

## 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.*

### **open use cases**

#### *Successful open*

```
/] open FATINFO.TXT  
/]
```

#### *Unsuccessful open*

```
/] open FATINFO.TXT  
Error: already open  
/]
```

#### *Unsuccessful open*

```
/] open NOTHERE.TXT  
Error: does not exist  
/]
```

### *Unsuccessful open*

```
/] open DIR
Error: cannot open a directory
/]
```

### **close use cases**

#### *Successful close*

```
/] close FATINFO.TXT
/]
```

#### *Unsuccessful close*

```
/] close NOTHERE.TXT
Error: file not in open file table
/]
```

### **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/]
```

### **size use cases**

#### *Successful size*

```
/] size CONST.TXT
45119
/]
```

#### *Unsuccessful size*

```
/DIR/] size NOTHERE.TXT
Error: file 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 EOF  
/]
```