

S Query-handler M { Unique
name List-dir
config

sexp-of-config

config-of-sexp

$t \leftarrow \text{internal_state}$

create : config $\rightarrow t$

eval : $t \rightarrow \text{Sexp.t} \rightarrow \text{Sexp.t} \text{ Or error.t}$

\uparrow
query

S Query-handler-instance

Query-handler

this : Query-handler.t

Q: Query-handler config

\downarrow

\downarrow

fun: build_instance

\downarrow

I: Query-handler-instance

handlers : Query-handler-instance list

\downarrow

fun: build-dispatch-table

\downarrow

table : name \rightarrow I

table

\downarrow

name-and-query : Sexp.t

\downarrow

fun: dispatch

\downarrow

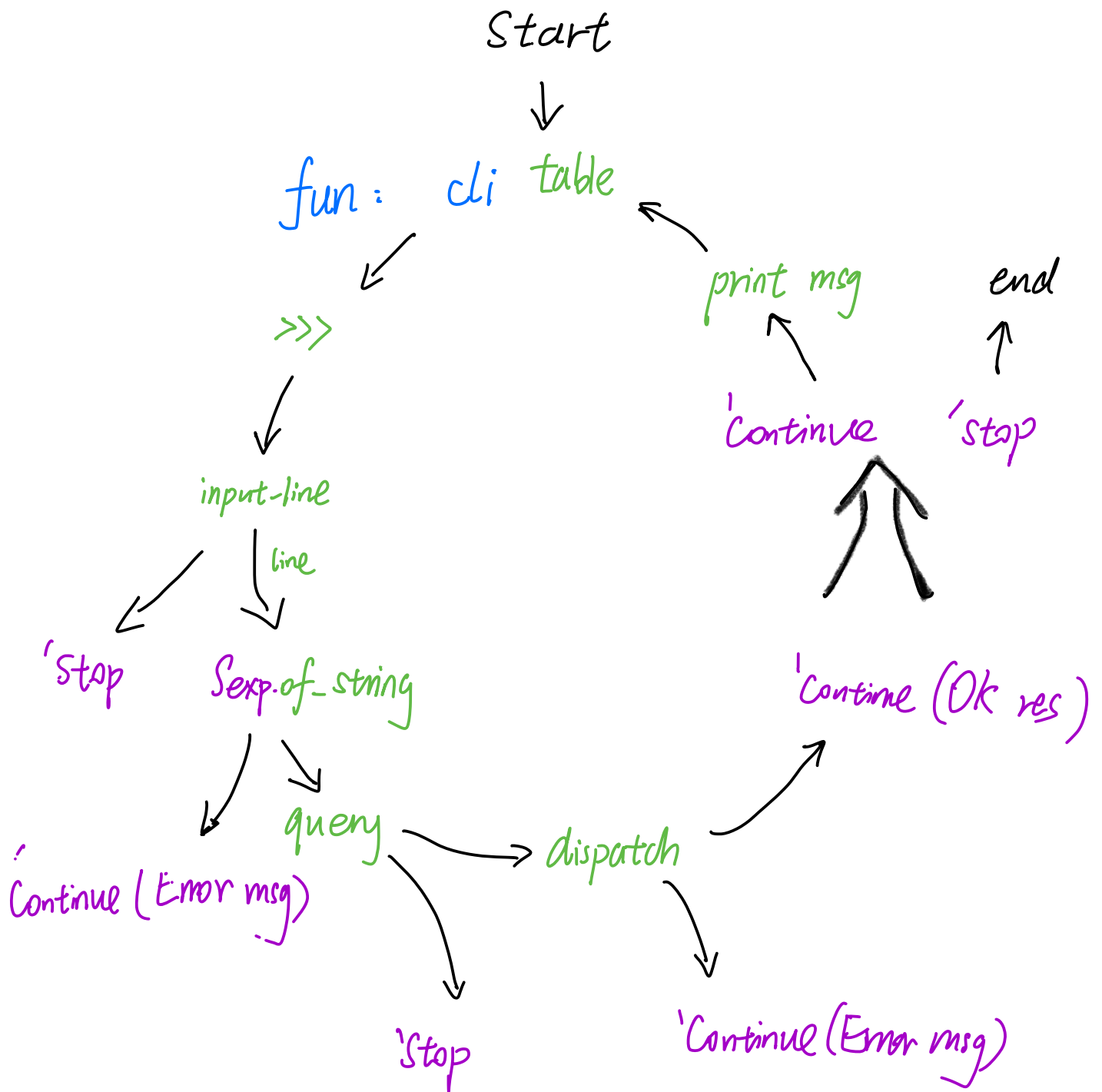
name-and-query

query format:

