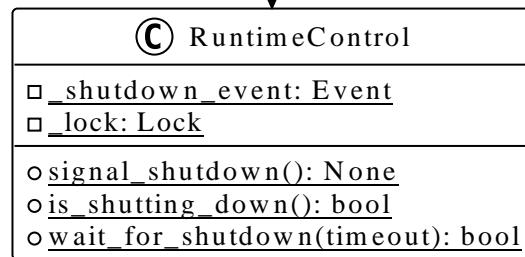
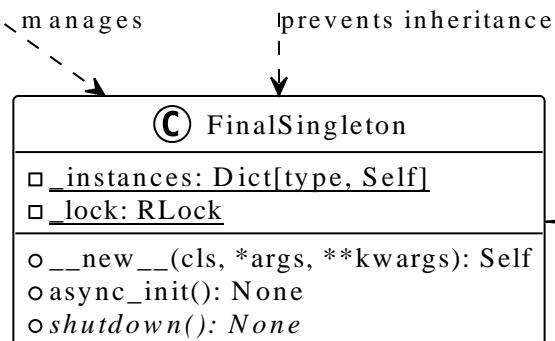
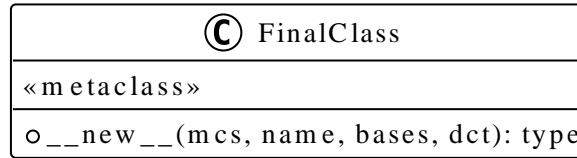
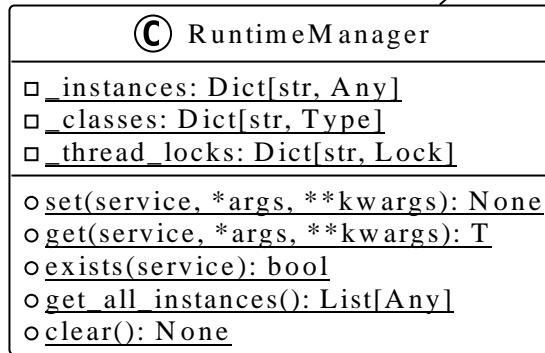


## Core Layer



Service Locator Pattern:

- Lazy initialization
- Thread-safe caching
- Named registration
- Constructor arg forwarding

Protected Construction Pattern:

- Prevents direct instantiation
- Enforces RuntimeManager usage
- Thread-safe singleton creation