## IT 4100: File Systems

## **FAT Filesystems**

Due according to date on Canvas

## Assignment

Begin by downloading the image found <u>here</u>. This is an image of a FAT filesystem that I have created.

Create a partition (of 100M), copy that image into the new partition. (Hint: Use the dd command). (I.e. on a new partition that is unmounted, do dd if=fattest.img of=/dev/sda25)

Mount the partition.

After you have mounted it, create a simple text submission file and answer the following questions:

- 1. How many bytes per logical sector?
- 2. How many bytes per cluster?
- 3. How many sectors per cluster?
- 4. How many hidden sectors? What is a hidden sector?
- 5. How many 1K blocks(clusters) does the OS recognize of that partition?
- 6. How many blocks(clusters) have been used on that partition?
- 7. How many clusters does the file foo.txt in the filesystem take up?
- 8. What is the actual file size of foo.txt?
- 9. How much slack space (if any) does the largest.img have?

## Submission and Passoff

• Use the <u>Submisions link</u> at the top of the page to submit your text file to the Fat assignment.