



ripgrep crates/grep/src/lib.rs: Code Companion

Reference code for the The Umbrella Crate lecture. Sections correspond to the lecture document.

Section 1: What This File Does

```
// The entire lib.rs file - remarkably minimal for such an important role
/*!
ripgrep, as a library.
...
*/

pub extern crate grep_cli as cli;
pub extern crate grep_matcher as matcher;
#[cfg(feature = "pcre2")]
pub extern crate grep_pcre2 as pcre2;
pub extern crate grep_printer as printer;
pub extern crate grep_regex as regex;
pub extern crate grep_searcher as searcher;
```

The entire file is under 20 lines of actual code. Its sole purpose is organizational—providing a unified namespace for six specialized crates.

Section 2: The Umbrella Crate Pattern

```
// Without the umbrella pattern, users would need:
use grep_cli;
use grep_matcher;
use grep_printer;
use grep_regex;
use grep_searcher;

// With the umbrella pattern, users get a clean hierarchy:
use grep::cli;
use grep::matcher;
use grep::printer;
use grep::regex;
use grep::searcher;
```


