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Rust...?

- ▶ systems-programming language: like C.
- ▶ It's completely memory safe: at compile time, no GC needed.
- ▶ First class multithreading support.
- ▶ Blazingly fast.

Bugs, what bugs?

- ▶ Heartbleed!



- ▶ Stagefright!



- ▶ Shellshock..?



So, what can you make with Rust?

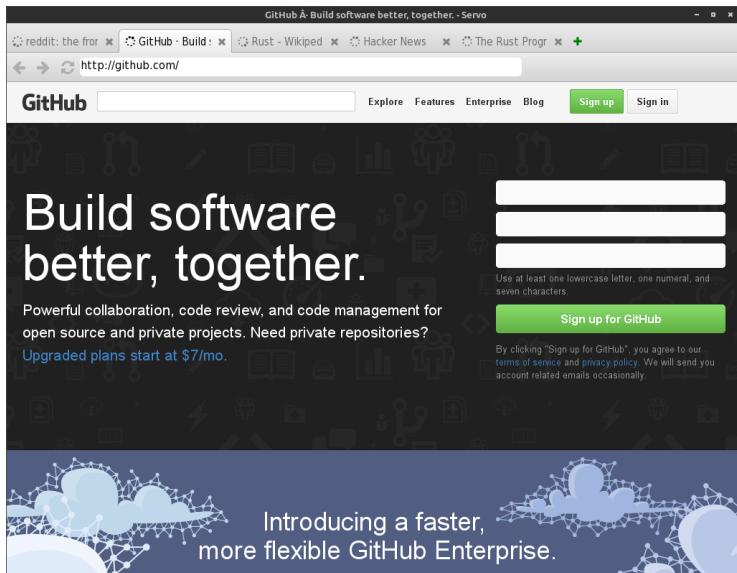


Figure: a webbrowser

So, what can you make with Rust?

```
1 extern crate tokio_proto;
2 extern crate tokio_service;
3 extern crate tokio_minihttp as http;
4 extern crate futures;
5 extern crate env_logger;
6
7 use tokio_service::Service;
8 use futures::{Async, Finished};
9 use std::io;
10
11 #[derive(Clone)]
12 struct HelloWorld;
13
14 impl Service for HelloWorld {
15     type Request = http::Request;
16     type Response = http::Response;
17     type Error = io::Error;
18     type Future = Finished<http::Response, io::Error>;
19
20     fn call(&self, _request: http::Request) -> Self::Future {
21         let resp = http::Response::new();
22         futures::finished(resp)
23     }
24
25     fn poll_ready(&self) -> Async<()> {
26         Async::Ready({})
27     }
28 }
29
30 pub fn main() {
31     let _ = env_logger::init();
32
33     let addr = "0.0.0.0:8080".parse().unwrap();
34
35     http::serve(addr, HelloWorld);
36 }
```

Figure: a webserver

So, what can you make with Rust?

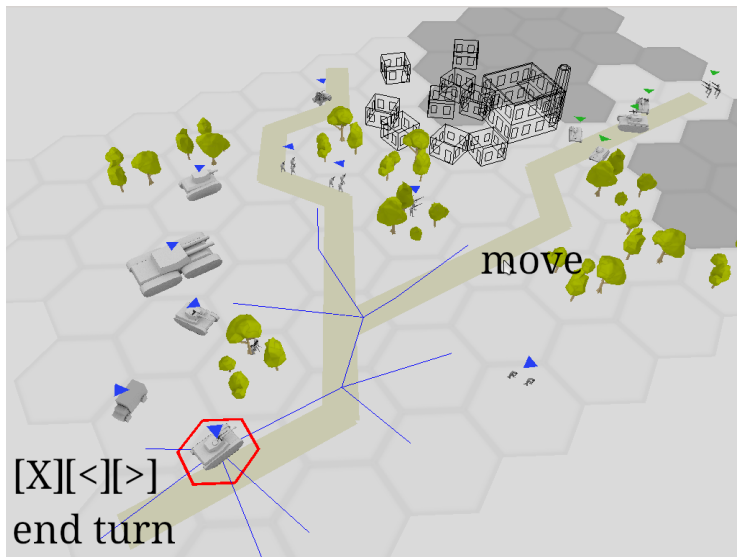


Figure: a videogame

So, what can you make with Rust?

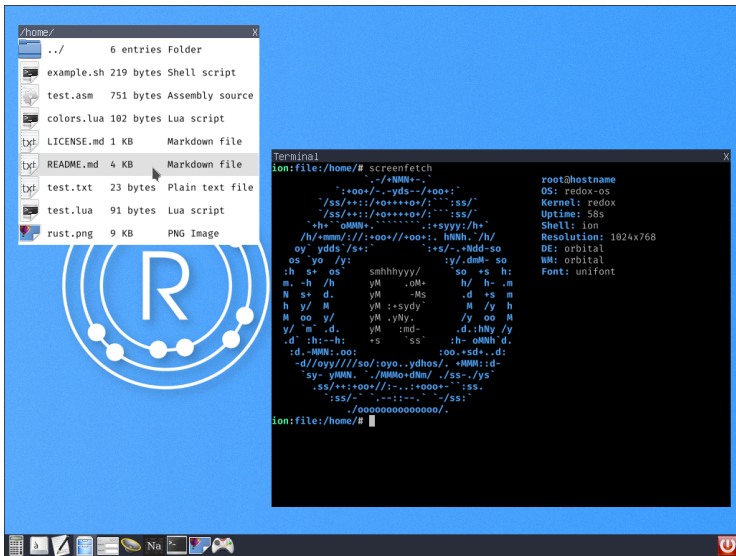


Figure: an operating system

The catch...

- ▶ Hard-to-learn...
 - ▶ ..because it makes you a better programmer.
 - ▶ Incredibly open and friendly community, great tutorials!
- ▶ Young ecosystem
 - ▶ With mature tools
 - ▶ Change to really shape the language and ecosystem
- ▶ Longer compile times

The catch...

