team7_sprint2_report

Introduction

This sprint focused on extending the xv6 user-space utilities by adding two new commands:

1. touch: Create or update files.

2. find: Recursively search directories.

Functionality 1: touch

Purpose: Mimics the Unix `touch` command.

Test:

$ touch myfile.txt

$ ls

myfile.txt

Expected Output: A new file 'myfile.txt' should appear.

Functionality 2: find

Purpose: Recursively search directories for a file by name.

Test:

$ mkdir mydir

$ touch mydir/hello.txt

$ find . hello.txt

./mydir/hello.txt

Expected Output: Path to the file should be displayed.

Testing Summary

Command	Expected Output	Passed
touch test1.txt	File created	Yes
touch test1.txt	File updated	Yes
find . test1.txt	./test1.txt	Yes
find / file2.txt	Not Found	Yes

Code Modifications

File	Description
user/touch.c	New command to create/update files
user/find.c	New command to search directories
Makefile	Added `_touch` and `_find` to `UPROGS`

Conclusion

The `touch` and `find` utilities were successfully implemented and tested in xv6.

No kernel changes were required. All changes were in user space.