

Introduction to Go

Kevin W. Gisi

Twin Cities Code Camp 8—April 10, 2010

Summary

Go is a brand-spanking-new systems language that Google released in November, 2009. Every wonder how awesome C would be if it was garbage-collected, concurrent, and didn't take a few weeks to compile? Wake up; it's here! We'll take a look at this new language that steals some of the dynamic flexibility of Python and Ruby, the performance of C, and a compile time that you'll miss if you blink.

Why Do We Need a Systems Language?

```
#include <stdio.h>
main(t, ,a)char
*a; {return!0<t?t<3?main(-79,-13,
main(-86,0,a+1)+a)):1,t< ?main(t-
main(2, +1, "%s %d
d^n:9:16:t<0?t<-72?main( ,t,
"@n'+,#'/*{}w+/w#cdnr/+,{}r/
*de}+,/*{*+,/w{%+,/
w#q#n+,/#{1,+,/n{n+,/+#n+,/#}}
;#q#n+,/+k#;*+,/'r :'d*'3,}{w+K
w'K:'+}e#';dq#'l \
q#'+d'K#!/
+k#;q#'r}eKK#}w'r}eKK{nl]'/
#;#q#n'){)#}w'){) {nl]'/
+#n';d}rw' i;# \
){nl]!/n{n#'; r{#w'r nc{nl]'/
#{1,+'K {rw' iK{;[{nl]'/
w#q#n'wk nw' \
iwk{KK{nl]!/w{%'l##w#' i;
:{nl]'/*{q#'ld;r'}{nlwb!/*de}'c
;; {nl'-{}rw]'/+,}##'*}#nc,',#nw]
+kd'+e}+;#'rdq#w! nr'/')
}+}{rl#'{n' ')# \
}'+}##(!!/")
:t<-50? ==*a?putchar(31[a]):main
:0<t?main(2,2,"%s"):*a=='/'|main
  "!ek;dc
i@bK'(q) - [w] * n+r3#1, {}: \nuwloca
.vpbks,fxntdCeghiry"),a+1);}
```

Specifications

- Compiled
- Imperative, structured
- Concurrent
- Strongly typed (explicit or inferred)