Week 9 Discussion

Root's parent isroot

Friday, June 2, 2017 10:26 AM Class Superblock Inode Clock Dirntry **Indirect** isDataBlock(bn) If bn totoal numblocks Return false If bn is superblock of gorups Return flase If bn is a free list I node/block) or node table Return false Rturn li isFreeBlock(bn): If isDtaBlock(bn) == flse Return false Else Return T/F (get info from free block bitmap isFreeNode(bn): If innode numbe > (2, first reserved inode) | | if indoe number is greater than totoal number ot inodes in this disk False For all blocks b If is datablock(b) === false B is RESERVED Else fi FreeBlock(b) B is FREE (block state)

```
checkBlock(bn)
      If bn < 0 }} bn > totalNumBlocks
            Bn is INVALID
For one inode I
      If mode == 0 }} inodecoutn == 0
            Skip
      Mode > 0 && linkeCount > 0
            Check all 15 pointres
      For each ptr
            If ptr != 0
                  checkBlock(n)
            If ptr == USED
                  Ptr is DUPBLICATE
            Else if ptr == FREE
                  ALLOCATED block on free
            Else if ptr == INVALID }} RESERVED
                  INVALID/RESERVVED lock
            Else
                  Ptr is USED
For all variblock block ptrs | | check if INVALID | | FREE, USED
      If INVALID or RESERVED
Be careful about the level
For all datablocks (is datablokc == true)
      If bn ! FREE?UESD?DUP
            UNREF
      If DUP
            DUPLICATE
For each directory de
      If de is inode > total inodes num
            INVALID
      Link(out{de inodenum]
            If de is not
```

Pratent(de, inodenum) De.parent inode

For all inodes
If node > 0 && link count
Alocated