fx JSON viewer and processor

CONCEPTS

Every argument is a JavaScript function; the result of one is the input x of the next. Start with . to skip x ⇒ x.

Input file or stdin
↓ parse
Arg 1 .users
↓ x
Arg 2 @.name
↓ x
Output JSON or text

Each argument gets the previous result as x

fx draws the interactive UI on stderr, so stdout only carries what you print with P or pipe out.

RUN AND INPUT

`fx <file>`
Open a file interactively

`<cmd> | fx`
Open piped JSON interactively

`fx <file> <expr>`
Apply an expression, print result

`<cmd> | fx .`
Pretty-print stdin

`fx <file> <expr1> <expr2>`
Chain expressions

`curl -i <url> | fx`
Show response headers too

`fx --slurp <expr>`
Read a stream as one array

`fx --strict .`
Reject invalid JSON

`fx --version`
Print version

EXPRESSIONS

`.<key>`
Select a field

`.<key>[0]`
Select an array element

`.<key>[]`
Flatten array items

`x ⇒ x.<key>`
Explicit arrow function

`'.map(x ⇒ x.<key>)'`
Map over an array in JS

EXPRESSIONS (cont.)

`'.filter(x ⇒ x.<key> > 1)'`
Filter an array in JS

`@.<key>`
Shorthand for map

`?.<key>`
Shorthand for filter

`'({...x, <key>: 1})'`
Copy an object with changes

`'Object.keys'`
Call any JS function by name

`` '`Hi ${x}`' ``
Template string output

BUILT-IN FUNCTIONS

`len`
Length of array, string or object

`keys / values`
Object keys or values

`sort / sortBy(fn)`
Sort an array

`uniq`
Unique values

`groupBy(fn)`
Group items by a result

`map(fn) / filter(fn)`
Curried map and filter

`flatten`
Flatten nested arrays

`reverse`
Reverse an array

`list`
Print array as lines for xargs

`save`
Write edits back to the input file

`YAML.stringify`
Convert JSON to YAML

FORMATS

`--yaml`
Read YAML

`--toml`
Read TOML

`--raw / -r`
Process input line by line as text

File extensions pick the format automatically (.yaml, .toml, .xml). stdin has no name, so it needs the flag.

INTERACTIVE: MOVE

Arrows Move; h j k l also work

g / **G** Top / bottom

Space / **b** Page down / up

J / **K** Next / previous sibling

[/ **]** Back / forward in history

@
Fuzzy-search a path and jump

q Quit

INTERACTIVE: FOLD AND VIEW

Enter / **l** Expand node

Backspace / **h** Collapse node

L / **H**
Expand / collapse recursively

e / **E** Expand / collapse all

1-9 Collapse to nth level

? Show help

INTERACTIVE: SEARCH AND OUTPUT

. Open query input

/ Regex search

n / **N** Next / previous match

Tab / **Shift** + **Tab**
Complete or cycle in query input

Esc Cancel the query

y Yank (copy) value

p Preview value

P Print value to stdout and exit

`:w <file>`
Write on-screen JSON to a file

RECIPES

Pull one column as lines

```
curl -s <url> | fx .items @.name list
```

Convert YAML config to JSON

```
fx config.yaml . > config.json
kubectl get pod -o yaml | fx --yaml .spec
```