Questions & Answers from Scribe Notes

1. Come up with 2 more definitions for design using your own experience with designing in the past.

2. Give examples of designs at the four corners of the Normal-Radical plane.

3. List advantages and disadvantages of both structural and decision oriented definitions of what a design is.

Design Patterns

1. What are some ways of adapting an existing observer class when more info is needed?

2. Name some benefits and downsides of mutable and stateless strategy objects.

3. What are some issues with the singleton pattern?

4. Name some uses of the strategy, adapter, singleton, bridge, and observer patterns.

5. In GUI framework, when a button is pressed, an ONButton-PressedEvent is heard...

6. Why is it generally considered bad practice to have mutable singleton classes?

7. What are some differences between the adapter and the bridge design pattern?

8. In Java switching between different layouts using a context makes use of what design pattern?

Architectural Styles

1. Pipe and filter designs are generally more maintainable. Why?

KWIC CASE STUDY

1. What design patterns are used in each of the designs? How does this reflect the use of design patterns as tools for communication in software design? Explain.

2. What is the Liskov substitution principle? What meaning does it have in object oriented programming? Does the composite pattern reflect this? Explain.

3. For the designs brainstormed in class, what context were they made in? (i.e. What is the main programming paradigm? What functionality was immediately considered? What future functionality was expected?)

GENERAL

1. Who is Ted Codd? [34]

2. What property does the following equation describe? If $A = B$, and $B = C$, then $A = C$.[35]

3. What is a necessary requirement for casual mode creativity to be effective? [36]

4. What does it imply if a design falls behind the Pareto front? [37]

[34] The inventor of relational databases.

[35] Transitivity.

[36] Must had previously employed intense mode creativity.

[37] There exists at least one design that dominates it in the criteria that are being evaluated.