

CS 140
Project 1: Threads
Design Document

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A Alarm Clock

A.1 Data Structures

A1

sdf

A.2 Algorithms

A2

A3

A.3 Synchronization

A4

A5

A.4 Rationale

A6

sf

B Priority Scheduling

B.1 Data Structures

B1

- **struct** thread
 - **int** base_priority
The base priority of each thread.
 - **int** donated_priority
The highest priority any thread is donating to each thread.
 - **int** effective_priority
The higher of the two above priorities.
- **struct** semaphore
 - **struct** list waiters
List of threads waiting on the semaphore.

B2

B.2 Algorithms

B3

B4

B5

B.3 Synchronization

B6

B.4 Rationale

B7

C Advanced Scheduler

C.1 Data Structures

C1

C.2 Algorithms

C2

C3

C4

C.3 Rationale

C5

C6

D Survey Questions

TODO