## Cargo and Crates

Pramode C.E

February 14, 2018

### Cargo

- ► The Rust package manager and build system
- ► Library dependencies specified in Cargo.toml

### Crate

- ► A Rust library/package
- ► Composed of one or more source files / modules
- Built using Cargo

#### crates.io

- Central repository containing crates
- ▶ Anyone can create a crate and upload to crates.io

- ► Crate names are unique and taken on first-come basis
- Published crates can't be removed/modified
- ► You can publish as many new versions as you like

# Semantic Versioning (SemVer)

- Crate versions have to follow SemVer rules
- https://semver.org/

## Publishing a crate

- Get an account on crates.io and acquire an API token
- ► Save the token to ~/.cargo/credentials by running the command: "cargo login API\_KEY".

## Packaging the crate

- ▶ Use this command: "cargo package"
- Creates a \*.crate file in target/packages
- Check the size of the file

## Upload the crate

Use "cargo publish" to publish the crate!