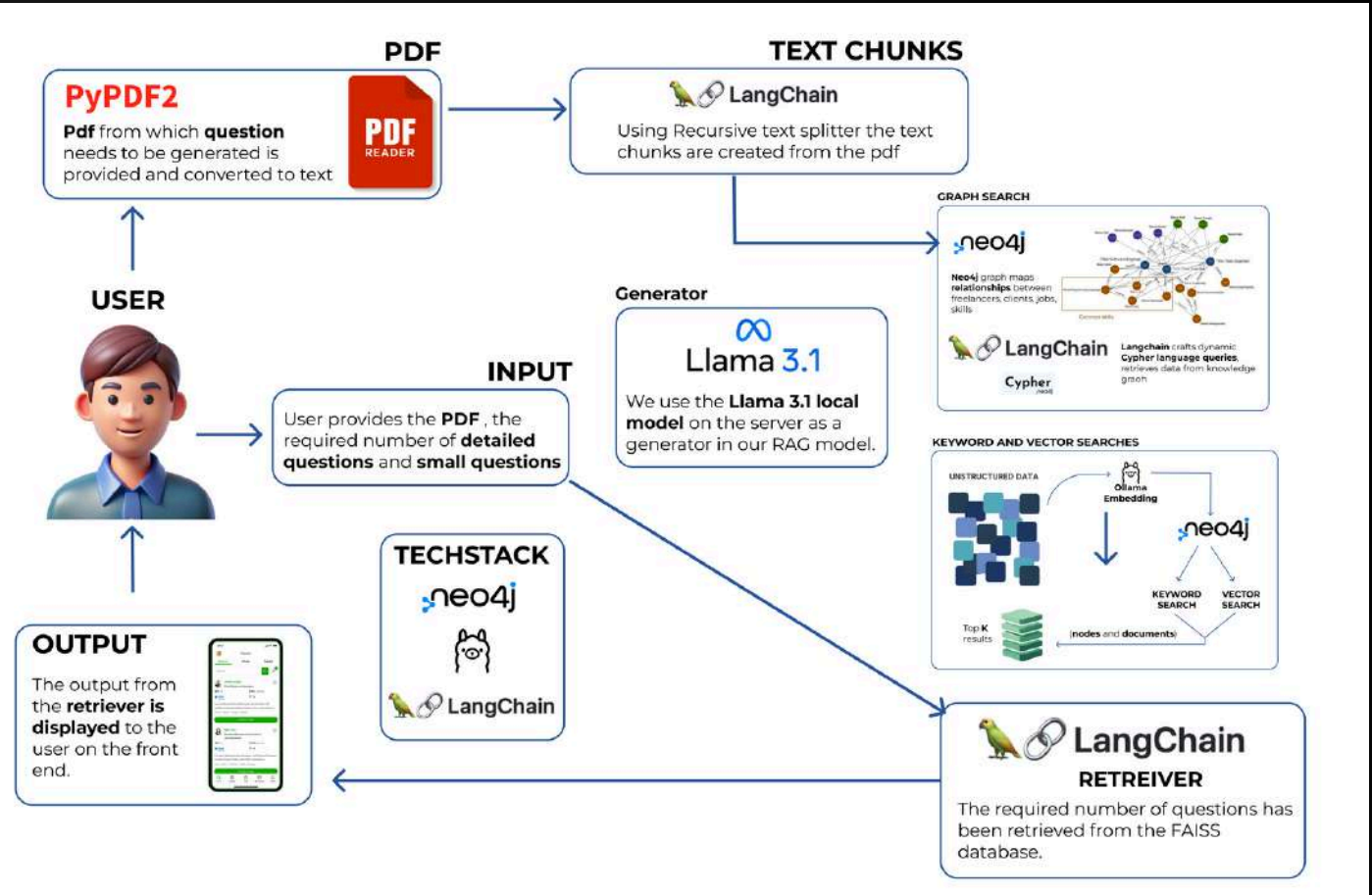




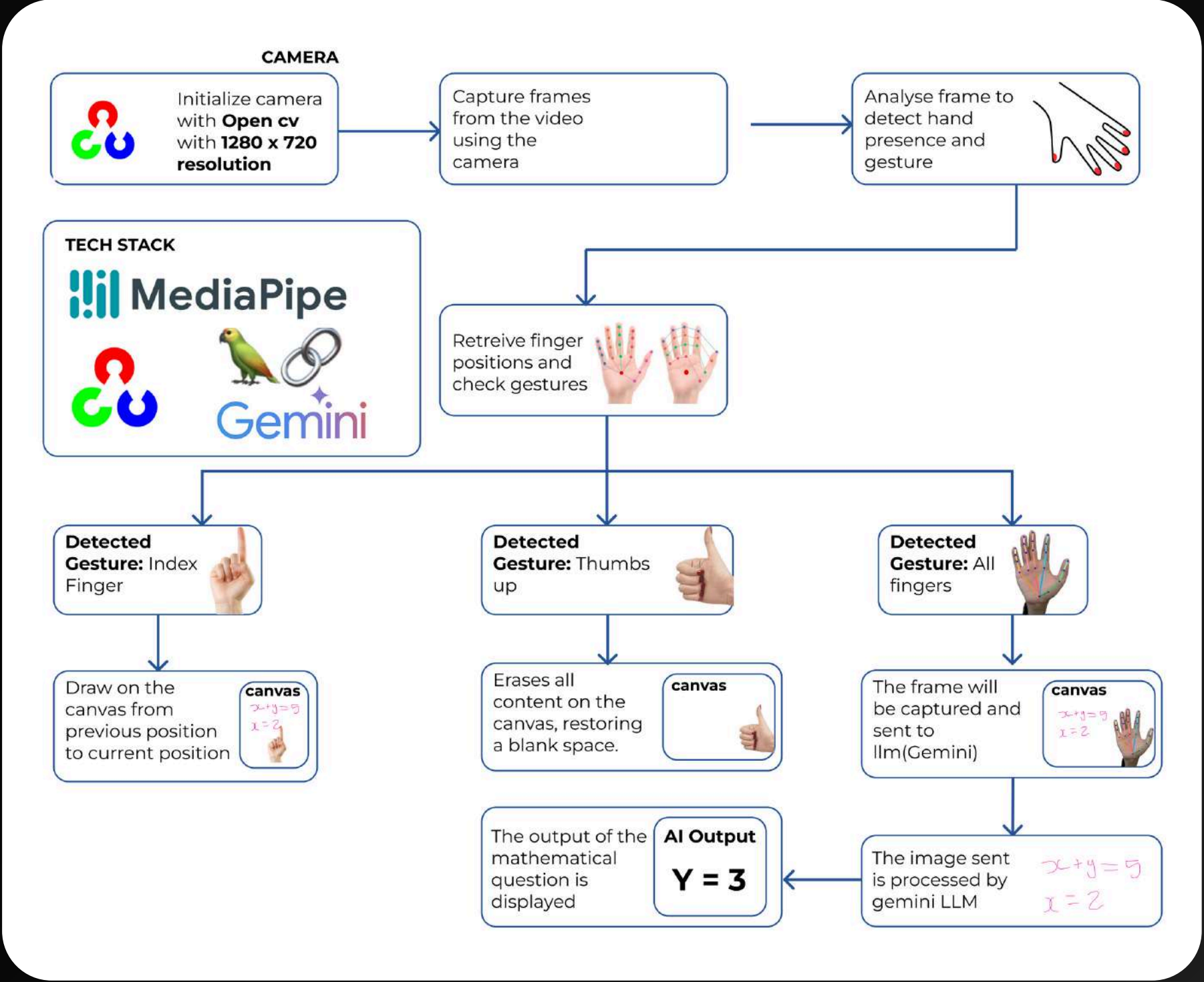
# PDF Question Generator Architecture



# Chat with PDF



# Virtual Board





# TECH STACK



Flask



LangChain



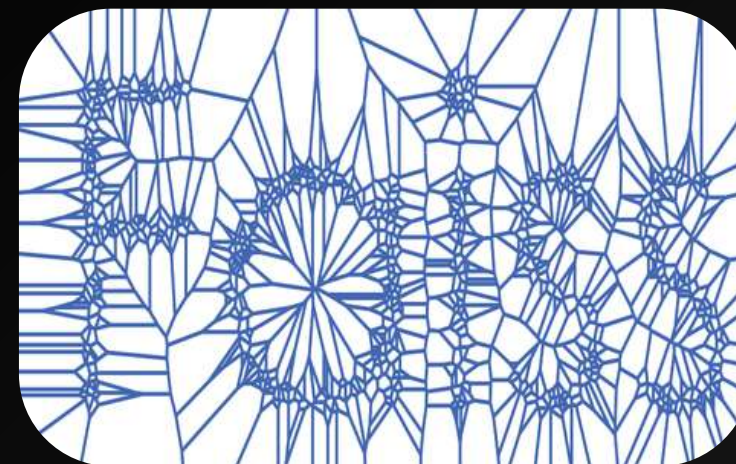
Whisper



Gemini



mongoDB



# DEPENDENCIES

## Programming & Frameworks

- Python, JavaScript (React, React Native)
- Flask for backend

## AI & Machine Learning

- NLP, Speech-to-Text APIs, TensorFlow,
- Google AI APIs for generative tools, Whisper (local model)

