

Navigating the File System

pwd Print Working Directory

The shell command `pwd` displays the file path from the root directory to the current working directory.

```
$ pwd
/Users/sonny/Downloads
```

mkdir Make Directory

The shell command `mkdir` is used to make a new directory in the filesystem according to its argument. If a file path is given, the new directory will be placed at the end. Otherwise, it will create a new directory in the current working directory.

```
$ mkdir new-directory
$ ls
old-directory  new-directory
```

ls List

The shell command `ls` is used to list the contents of a directory. If no arguments are given, it will list the contents of the current working directory.

```
$ ls Desktop
resume.pdf
photo.png
```

cd Change Directory

The shell command `cd` is used to move throughout the filesystem of a computer. It accepts a variety of arguments:

- Full file paths.
- Names of children of the current directory.
- `..` the parent of the current directory.

```
$ cd some-directory
$ cd ..
```

Filesystem Structure

A computer's filesystem organizes the data stored by a computer, so that it can be easily retrieved by the user. Files are generally represented in a tree-like structure, in which any parent directory can have any number of children. The root directory is then found at the base of the tree.

touch Create New File

The shell command `touch` creates a new file in the current working directory with the name provided.

```
$ touch grocery-list.txt
```

The Command Line

The command line allows a user to navigate the filesystem and run built-in programs or custom scripts. In Unix, the command line interface is called Bash, and the shell prompt is the `$`.

A dark-themed terminal window with a white shell prompt character '\$' at the top left.

Helper Commands

Helper commands for the command line include:

- `clear` to clear the terminal
- `tab` to autocomplete the line
- `↑` and `↓` to cycle through previous commands