

start

open TCP socket with port
open UDP socket with port 80

wait to receive a message
from UDP or TCP

is message
TCP or UDP?

UDP

UDP

Extract server address
Extract request

Extract server address
Extract request

is it in the
cache?

is it in the
cache?

No

Yes

Yes

No

open UDP socket
with server address

receive response
from cache

receive response
from cache

open TCP socket
with server address

send DNS request
turn on Timer

send HTTP request
turn on Timer

is response
transmitted before
timeout?

is response
transmitted before
timeout?

No

No

Yes

Yes

receive response

receive response

save in cache

save in cache

send response to
client with TCP

send response to
client with UDP