Concurrent programming has mostly been the domain of systems programmers rather than application developers, but Java's support of concurrency has enticed many to try their hand at concurrent applications. However, concurrent programming poses many traps for the unwary.

This tutorial demonstrates various design patterns and techniques for constructing concurrent applications in Java and for managing that concurrency. On the language side we look at Java's mechanisms to support concurrent programming.

On the design side we look at object structures and design rules that can successfully resolve the competing forces (safety, liveliness, efficiency, coordination, reusability) present in concurrent software design problems.