

fstat()

The `fstat()` function retrieves metadata about a file by using its file descriptor, populating a "struct stat". It's defined in "sys/stat.h".

```
#include <sys/stat.h>

// "fd" is the file descriptor (e.g. from "open()")
// "statbuf" is a pointer to store metadata
int fstat(int fd, struct stat *statbuf);
```

Returns 0 if success. In case of failure, returns -1 and sets "errno".

Example Usage

```
#include <sys/stat.h>
#include <fcntl.h>
#include <stdio.h>
#include <unistd.h>

int main(void)
{
    int fd;
    struct stat statbuf;

    fd = open("example.txt", O_RDONLY);
    if (fd == -1)
    {
        perror("open");
        return (1);
    }
    if (fstat(fd, &statbuf) == -1)
    {
        perror("fstat");
        close(fd);
        return (1);
    }
    printf("File size: %ld bytes\n", statbuf.st_size);
    printf("Owner UID: %d\n", statbuf.st_uid);
    close(fd);
    return (0);
}
```