Study Questions - Design Experience

> Interfaces:

What is Lampson's principle for interfaces?

What does an interface provide?

What does an interface consist of?

What are the requirements for a good interface?

⇒ Simplicity

What is Lampson's principle for simplicity?

What are the requirements?

What are the implications? How do you reconcile this with the Shanley Principle?

What are the results/effects of combining things? Example?

What do you need to pull it off?

⇒ Corollaries

\$Do we still need to worry about speed? Why or why not?

What do you want to hide? Not hide?

What is function abstraction? Why is it important?

What is separation of concerns? What are the benefits?

Study Questions - Design Experience

⇒ Continuity

- What is the basic problem?
- What do you want to keep stable? Allow to change?
- What does it mean to be upwardly compatible? Examples?
- ♦What is bootstrapping?

⇒ Implementations

- What is Brook's advice? Why? Examples?
- Why is it important to keep secrets? Examples? Benefits?
- What are useful design techniques for divide and conquer? Examples?
- What does it mean to use a good idea again? Examples?
- What is the difference between normal and abnormal?
 - > What is Lampson's advice? Why? Examples?

⇒ Speed (not the drug ©)

- \$Examples of techniques?
- \$Advantages of these techniques?
- \$Problems?

Study Questions - Design Experience

⇒ Fault tolerance

- When should it be considered? Why? Where?
- What are some useful techniques? Their benefits?