XCRAM
Program Design Language

Submitted to:

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Revision Control

History Revision:

Revision Date	***Person Responsible***	***Version Number***	***Modification***
11/17/16	Sharleen Joy Y. Go	1.0	Initial Document.

Program Specification: Add Task

Input:

A new task(NT) and the current schedule(S)

Output:

none

Program Logic:

```
IF NT.type= "fixed" THEN
     TB=S.LocateTB(NT.muststart,NT.mustend)
     IF not TB.isfree() AND TB.task.type= "fixed" THEN
          DISPLAY "The desired time is not available"
          RETURN
     ELSE
          IF TB.isenough(NT) and not TB.isfree() THEN
               PQ.insert(TB.task)
               TB.task= None
          ELSE IF not TB.isenough(NT)
               temp=0
               IF TB.isfree() THEN
                    temp= S.CanCompact(TB,NT)
                    IF temp>0 THEN
                         TB= S.Compact(TB,count)
                    END IF
               END IF
               IF temp<1
                    count= S.CanKickD(TB,NT)
                    IF count>0 THEN
                         TB= S.Kick(TB,count)
                    ELSE
                         DISPLAY "The desired time is not
                         available"
                         RETURN
                    END IF
               END IF
          END IF
     END IF
```

```
ELSE
     TB= S.LocateFreeFit(NT)
     IF TB= NULL THEN
          TB= S.LocateFree(NT)
          IF TB= NULL THEN
               TB= S.LocateKick(NT)
               IF TB= NULL THEN
                    DISPLAY "The new task can no longer fit in the
                    current schedule"
               END IF
          END IF
     END IF
END IF
IF TB.shouldsplit(NT) THEN
     TB.split(NT)
END IF
TB.task=NT
IF not PQ.empty THEN
     Reschedule
END IF
```