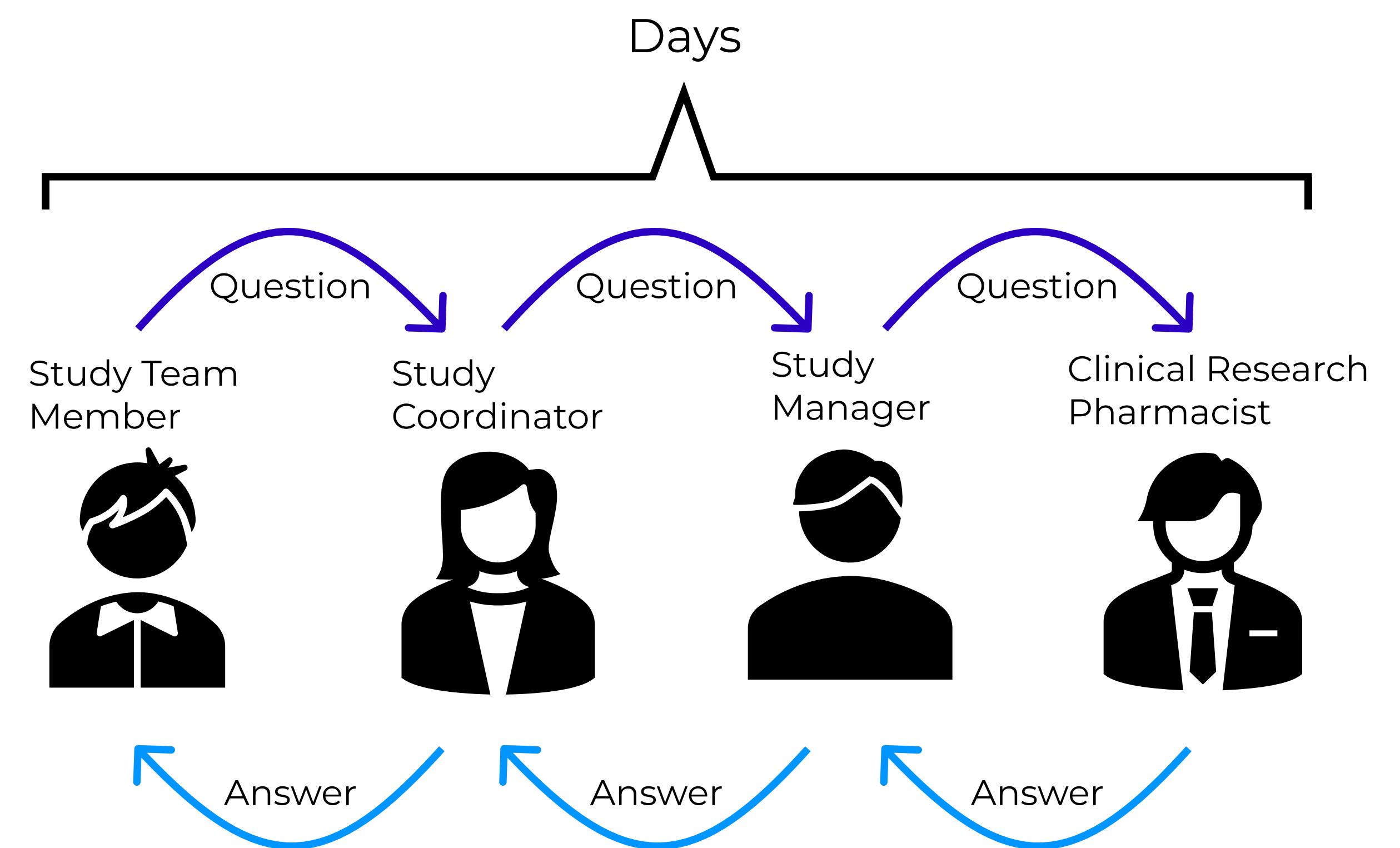


Pfizer Clinical Trial Chatbot

A tool that answers study teams' investigational product (IP) questions quickly thereby minimizing wait times for patients.

Problem & Research

In order to develop new medications, Pfizer conducts a multitude of clinical studies. If any study team member at the nearly **5,000 clinical trial sites** has a question about the administration of the new drug, they must **consult one of the only 15 clinical research pharmacists**. This is a serious bottleneck in the process, and one we were asked to improve.



