# MYCIN – MEDICAL EXPERT SYSTEMS

Presented By

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# MYCIN?

- MYCIN is one of the **first expert systems** developed specifically for the medical field and thus for digital health.
- Developed in the early 1970s
- LISP programming language
  - a functional programming language that was designed to easily manipulate data strings.
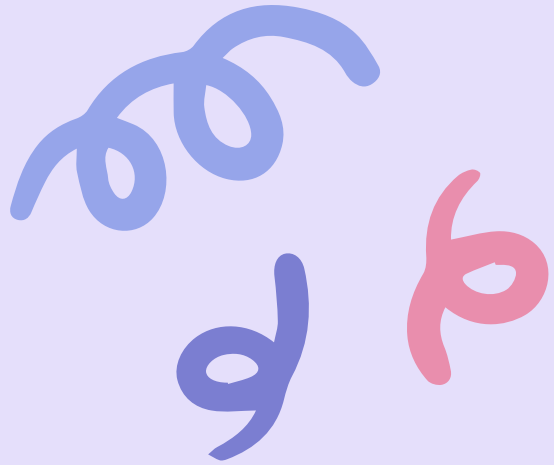
# DISCOVERY

**Developer:**
Edward Shortliffe (1972)
Department of Medicine and Computer Science
Heuristic Programming Project
Stanford University School of Medicine, California
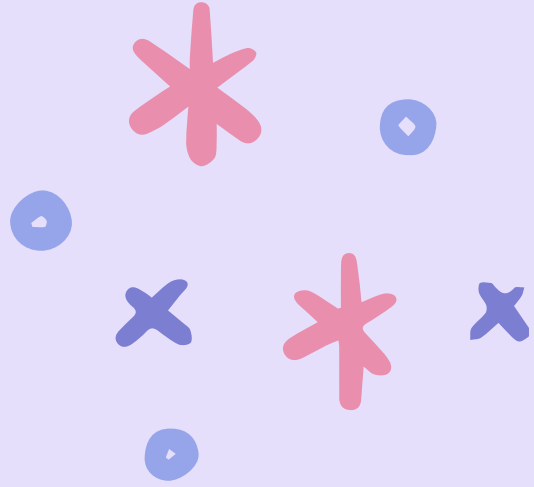
# GOAL

- The Goal of MYCIN was to compete in an experiment conducted at Stanford **Medical similar to the Turing Test.**
- **The case histories of ten patients with different types of meningitis were submitted to MYCIN as well as to eight human physicians, including a resident, a research fellow, and five faculty specialists in infectious disease.**
- **Both MYCIN and the human physicians were given the same information.**

- The **framework for MYCIN** was derived from an earlier expert system called **DENDRAL**, created to find new chemical components in the field of orgainic chemistry (also developed at Stanford).
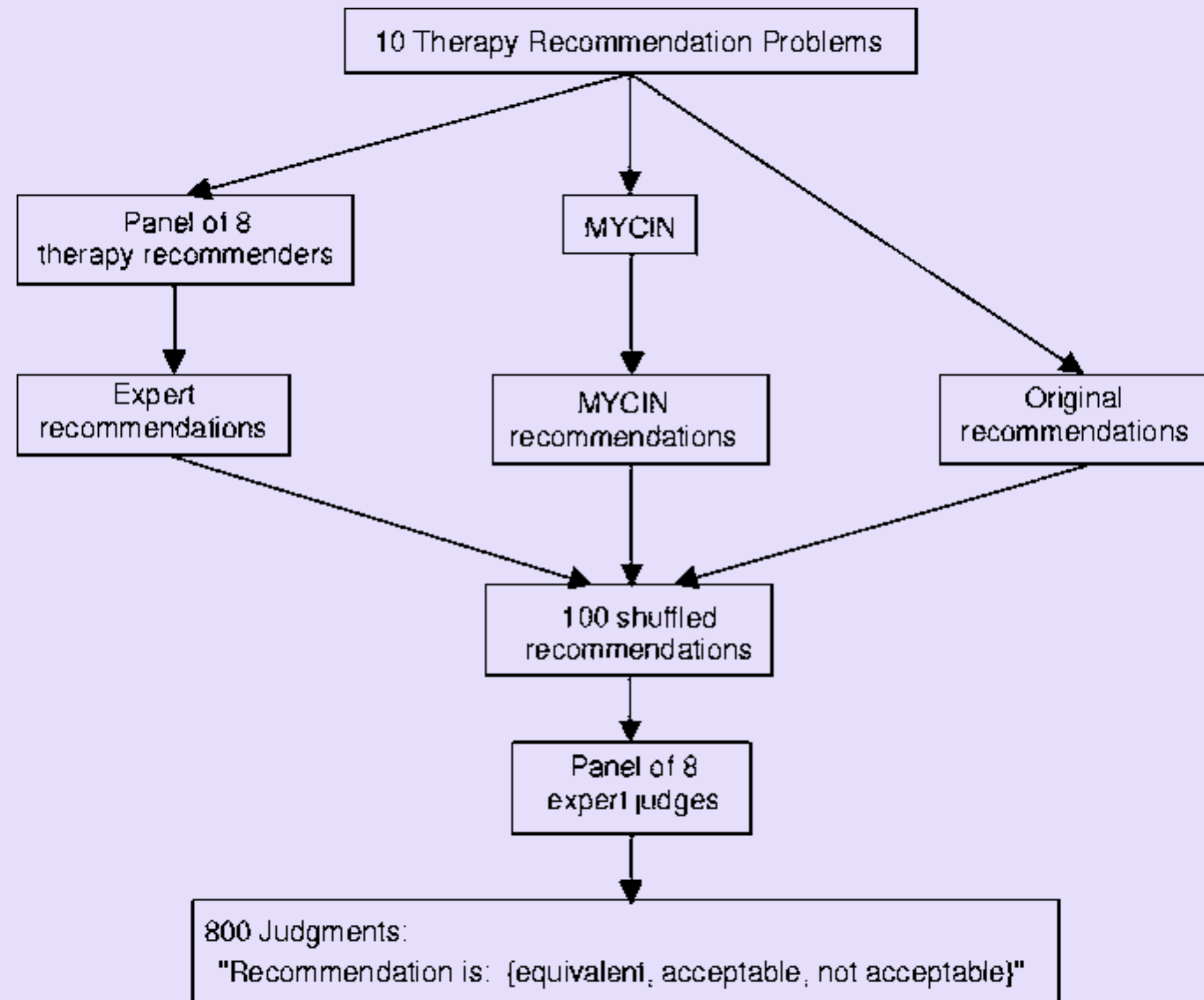
**Mycin was mainly used in the identification of:**

