Threading and Concurrency Day!

- ## Assigned Reading

  - You're reading all of Section 12.1 and Sections 12.3 through Sections 12.8 right now, skipping those subsections that refer to networking and servers.

    - Chapter 12 is actually the fourth chapter of the reader.

    - Code examples are in C, but the concepts are largely the same regardless of language.

  - Once we learn networking, we'll come back and hit on some of these excluded sections.

- ## Today's Agenda

  - Work through the `ticket-agents` example one more time, pointing out why all but the final version are flawed and capable of producing erroneous results.

  - Speak about the canonical Dining Philosophers concurrency example, which is taught in virtually every course that teaches multithreading and concurrency.

    - We'll implement a total of **four** dining philosophers simulations.

    - Each one will advance us toward a better solution that relies on multithreading while ensuring that minimal CPU is wasted by threads unable to get any meaningful work done.