COMP6991 23T3

Concurrency

Concurrency refresher

Concurrency going wrong

Example: `data_race.c`

Example: `DataRace.java`

Example: `data_race.py`

How can we fix it?

Example: `fix_race.c`

Example: `FixRace.java`

Causing a data race in Rust

Example: attempt 1-3

Solving the issue in Rust

Example: attempt 4

Solving lifetime issues

`Example: attempt 4 fix 1-2`

Another approach?

Example: attempt 5

Evil crime time

Example: `unsafe_race`

Tuesday
todo!("list");

> thread::spawn bounds

> Scoped threads

> Atomics

> `move` closures

> Poisoning

> RwLock, briefly

> Channels

> Send / Sync

> Rayon