Solution: Chatbot

The screenshot shows a chatbot interface with the following callouts:

- Change Protocol Number:** Chatbot confirms protocol number with user and gives option to change it.
- What temperature do I store the thawed vials?:** Chatbot response with relevant IP manual information.* Bolds protocol number and key info for user reference.
- Type interface where user can interact with chatbot.**

Study team members use the chatbot to get answers about the administration of new medications during clinical trials.

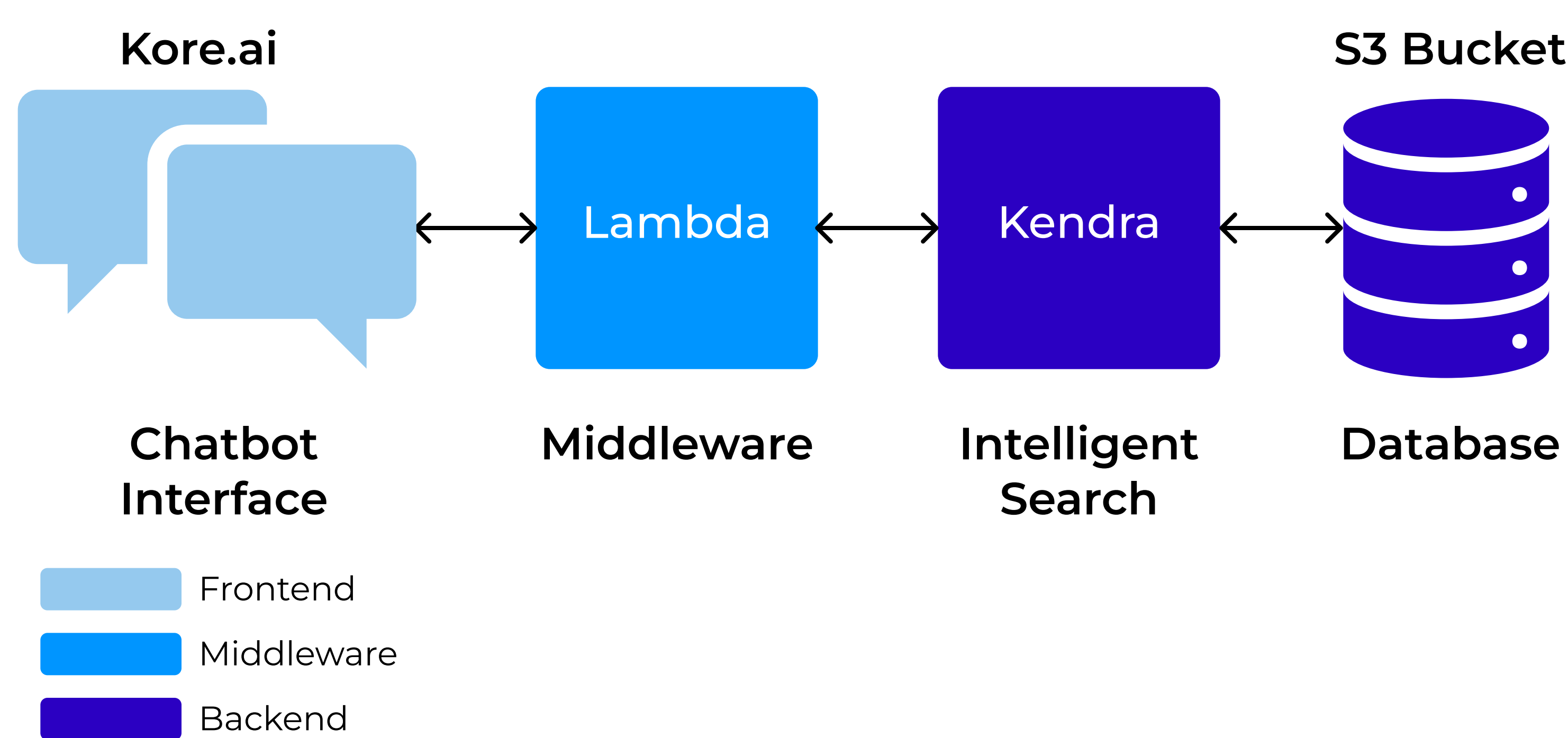
Quotes from Users

“The main benefit to using this is that I get an answer immediately.”

“Any reduction in time would definitely be helpful.”

* For demo purposes the document used in this image is the Pfizer-BioNTech COVID-19 Vaccine Fact Sheet for Healthcare Professionals which is publicly available on the FDA website.

