## **Overview**

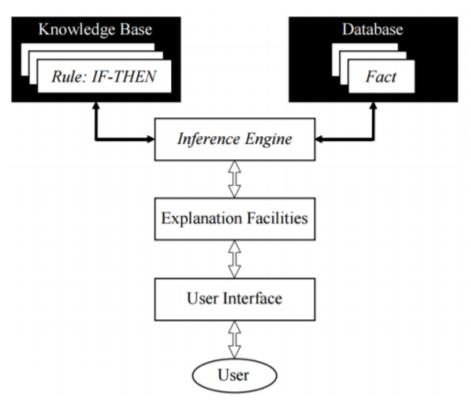
- goal to achieve intelligence with a set of rules
- · set of rules
  - underlying assumption
  - if antecedent then consequent
    - \* if condition then consequence
  - consequence
    - \* infer facts
      - ◆ setting a variable
    - \* act

## Reasoning

- infer facts
  - derive all facts based on given knowledge
    - \* facts and rules
  - [[Forward Chaining]]
- validate
  - test whether hypothesis is true
  - based on given facts and rules
  - [[Backward Chaining]]

## **Components of Rule-Based System**

- set of rules
  - knowledge useful for problem solving
  - contains general knowledge
  - information about classes/concepts
- · set of facts
  - information about concrete objects
- Inference Engine
  - reasoning based on given set of rules and incoming facts
- Explanation Facility
  - explains the reasoning
  - optional



## Complete Str System



• User Interface

[[Data Science and AI]] [[General Knowledge vs Facts]]