

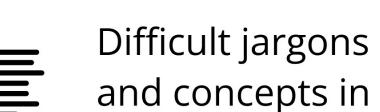
Problem

Regardless of their level of English language proficiency, **International scholars** in US higher education institutions and programs can experience challenges with their academic progress based on the need to read and analyze academic texts that often present complex concepts and theories use domain specific terminology.

25%

25% of students in the US speak non-English.

academic papers.





No academic reading product for ESL learners.

Students value

their academic

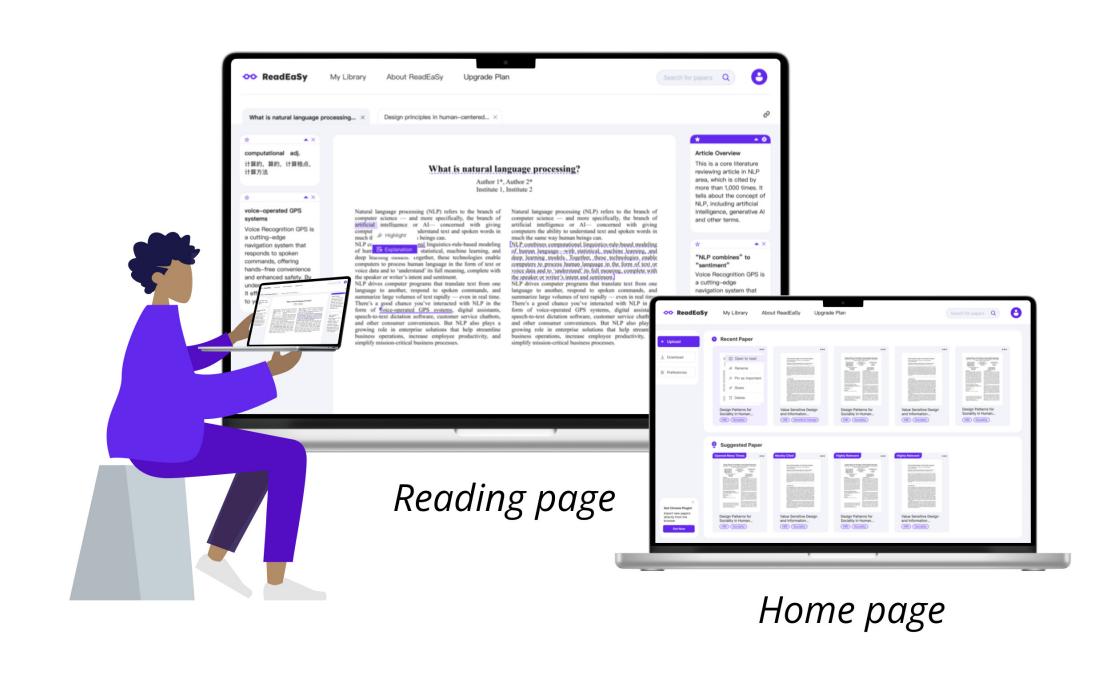
achievements.

Solution

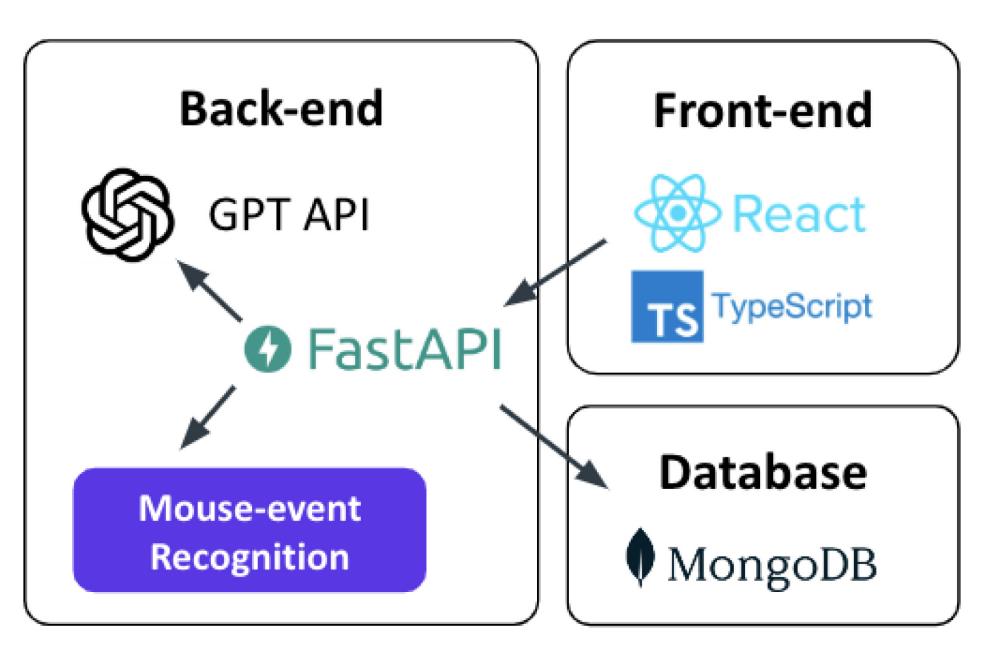
We have developed a research and study companion application that makes real-time comprehension, vocabulary development and cross reference analysis more accessible.