## Cloud Services & Hosting

- Google Cloud, Firebase
- Docker for deployment

## Database & Storage

- MongoDB, Faiss
- Amazon S3 for media files

## APIs & Integration

- LinkedIn, Twitter, YouTube, Google Translate APIs

## Frontend Libraries & Tools

- Magic.Design, Shadcn UI, Redux/MobX

## Version Control & CI/CD

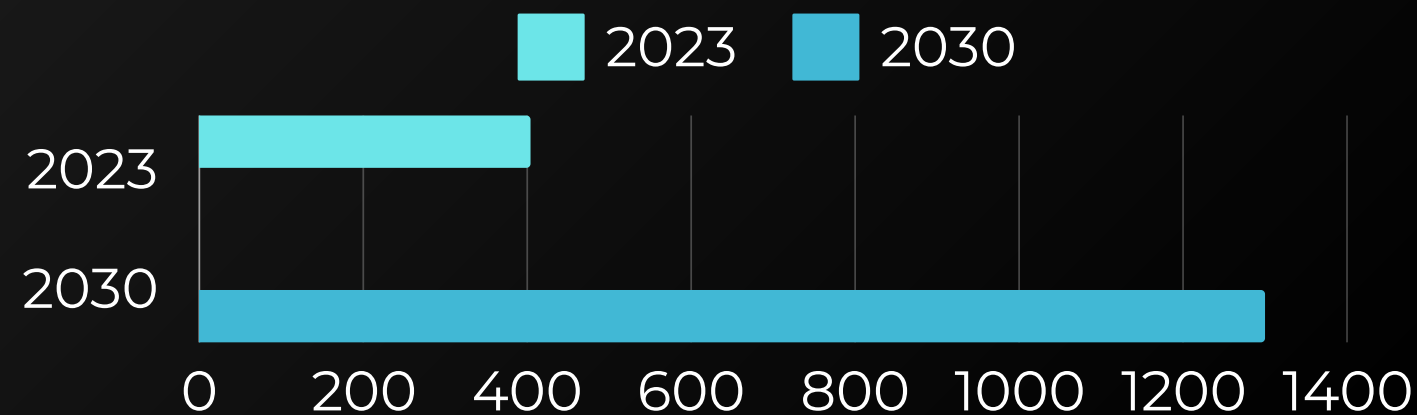
- GitHub, Docker



# MARKET OPPORTUNITY

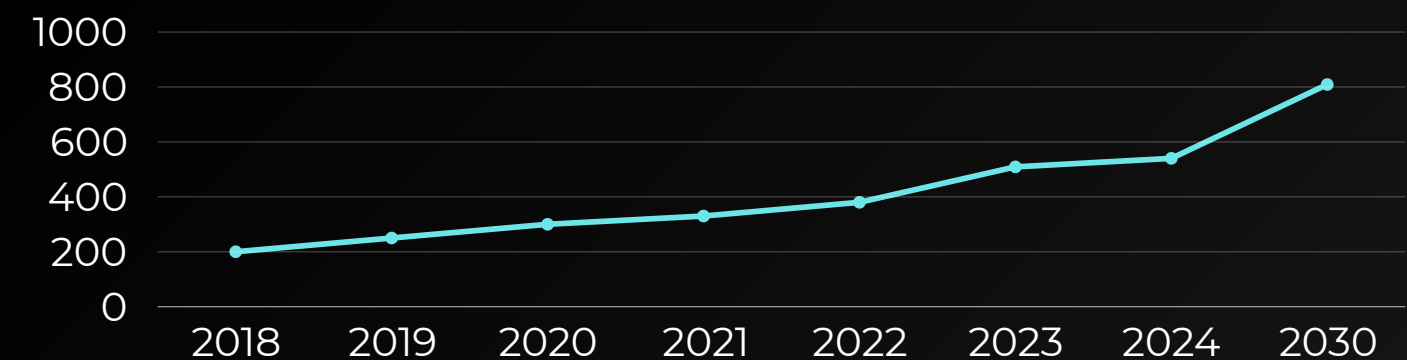
## Education Technology (EdTech) Market:

- Current Market Size: \$404 billion (2023)
- Projected Growth: CAGR of 16.3%, reaching \$1,300 billion by 2030



## Professional Development Market:

- Market Size: \$200 billion globally
- Increasing demand for online professional development tools



## Target Audience:



## Geographical Reach:



# TEAM OF BUILD WHEELS



**Amrish P**

**Rajalakshmi Engineering College**

An entrepreneurial leader, first agency at 15 managing a team of 10, excels in web development and embraces diverse challenges, driving impactful solutions.



**Fazil S**

**Rajalakshmi Engineering College**

Fazil is an aspiring Full Stack Developer, Experienced Front-end Developer, Passionate About Delivering High-Quality Solutions



**Daniel Das K**

**Rajalakshmi Engineering College**

Daniel excels in genAI, Computer Vision, Deep Learning, and ML, ranked top 100 in Google Solutions Challenge addressing tech challenges



**Dheekshith T**

**Rajalakshmi Engineering College**

Dheekshith, experienced in ML, DL, and genAI, leads disciplined teams to tackle challenges with impactful solutions.



Kindly check out our additional document that gives a detailed overview

[Click here](#)



Click here to view the YouTube video explanation of EduSage

[Click here](#)

