

CSU Safe



Revolutionizing Environmental, Health, and Safety (EHS) training through AI-powered course analysis and personalized learning recommendations.

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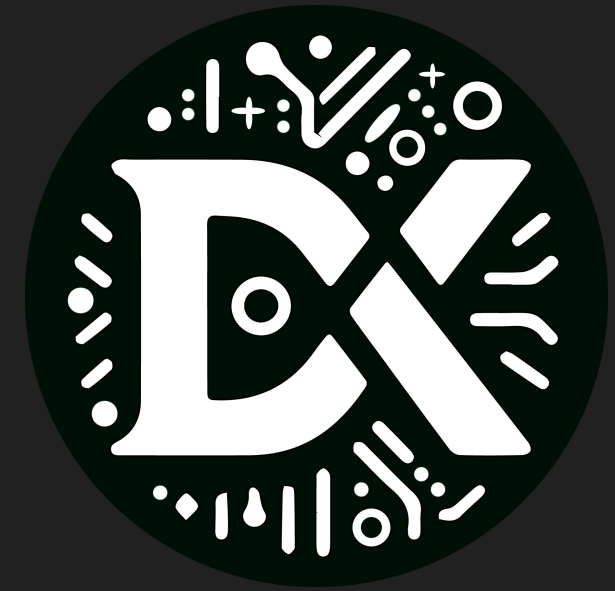
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Why This Matters

Accident Rate

A study found that 45% of academic lab participants experienced an injury while working

Nationwide Scalability

Colleges all over the nation could use this platform to prevent accidents in academic spaces, keeping students and staff safe

Comprehensive Coverage

Serves students and faculty with customized safety training based on their specific requirements.

Challenge

Generic Training & Missed Risks

Current EHS training systems fail to address the specific hazards present in laboratories, workshops, and fieldwork environments.

Without targeted training, students and staff miss critical safety information relevant to their actual work.



Solution

A direct and simple
user interface

An intelligent
recommendation
system powered by
an LLM.

Keeping students
and staff safe by
providing them with
training they'll
actually need.

High Level Architecture



Streamlit

Interactive dashboard with role-based access for Faculty and Students.



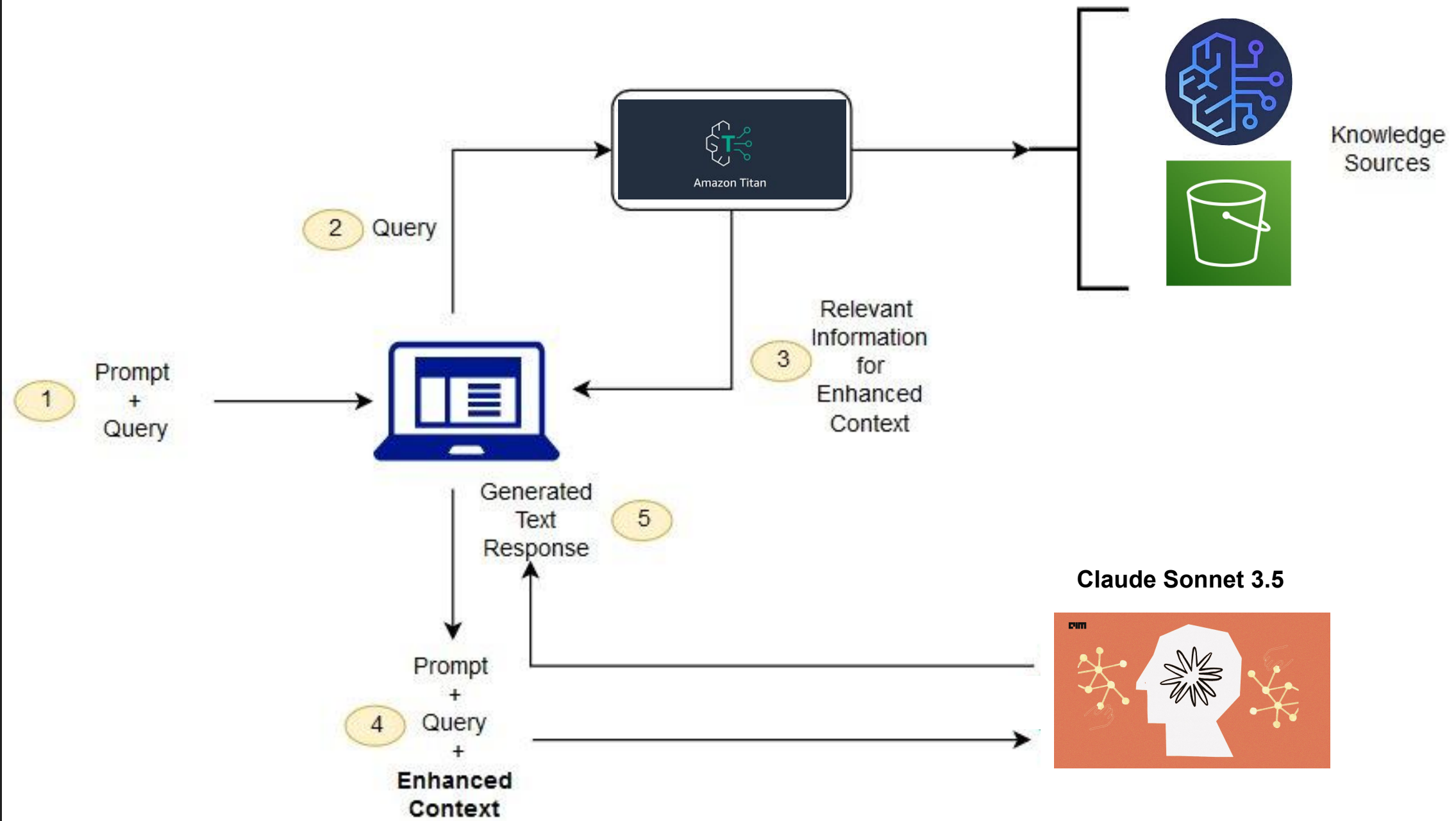
RAG System

AWS Bedrock Knowledge base to match courses with the EHS training



Web Scraping

Scraped multiple CSU websites in order to find course info and training recommendations



Core Features



Course Selection

Dynamic checkboxes generated from recommendations and course catalogs from different CSU's.



Smart Recommendations

Real-time generation of EHS training modules based on selected course hazards and requirements.

Implementation Benefits

For Faculty

- Automated hazard identification
- Relevant training assignment
- Streamlined safety management

For Students

- Course-specific safety training
- Reduced irrelevant content
- Better hazard preparation



Next Steps

Developing a secure login system

A secure login system with identity verification will allow students to make sure their data is safe

Adding a tracking system and allow faculty to add training

A system that tracks completed student trainings will expedite their progress and allow faculty to add new trainings as needed to ensure student safety

Launch & Scale

Get data from all of the CSU's to increase scalability and roll out the finished product to the schools.

Thank you

