

Computer Operating Environments

Threaded Application Presentation

Euan Watt

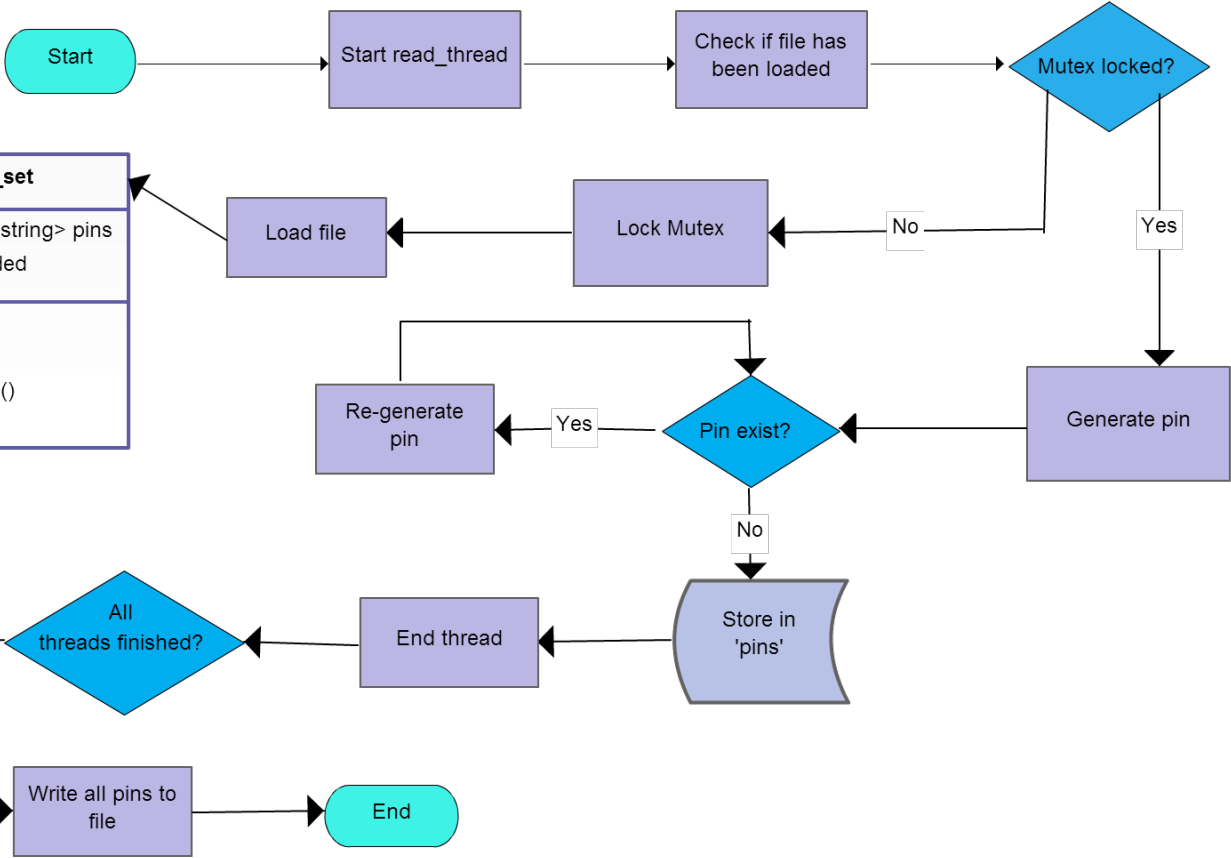
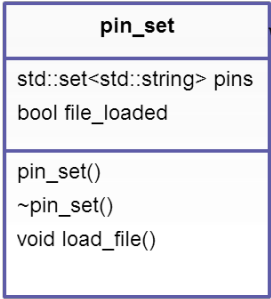
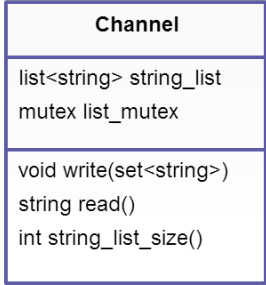
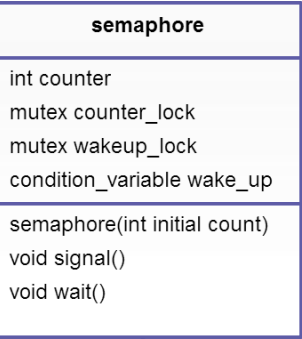
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Application Function

- Generate 2000 unique pin numbers
- Read/ write a file with the unique pin numbers
- Have every pin across running the application multiple times unique

Code structure

- Three external classes
- Two threading functions



Threading

- Boost Library
- Marsenne Twister
- Mutexes
- Channel
 - Semaphore
 - Unique Lock

Reflection - Difficulties

- Finding an appropriate way to check pins across threads
- Channels
 - Syntax
 - Semaphore class declaration

Reflection - Differences

- Atomic Operations
- More digits - allows for more pins to be generated
- Potentially ignore previously generated pins for benchmark (in code)

Thanks for listening!

Any questions?