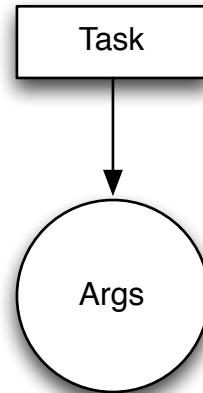
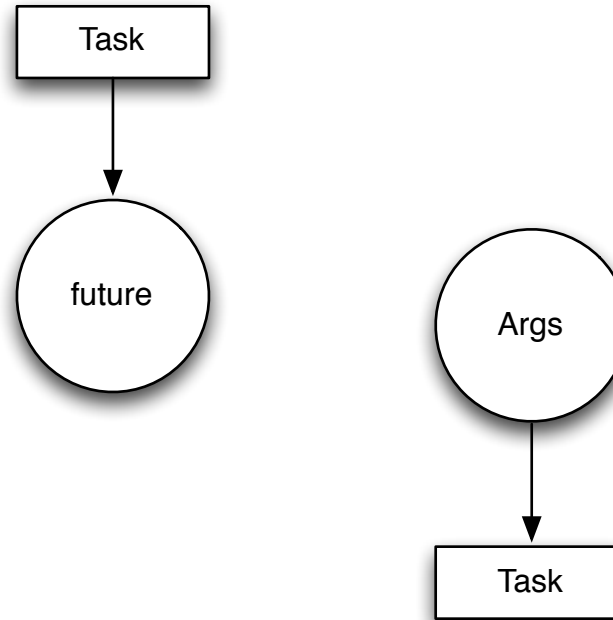