- Severe bacterial infections
- Correct administration of antibiotics based on the patient's physiology.
- Diseases related to blood clotting.
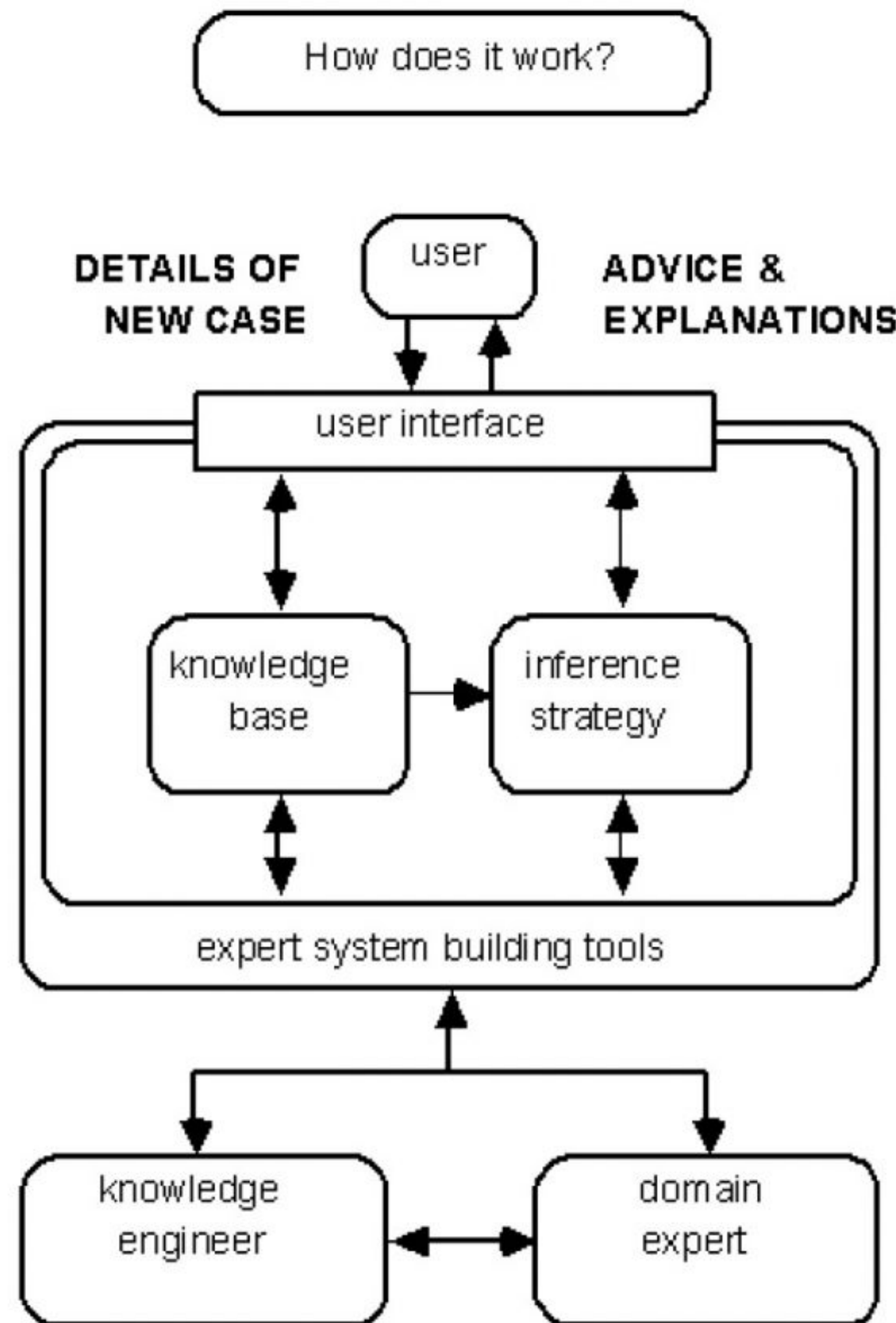
MYCIN has a knowledge base of around 600 rules

# THANK YOU

PRUDHVI NARAYANA BANDARU