System



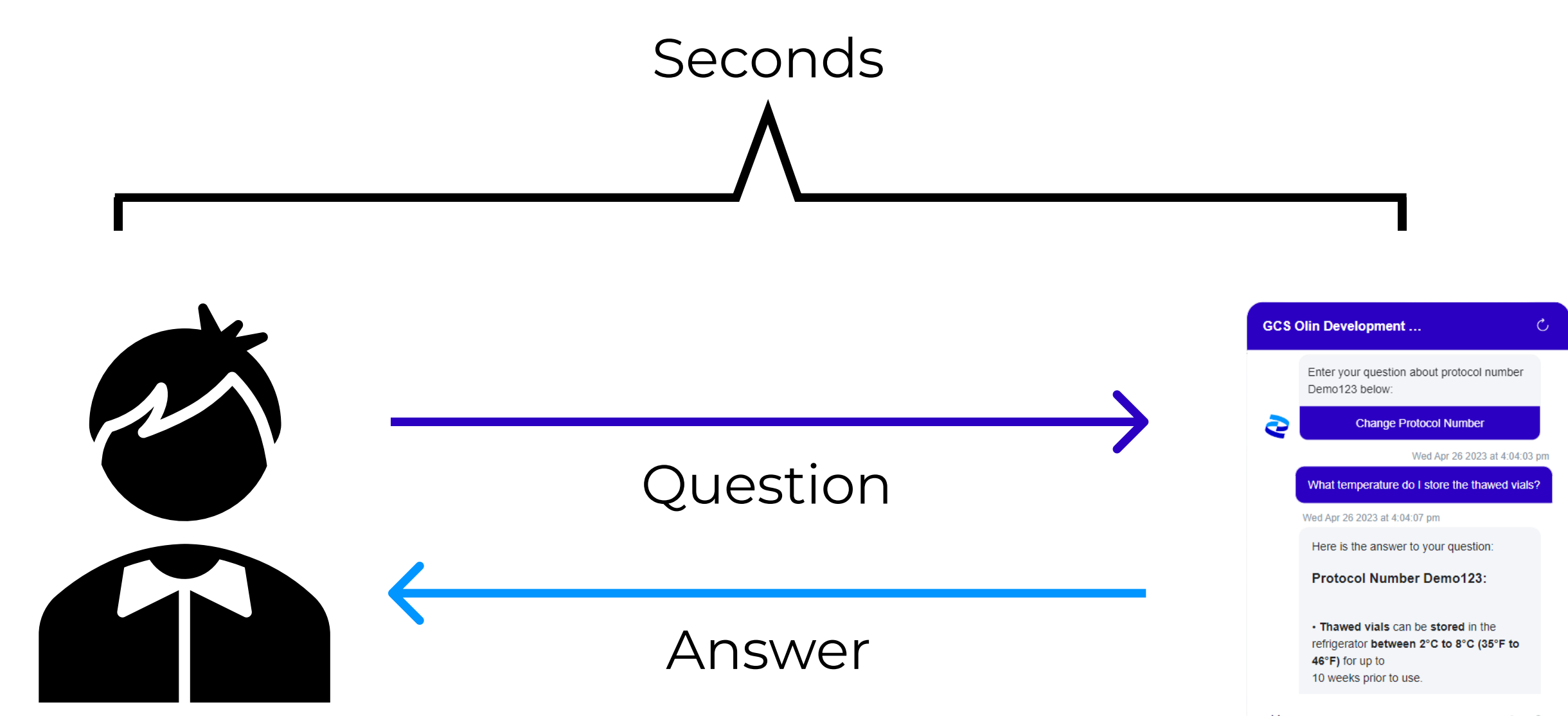
Our overall system architecture, shown to the left, is informed by four key criteria:

- **Safety** - tracking and reporting errors
- **Performance** - speed and precision
- **Maintainability** - technical overhead
- **Usability** - intuitive user interface

Outcomes

We created a chatbot to help save time for CRPs, study team members, and patients. **Pfizer is putting this bot into production for use by June 2023!**

Pfizer is looking to expand our system for increased access to dense information to other use cases within their ecosystem.



* For demo purposes the document used in this image is the Pfizer-BioNTech COVID-19 Vaccine Fact Sheet for Healthcare Professionals which is publicly available on the FDA website.



Team: Caitlin Coffey, Sam Coleman, Jonas Kazlauskas, Hazel Smith
Advisor: Lynn Andrea Stein
Lead Liaisons: Kersten Elenteny, Ashish Honawar
May 2023