

Project 3 Use Cases

Please consult the project 3 specification for all expectations of behavior. The use cases listed in this document are not exhaustive and are only composed of 80% of project grading test cases.

Starting your Utility

Note: Please do not hard-code the image name into your program. Once your utility is running, please display a prompt to the user that looks different from the normal shell prompt so that the user knows that he or she is now in the utility. Also, please reflect the current working directory in the utility prompt relative to the image's root directory for ease of debugging and testing.

```
$>./fat32_reader fat32.img  
/]
```

info use cases

```
/] info  
BPB_BytesPerSec is 0x200, 512  
BPB_SecPerClus is 0x1, 1  
BPB_RsvdSecCnt is 0x20, 32  
BPB_NumFATs is 0x2, 2  
BPB_FATSz32 is 0x3f1, 1009  
/]
```

Note: Do not assume and hard-code these values into your reader! For example, I may test your reader on an image with a different sector size, different number of sectors per cluster, etc., and everything should still work correctly.

cd and ls use cases

Successful cd and ls

```
/] cd DIR  
/DIR/] ls .  
.  ..  A   B   C   D   E   F   G   H   I   J   K   L   M  
N   O   P   Q   R   S   T   U   V   W   X   Y   Z  
/DIR/]
```

Unsuccessful cd

```
/] cd /FATINFO.TXT  
Error: not a directory  
/]
```

Unsuccessful cd

```
/DIR/] cd NOTHERE
```

Error: does not exist
/DIR/]

stat use cases

Successful size

```
/] stat CONST.TXT  
Size is 45119  
Attributes ATTR_ARCHIVE  
Next cluster number is 0x0004  
/]
```

Unsuccessful stat

```
/DIR/] stat NOTHERE.TXT  
Error: file/directory does not exist  
/DIR/]
```

read use cases

Successful read

```
/] read CONST.TXT 0 15  
Provided by USC  
/]
```

Unsuccessful read

```
/] read EMPTY.TXT 45 99  
Error: attempt to read beyond end of file  
/]
```