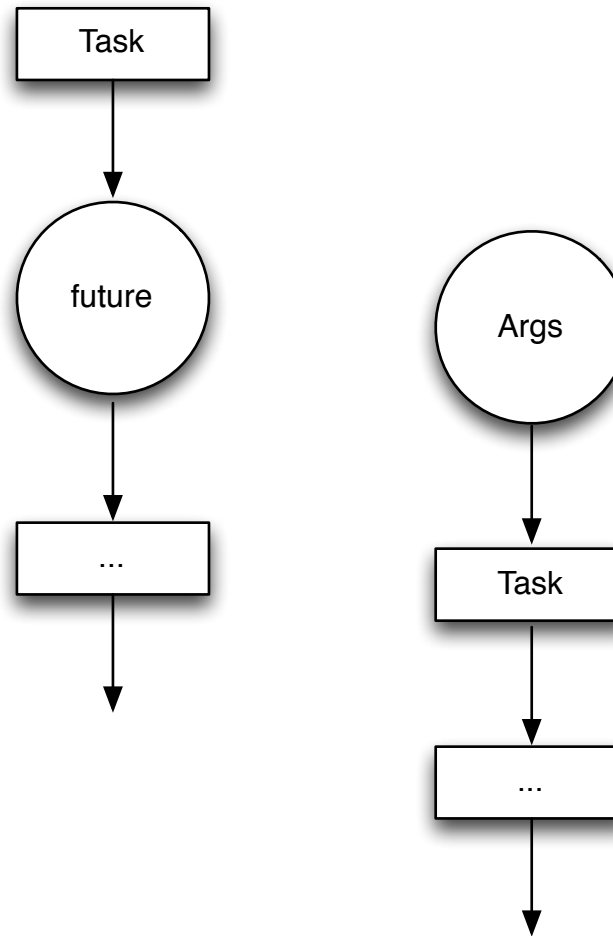
No Raw Synchronization Primitives



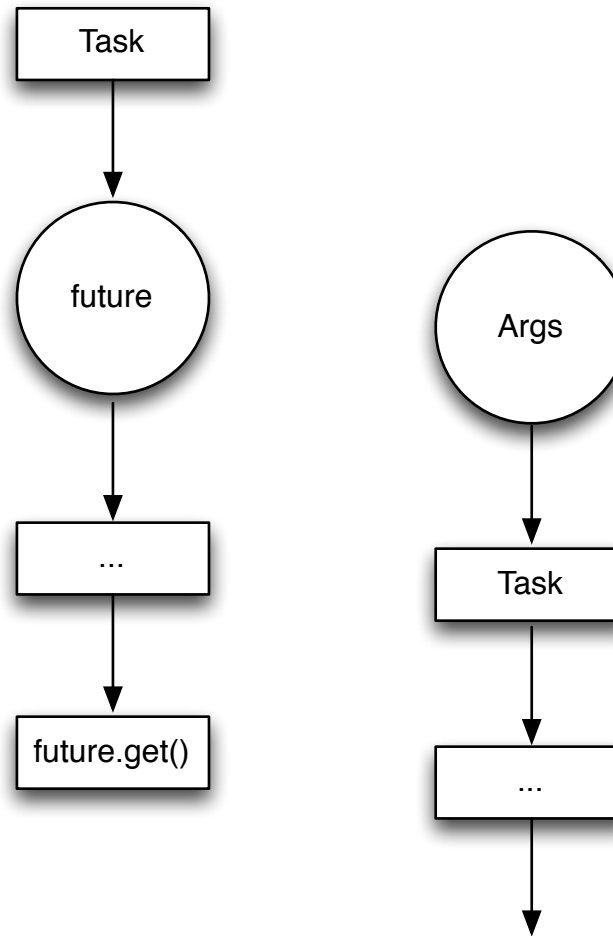
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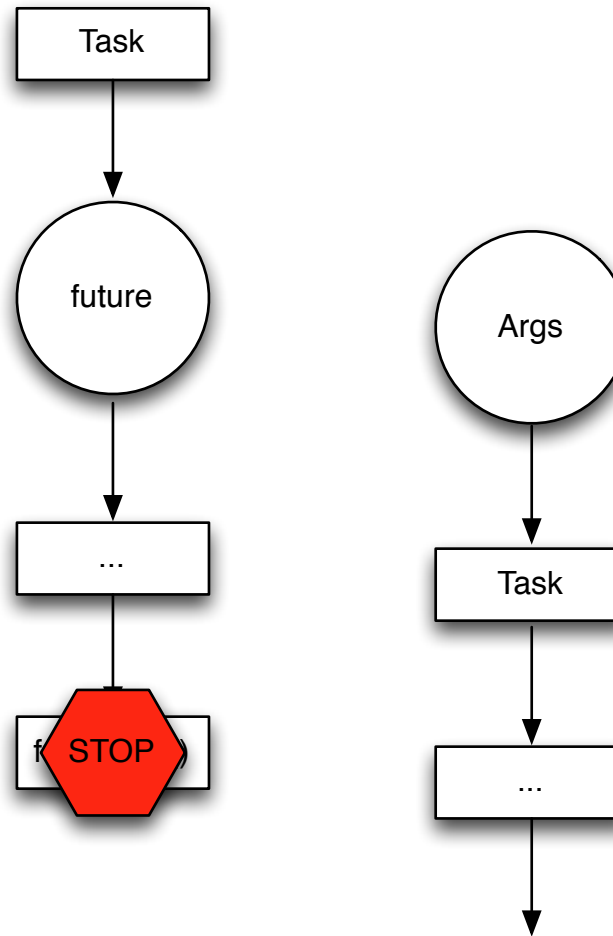
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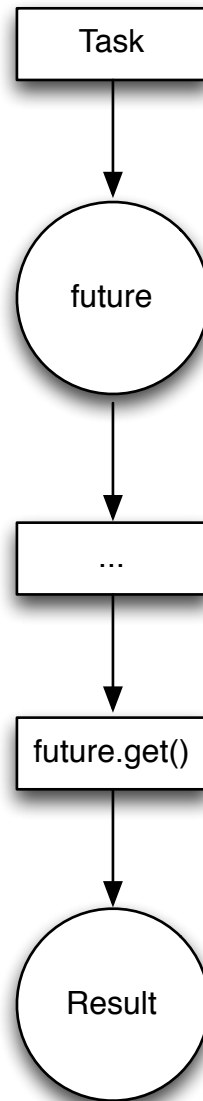


No Raw Synchronization Primitives



No Raw Synchronization Primitives





- Blocking on `std::future.get()` has two problems
 - One thread resource is consumed, increasing contention
 - Any subsequent non-dependent calculations on the task are also blocked
- Unfortunately, C++11 doesn't have dependent tasks
 - GCD has serialized queues and groups
 - PPL has chained tasks
 - TBB has flow graphs
- All are able to specify dependent tasks, including joins

