Knowledge-Based Systems

How are Knowledge-Based and Expert Systems <u>similar to</u> Decision Support Systems?

- They are both based on **relational information.**

How are Knowledge-Based and Expert Systems <u>different from</u> Decision Support Systems?

Decision Support Systems	Knowledge-Based and Expert Systems
- quantitative (numbers) - model-based $Y = f(X)$	- qualitative (text) - rule-based - when facing …, do …

Knowledge-Based and Expert Systems are the follow-up to Decision Support Systems?
- Decision Support Systems: Which course of action is the best?
- Knowledge-Based and Expert Systems: How to implement the above course of action?

- Decision Support Systems: Buying a hybrid car is worth it when the price of gas > $6/gallon
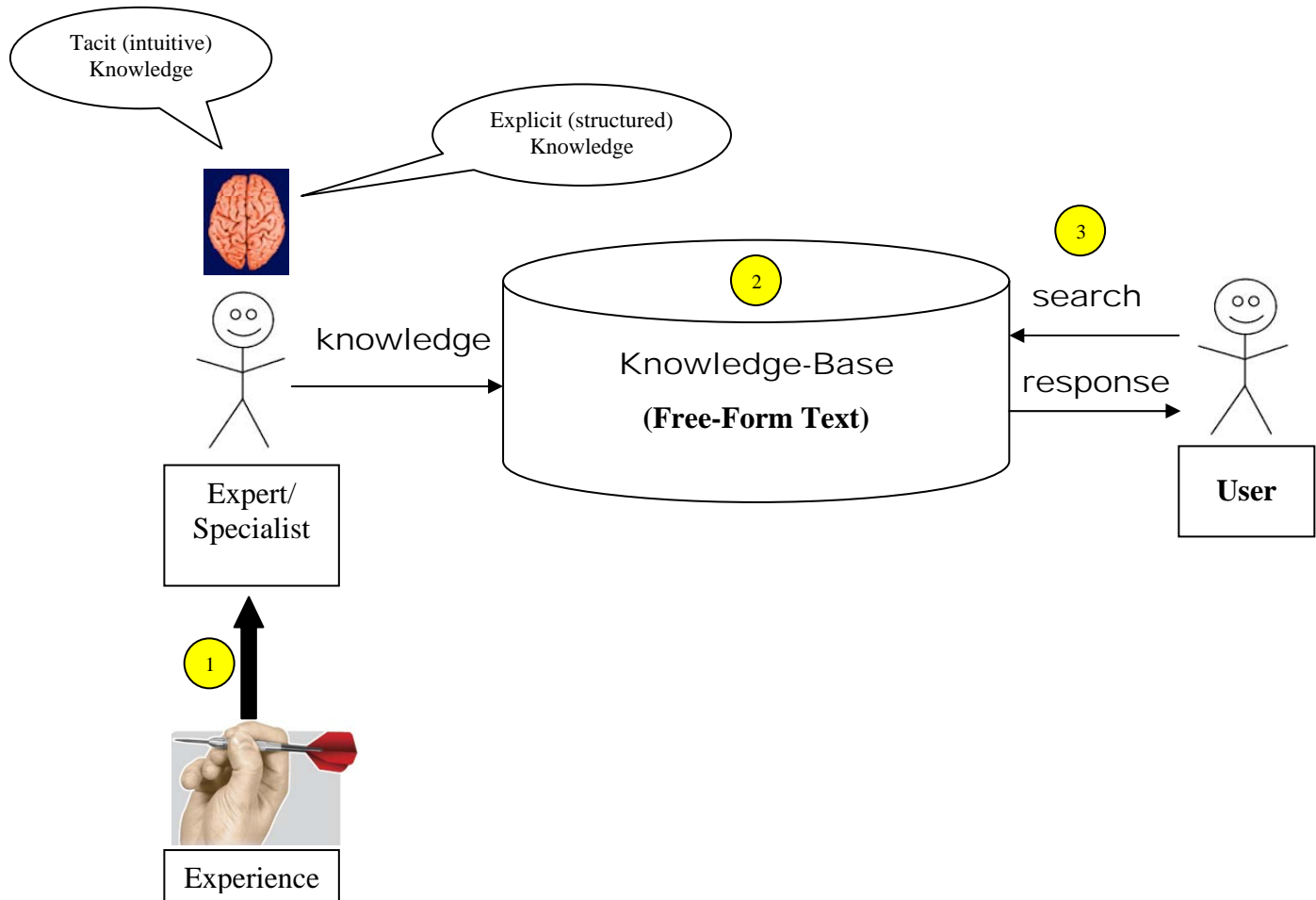- Knowledge-Based and Expert Systems: To buy a hybrid car, follow these steps: …………

What types of things do we know?

- We know that/when/who/where/what ➔ Factual Knowledge   ➔ Information
- We know how-to   ➔ Procedural Knowledge ➔ Skill/Competence
- We know why   ➔ Explanatory Knowledge ➔ Understanding

Call Taken: 7/17/2003, 12:06:00 PM
Work Started: 7/17/2003, 3:30:00 PM
Problem Solved: 7/17/2003, 4:15:00 PM

Problem Category: Lecturn - PB134
Short Description: Adobe Acrobat 6 does not display images.
Progress: Assigned to Rickl 7/17/2003

Solution Details: Chris was working on this lecturn computer to troubleshoot the problem. We found that Acrobat Reader 6 does not display large images in the document by default. To resolve this problem, edit the program preferences by clicking "Edit / Preferences / Page Display" and check the box labeled "*Display large images*". Acrobat Reader will then display all images in the document.

Tacit (intuitive) Knowledge

Explicit (structured) Knowledge

knowledge

Knowledge-Base

(Free-Form Text)

3

2

search

response

Expert/ Specialist

User

1

Experience

Textbook (pages 89-90)

1 creating knowledge

2 capturing and storing knowledge

3 disseminating knowledge

The Mother of Knowledge Management: Julia Child. http://en.wikipedia.org/wiki/Julia_child
Read enough to figure out her role in knowledge management.