- 1. Real-time contextual word explanation and background information: Al-based personalized word explanation and background information for comprehension.
- 2. Interactive summary: Summary provided by OpenAl API based on users' behavior and paper content for efficient reading.
- 3. Personal repository and smart recommendation system: A powerful knowledge base that facilitates long-term academic study based on academic level and history reading behaviors.

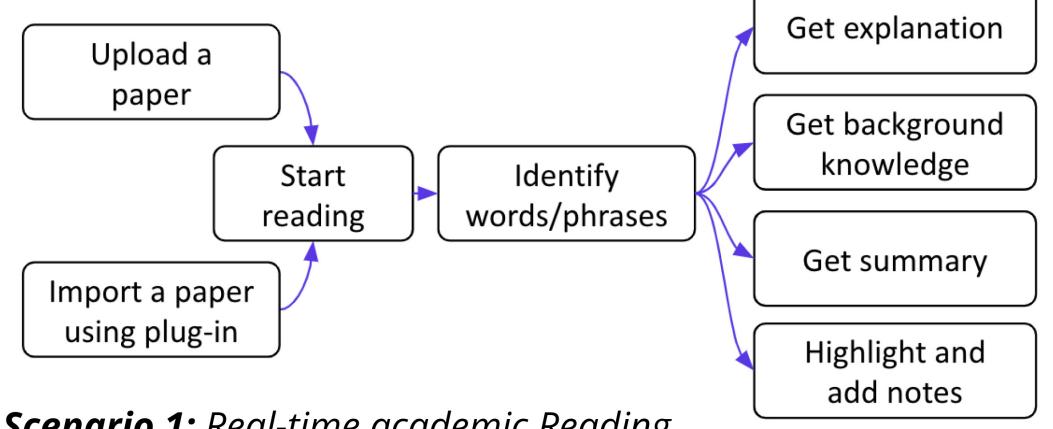
Interfaces



Software Diagram



User Flow

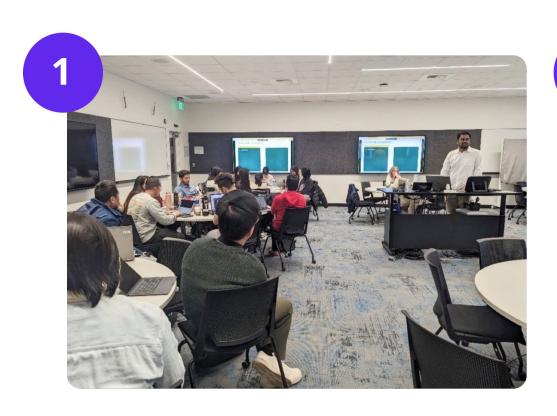


Scenario 1: Real-time academic Reading

Check paper Check reading knowledge graph histories (notes, summaries) Go to personal Open history repository paper to review Click to get new informations Get paper link and share

Scenario 2: Long-term Academic Study

Process



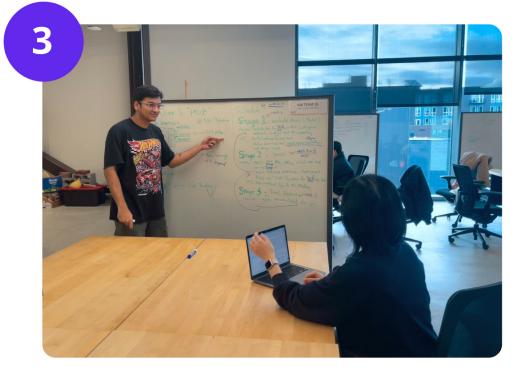
Discover:

Observed many students have difficulty with English academic content. Formed a student-led project to brainstorm.



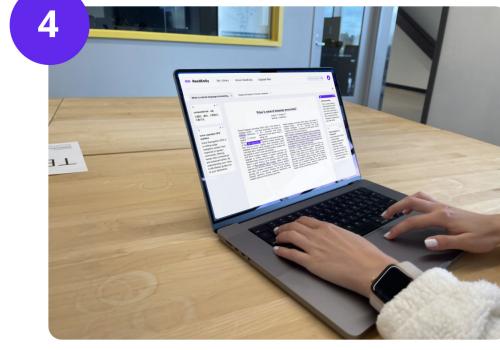
Define:

Conducted user research and market analysis to narrow down problem scope, helping ESLs read academic papers.



Develop:

Transformed user needs to design requirements, also explored tech platforms for potential solution.



Deliver:

Conducted three rounds of prototyping and user evaluation to build a final MVP web-app.



Product Designer

Yuqi Huang, MSTI 2024, Connected Devices Alabhya Singh Thakur, MSTI 2024, Connected Devices

Product Developer

Jiexin Ding, MSTI 2024, Connected Devices Bowen Zhao, MSTI 2024, Connected Devices