

Simple justfile

```
#!/usr/bin/env just --justfile
# hello is recipe's name
hello:
    echo " Hello World! "
```

Attention: don't use keywords as recipe name, such as "import", "export", "alias" etc.

default Recipe - first or [default]

```
default: lint build test
# default recipe to display help
information
default:
    @just --list
# default recipe with [default]
attribute
[default]
hello:
    echo hello
# if no default recipe, first
recipe will be default
```

Aliases

```
alias t := test
alias c := check
```

Settings

```
set shell := ["zsh", "-cu"]
#set shell := ["bash", "-x"]
set dotenv -required
set dotenv -load := true
serv:
    echo " $DA TAB ASE _AD -
DRESS from .env"
set positiona l-a rgu ments :=
true
foo:
    echo $0
    echo $1
```

Strings - escape with Double-quoted

```
string-with-tab := "\t"
string -wi th- newline := " \n"
escapes := '\t\n \r"\\"'
shell- exp and ed-path :=
x'~/${ FOO }/${ BAR}'
message := f'hello {{name}}'
# this string will evaluate to
`foo\n bar\n`
x := '''
    foo
    bar
    '''
```

just command line

```
# run recipe
$ just hello param1
# list recipes in alphabetical order
$ just --list
$ just --summary
# Show full information about recipe
just --show test
# select recipes to run interactively
$ just --choose
# shell completion
just --completions zsh
```

GitHub Actions

```
- uses: extractions/setup-
just@v1
    with:
        jus t-v ersion: 1.45.0
```

IDE integration

VS Code: <https://marketplace.visualstudio.com/items?itemName=skellock.just>

JetBrains: <https://plugins.jetbrains.com/plugin/18658-just>

PROJECT_DIR env variable available for JetBrains IDEs

Just module/import

```
# load bar/justfile,
bar/.justfile, bar.just
mod bar
# include the contents of
another justfile
import 'foo/b ar.j ust'
```

just --unstable bar::hello

Recipe with parameters

```
filter PATTERN:
    echo "{{PATTERN}}"
# param with default value
email address s=' mas ter @ex -
amp le.c om':
    echo "{{address}}"
# param with validation pattern
[arg('n', patter n=' \d+')]
double n:
    echo $(({{n}} * 2))
# param with expression
test triple =(a rch() + " -un -
kno wn- unk now n"):
    ./test "{{triple}}"
# variadic param: '+' accept one
or more values
[doc(' Backup files')]
backup +FILES:
    scp {{FILES}}me@exa mpl -
e.com
# variadic param with *: zero or
more values
commit MESSAGE *FLAGS:
```

Recipe with parameters (cont)

```
> git commit {{FLAGS}} -m "{{MESSAGE}}"
```

If possible, please put param in quotation mark and friendly for syntax highlight.

Recipe with env variable for command

```
# recipe param as env variable
with $ sign
hello $name:
    echo $name
```

Recipe Dependencies - Before, After & Around

```
# execution sequence: a -> b ->
c -> d
b: a && c d
# execute recipe 'a' around
b:
    echo 'B start!'
    just a
    echo 'B end!'
# depend with params by
expression
default: (build " mai n")
build target:
    @echo 'Building
    {{target}}...'

```

Command annotate: quiet(@), suppress(-), invert(!)

```
hello:
    @ echo " command will not be
    echoed "
    - echo " ignore none-zero
    exit status and contin ue"
@hello2:
    echo " command will not be
    echoed "
# Invert command exit status by
! - shell feature
hello3:
    # if command succee ds(exit
    status is 0), exit just
    ! git branch | grep '*'
    master'
```

Recipe with other Languages

```
bash-test:
    #!/ usr /bi n/env bash
    set -euxo pipefail
    hel lo='Yo'
    echo " $hello from bash!"

[scrip t("b ash ")]
bash-t est2:
    set -euxo pipefail
    hel lo='Yo'

[scrip t(' bun', 'run')]
[exten sio n(".t s")]
bun-hello:
    let name: string = " Jac -
    kie "
    con sol eHello ${name
    })
[scrip t("d uck db", " -f")]
query:
    select version()
    echo " $hello from bash!"
```

Private Recipes - name starts with _

```
test: _test-helper
    ./b in/test
# omitted from 'just --list'
_test- helper:
    ./b in/ sup er- sec ret -te -
    st- hel per -stuff
```

Recipes as shell alias

```
for recipe in `just -f
~/justfile --summary`; do
    alias $recip e="just -f
~/jus tfile -d. $recip e"
done
```

Recipe with Python venv

```
venv:
    [ -d .venv ] || uv venv
run: venv
    ./v en v/b in/ python3
    main.py
```

Variables

```
version := "0.2.7"
tardir := " awe som esa uce -" +
version
tarball := tardir + ".ta r.g z"
path := " a" / " b" # join path
var1 := '' && 'goodbye' # ''
var2 := 'hello' && 'goodbye' #
'goodbye'
var3 := '' || 'goodbye' #
'goodbye'
var4 := 'hello' || 'goodbye' #
'hello'
test:
    echo "{{version}}"
# set/ov erride variables from
just command line
$ just --set version 1.1.0
```

- Substitutions: {{NAME}}

- Logical Operators: || &&

- Joining Path: /

Environment variable for commands

```
export RUST_BACKTRACE := "1"
test:
    # will print a stack
    trace if it crashes
    cargo test
```

backtick - capture output from evaluation

```
JAVA_HOME := `jbang jdk home 11`
# backtick code block
stuff := ``
    foo ="he llo "
    echo $foo " wor ld"
    ``
```

backtick - capture output from evaluation (cont)

```
> done BRANCH=`git rev-parse --abbrev-ref HEAD`
git checkout master
sloc:
  @echo "`wc -l *.c` lines of code"
# backtick works anywhere: string/variable/params
```

Just functions

```
hello name:
  echo "{{os()}}"
  echo "{{uppercase(name)}}"
# function categories
* System Information
* Environment Variables
* Justfile and Justfile
Directory
* String Manipulation
* Path Manipulation
# String contact: (key + " :" + value)
```

Conditional expressions: if, loop and while

```
# regular expression match
fo := if " hi" =~ 'h.+' { " -
mat ch" } else { " mis mat ch" }
test:
  if true; then echo 'True!';
fi
  for file in `ls .`; do echo
$file; done
  while `serve r-i s-d ead`;
do ping -c 1 server; done
foo bar:
  echo '{{ if bar == " bar " {
" hel lo" } else { " bye " } }}'
```

Attention

```
# Each command line is executed
by a new shell.
# If a command line failed, just
will exit, \
# and subsequent command lines
will not be executed.
change -wo rki ng-dir:
  cd bar && pwd
  # multi-line construct -
escape newline with slash
  if true; then \
    echo 'True!'; \
  fi
# justfile is case insensitive:
Justfile, JUSTFILE etc
# justfile could be hidden:
'.just file'
# Call recipe from sub dir:
`~/app 1/t arg et>$ just build`
```