(query-name, query)

name → table → I

I. eval I. this query ← eval query



unique_instance

list_dir_instance

M Loader

name

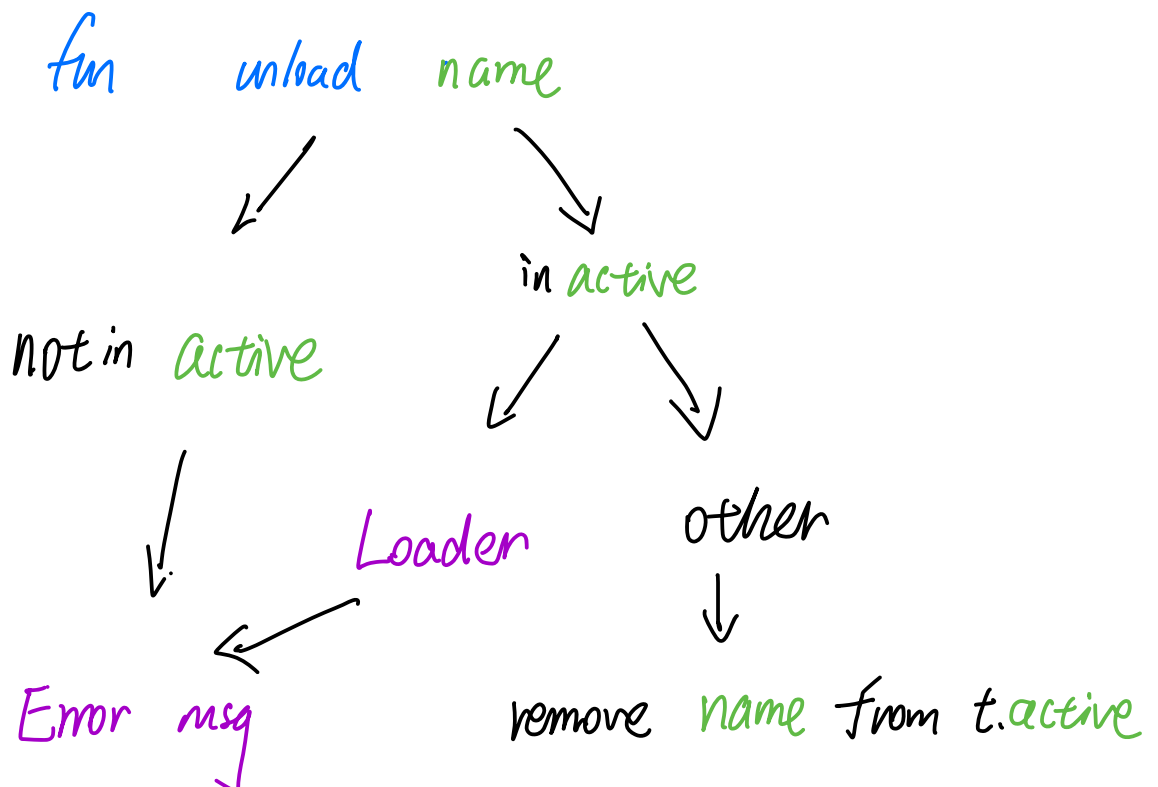
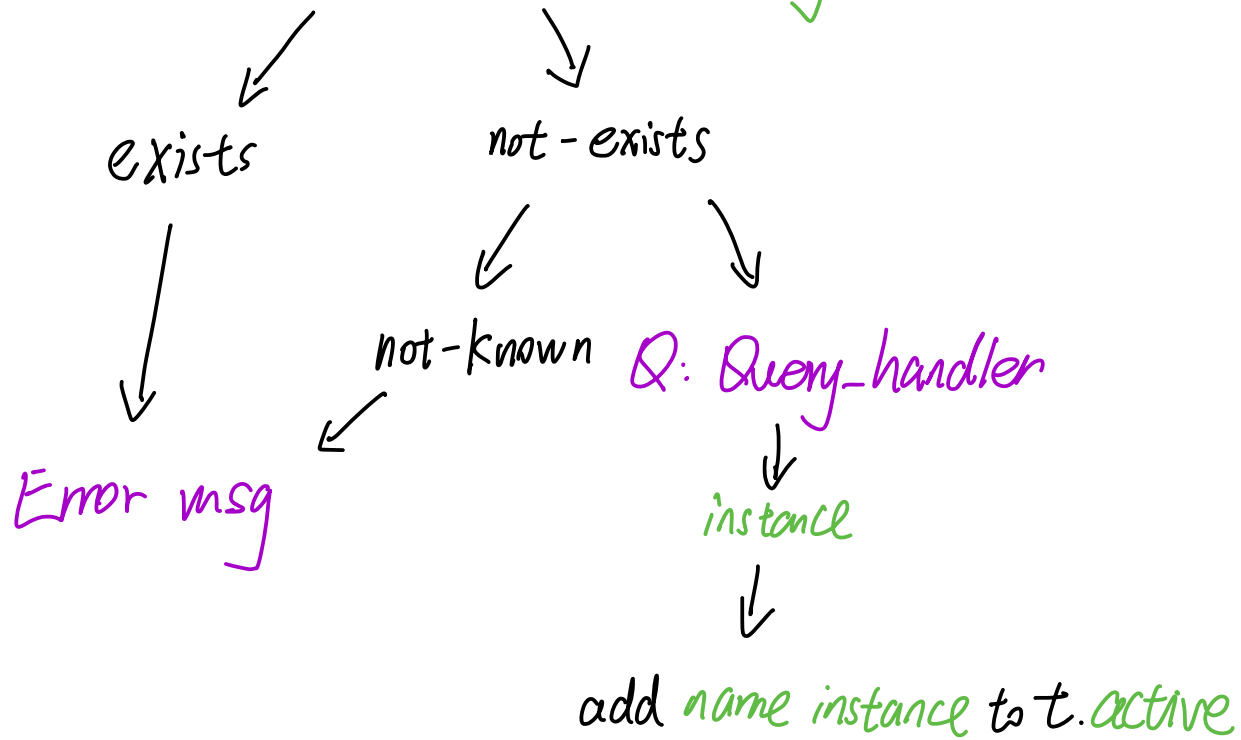
config

