

proposal: Go 2:

Author background

- Would you consider yourself a novice, intermediate, or experienced Go programmer?
- What other languages do you have experience with?

Related proposals

- Has this idea, or one like it, been proposed before?
 - If so, how does this proposal differ?
- Does this affect error handling?
 - If so, how does this differ from previous error handling proposals?
- Is this about generics?
 - If so, how does this relate to the accepted design and other generics proposals?

Proposal

- What is the proposed change?
- Who does this proposal help, and why?
- Please describe as precisely as possible the change to the language.
- What would change in the language spec?
- Please also describe the change informally, as in a class teaching Go.
- Is this change backward compatible?
 - Breaking the Go 1 compatibility guarantee is a large cost and requires a large benefit. Show example code before and after the change.
 - Before
 - After
- Orthogonality: how does this change interact or overlap with existing features?
- Is the goal of this change a performance improvement?
 - If so, what quantifiable improvement should we expect?
 - How would we measure it?

Costs

- Would this change make Go easier or harder to learn, and why?
- What is the cost of this proposal? (Every language change has a cost).
- How many tools (such as vet, gopls, gofmt, goimports, etc.) would be affected?
- What is the compile time cost?
- What is the run time cost?
- Can you describe a possible implementation?
- Do you have a prototype? (This is not required.)