

Clojure Basic Training - Module 8

# Java interop

# Hosted language

- Clojure is hosted on the JVM
- Easy access to all the JAVA libraries
- Most of the time, a wrapper clojure library exists (e.g. cli-time for joda, ...)

# The dot special form

- Instantiation

`(new java.util.Date)` or `(java.util.Date.)`

- Import and instantiation

`(import java.util.Date)` then `(Date.)`

- Instantiation with parameter

`(java.net.URI. "http://clojure.org")`

# The dot special form

- Instance methods

`(. d getTime)` or `(.getTime d)`

- Static methods

`(. Math floor 4.345)` or `(Math/floor 4.345)`

- Get field value

`(let [pt (java.awt.Point. 0 10)] (.x pt))` — or `(. pt x)`

- Set field value

`(let [pt (java.awt.Point. 0 10)] (set! (.y pt) 100))`

# Access to libraries

- automatic import of `java.lang.*`
- all from dependencies (see leiningen deps) like `[clj-time "2.0.7"]`

# Let's try

- Update my-app to use joda instead of cli-time
- [joda-time "2.7"]