sexp-of-config

config-of-sexp
t < known
active

fun: create (known: module list
active: [])

fun: load t name config



type request =

| Load name config
 | Unload name
 | known-services
 | Active-services

fun eval t ^{sexp.t} query

Load → load

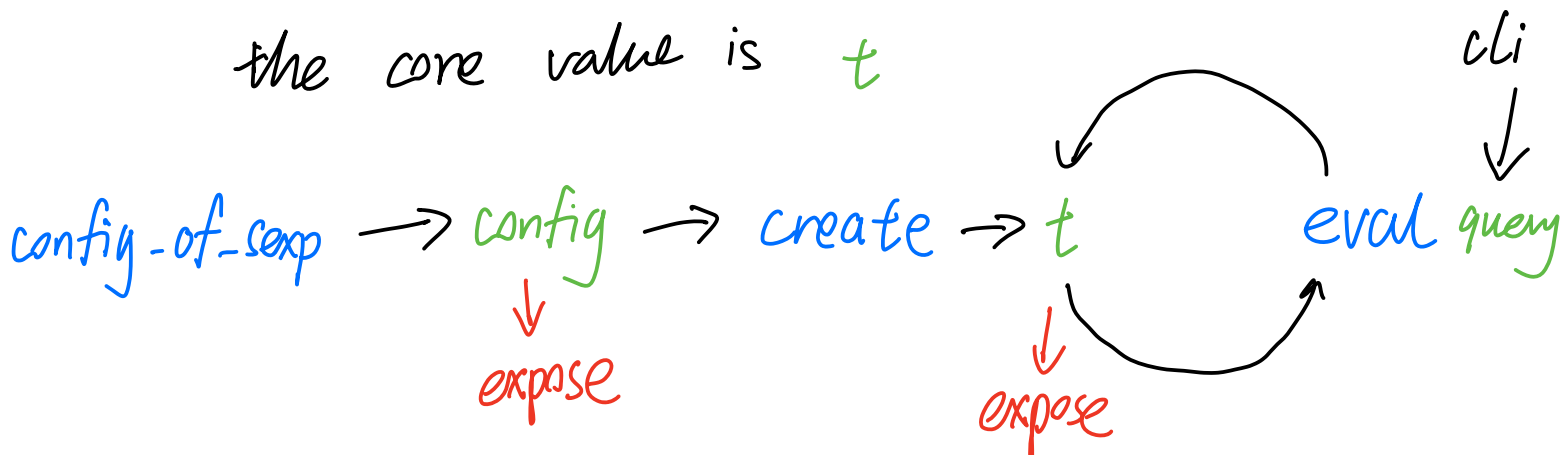
Unload → unload

known-services → known → sexp.t

Unknown-services → active → sexp.t

A module define some values and
 some methods on these values

the core value is t



Query-handler and Query-handler-instance like Class and Object

fun run

loader ← create all-known-Query-handle-module list

loader-instance ← \langle loader

Add loader-instance to loader.active

cli loader.active

S: Query-handler

M: Unique

List-dir

Loader

⋮



src.ml compile

known

like utop #load

Query-handler-instance

unique

ls

loader

⋮



load

unload

active

add new module
when the cli is running
to extend

