CLASS DISCUSSIONS- DESIGN OF A TASK PARALLEL LIBRARY

Main Contributions

Implementing Wait()

What New Operation Do We Need?

Idempotence

THE Protocol

```
            Worker/Victim                         Thief
1    push() {                           1    steal() {
2        T++;                           2       lock(L);
3    }                                  3       H++;
                                        4       if (H > T) {
4    pop() {                            5          H--;
5        T--;                           6          unlock(L);
6        if (H > T) {                   7          return FAILURE;
7            T++;                       8       }
8            lock(L);                   9       unlock(L);
9            T--;                       10      return SUCCESS;
10           if (H > T) {               11   }
11               T++;
12               unlock(L);
13               return FAILURE;
14           }
15           unlock(L);
16       }
17       return SUCCESS;
18   }
```

Futures

Replicable Tasks