

# PIXIE LANG

# WHAT IS PIXIE?

#### SMALL LIGHT LISP

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# SMALL LIGHT LISP INSPIRED BY CLOJURE

## WHATIS PIXIE?

SMALL LIGHT LISP

INSPIRED BY CLOJURE

MAGICAL POWERS

https://github.com/pixie-lang/pixie

# ISN'T CLOJURE PERFECT?

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#### JVM STARTUP TIME



# ISN'T CLOJURE PERFECT?

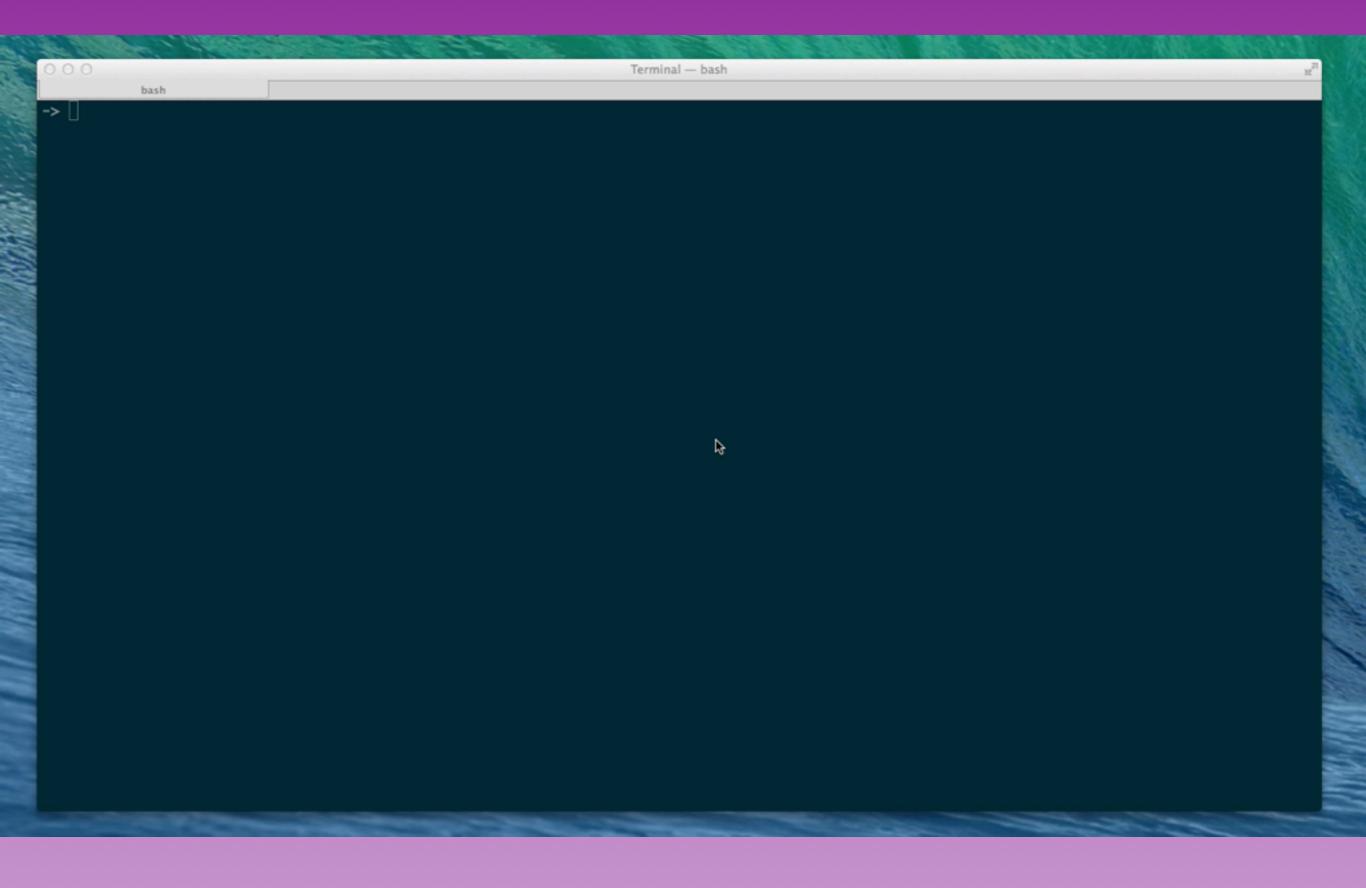
#### SLOW FOR SCRIPTING



## PIXIE IS FAST



### PIXIE IS FAST



#### PIXIE MAGIC

#### WRITTEN IN RPYTHON

USES THE PYPY TOOLCHAIN
WHICH IS A FRAMEWORK FOR
GENERATING HIGH PERFORMANCE
DYNAMIC PROGRAMMING LANGUAGE
IMPLEMENTATIONS

#### PYPY

#### DON'T BE CONFUSED

- RPYTHON TOOLCHAIN FOR MAKING LANGS
- ALSO A PYTHON LANG IMPLEMENTATION ITSELF

#### PYPY

#### VERY GOOD FOR MAKING LANGS

- VERY FAST
- REALLY NICE JIT
- GARBAGE COLLECTION
- CROSS PLATFROM REACH
- STM IN DEVELOPMENT WHICH WOULD REMOVE THE GIL (GLOBAL INTERPRETER LOCK) AND MAKE GARBAGE COLLECTION THREAD-SAFE)

# PIXIE MAGIC FROM PYPY

- IMPLEMENTS ITS OWN VIRTUAL MACHINE
- HAS ITS OWN BYTECODE, GC, AND JIT
- SMALL AND FAST
- MATH SYSTEM IS POLYMORPHIC (FAST BECAUSE OF JIT)

# PIXIE MAGIC FUTURE

- JIT HINTING (MAYBE)
- STM FOR PARALLESIM (YES DEPENDENT ON PYPY)



# MEET PIXIE

LET'S SEE SOME EXAMPLES IN ACTION

### MEET PIXIE

#### DOES IT HAVE ALL MY FEATURES NOW?



### MEET PIXIE

# DOES IT HAVE ALL THE FEATURES I WANT RIGHT NOW?



NO - STILL VERY YOUNG

# BUILD TOOL



https://github.com/pixie-lang/dust

### LET'S HACK

MISSION: ADD ZIPMAP

HTTPS://CLOJUREDOCS.ORG/CLOJURE.CORE/ZIPMAP