

CS 537

P4a: Scalable Web Server

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Overview

- Basic Web Server (server_none)
- One Thread Per Request (server_newt)
- Fixed-Size Thread Pool (server_cond / server_sema)

Basic Web Server

- Demo (Port)
- Code Structure
- Drawback

home.html favicon.ico	output.c
request.{h,c}	
server_none.c	
server_impl.h	
server.c	

(CS Network)



One Thread Per Request

- malloc + free
- pthread_detach
- Demo (Makefile, pstree)

requestHandle	request Handle	request Handle
entry	entry	entry
server_dispatch		
main/while		

client.c

Browser

Fixed-Size Thread Pool

- Producer-Consumer
 - mutex + condition variable
 - semaphore

requestHandle	request Handle	request Handle
entry(consumer)	entry	entry
Bounded Buffer		
server_dispatch(producer)		
main/while		

client.c

Browser