## The Coffee Maker Initial Write-up

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### 1 History

Concurrency is a rather elusive idea. A rather "catch-22" concept. And, it appears nothing is written to fully communicate the paradigm. Rather, the literature on the subject appears to be long winded essays on what not to do.

### 2 Abstract

My understanding of concurrency is incomplete. I must take greater steps and action in its investigation. Unfortunately, I do not pick up abstract concepts by just reading about them. I must "play" with ideas, I must experiment with ideas to fully "grasp" them.

## 3 Concept

To gain understanding in concurrency, the intent is to model a Coffee Maker in software. This will improve the understanding of concurrency via the development of different ways to handle concurrency. Mastering different ideas related to concurrency is the imperative. As always, design is independent of implementation (language). The main concepts to be mastered in this development are Synchronization (via Mutexs/Locks/Synchronized keyword/Synchronized(object)/Thread Waiting/Thread Notification).

#### 4 Intent

To model a Coffee Maker so as to expand the understanding of concurrency.

### 5 Stakeholders & Interests

The Coffee Drinker.

# 6 Typical Success Scenario

The Coffee Drinker Drinks coffee by pulling the carafe and filling a mug or cup. The Coffee Drinker makes coffee by filling the reservoir with water, adding coffee grounds to an unused coffee filter at where the water drips through the coffee grounds into the carafe.