

**Bruegge 99, System Design, Chapter 6****Bernd Bruegge****Quiz No. 9****October 14<sup>th</sup>, 1999****1. What is the difference between the three possible control flow mechanisms: procedure-driven control, event-driven control and threads?**

In procedure-driven control, operations wait for input whenever they need data from an actor.

In event-driven control, a main loop waits for an external event.

Threads are the concurrent variation of procedure-driven control: the system can create an arbitrary number of threads, each responding to a different event.

**2. What is the command pattern used for?**

The command pattern enables the encapsulation of control such that user requests can be treated uniformly, independent of the specific request. This pattern protects these objects from changes resulting from new functionality. Another advantage of this pattern is that control flow is centralized in the command objects as opposed to being distributed across interface objects.