Humble Institute SWE Take-home Assignment (April 2025)

Assignment Prompt
Please design a responsive web application that uses AI to summarize long-form content from various sources.

Core Application Requirements
- Content Input
  - At the minimum, candidates should support text input and PDF upload
  - Optional: candidates may also optionally support URLs (e.g. a Medium or Substack article), YouTube videos, or audio uploads
- AI Processing
  - Integration with LLMs for summarization
  - Key points extraction
  - Multi-turn question and answering
- Frontend Interface
  - At the minimum, we expect an interface similar to ChatGPT / Claude
  - On top of this, candidates may also come up with novel interfaces that might better handle the assignment prompt use case
- User Management
  - The application should have support for simple sign-up / login / logout
  - Past chats should also be segmented by the user
- Instrumentation
  - Simple instrumentation to track track usage for analytics workloads
- Cloud Deployment
  - The app must be deployed to a cloud provider. Ideally, this should be AWS, GCP, or Alibaba Cloud. Submissions on cloud abstraction layers (e.g., Firebase, Heroku, Vercel, Supabase, Render, etc.) are also accepted.

Evaluation Criteria
While this is not an exhaustive list, some of the things we will evaluate are
- Application design & architecture
- Summarization quality
- User interface design
- Error handling for various content types