TÉCNICO LISBOA

1st Mini-Project: Chat Client & Server

Programming with Sockets

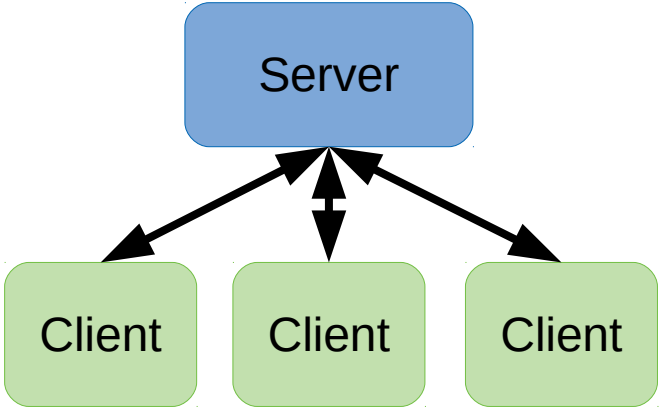
Overview

Learn how to program with Sockets in C

- Single threaded

Create chatroom service

- **Client:**
  Interacts with users
- **Server:**
  Communication hub



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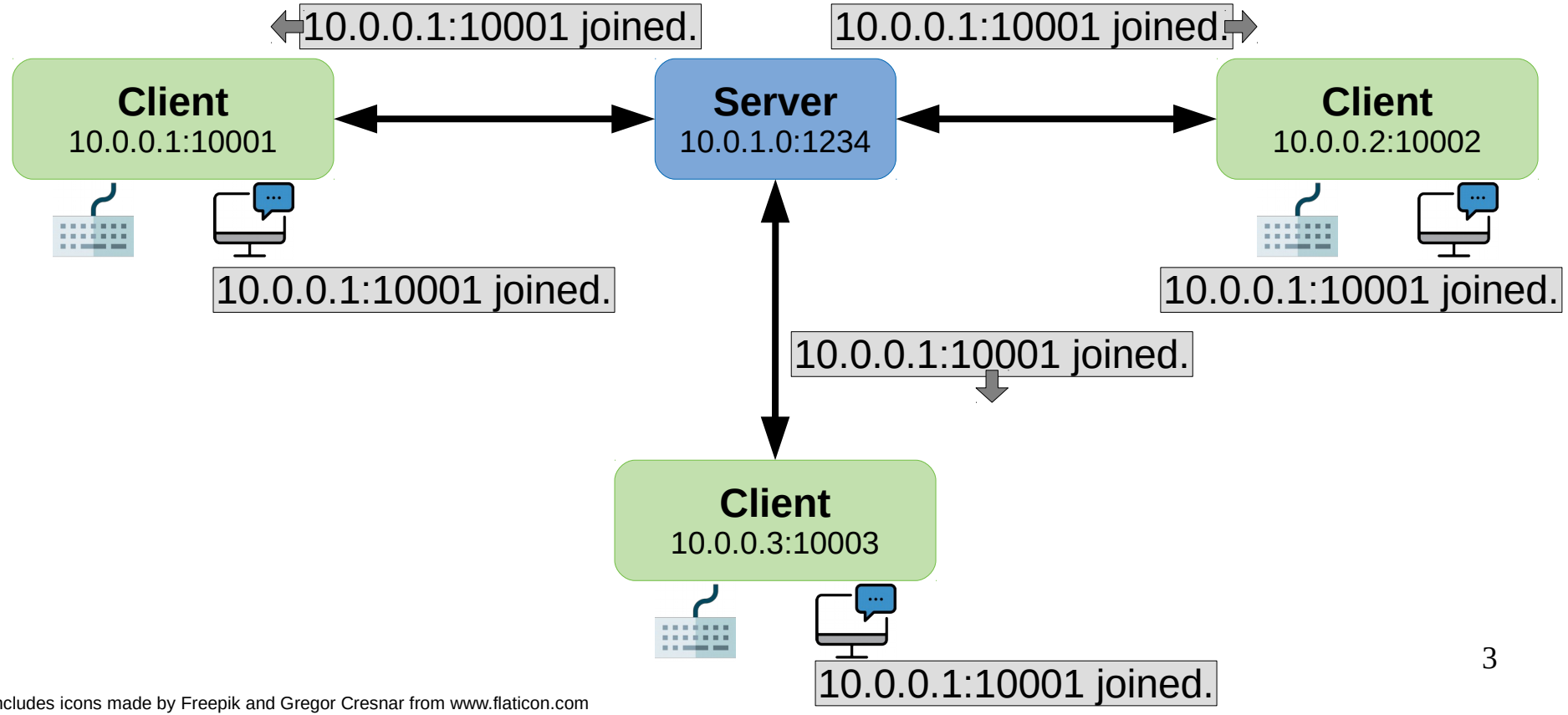
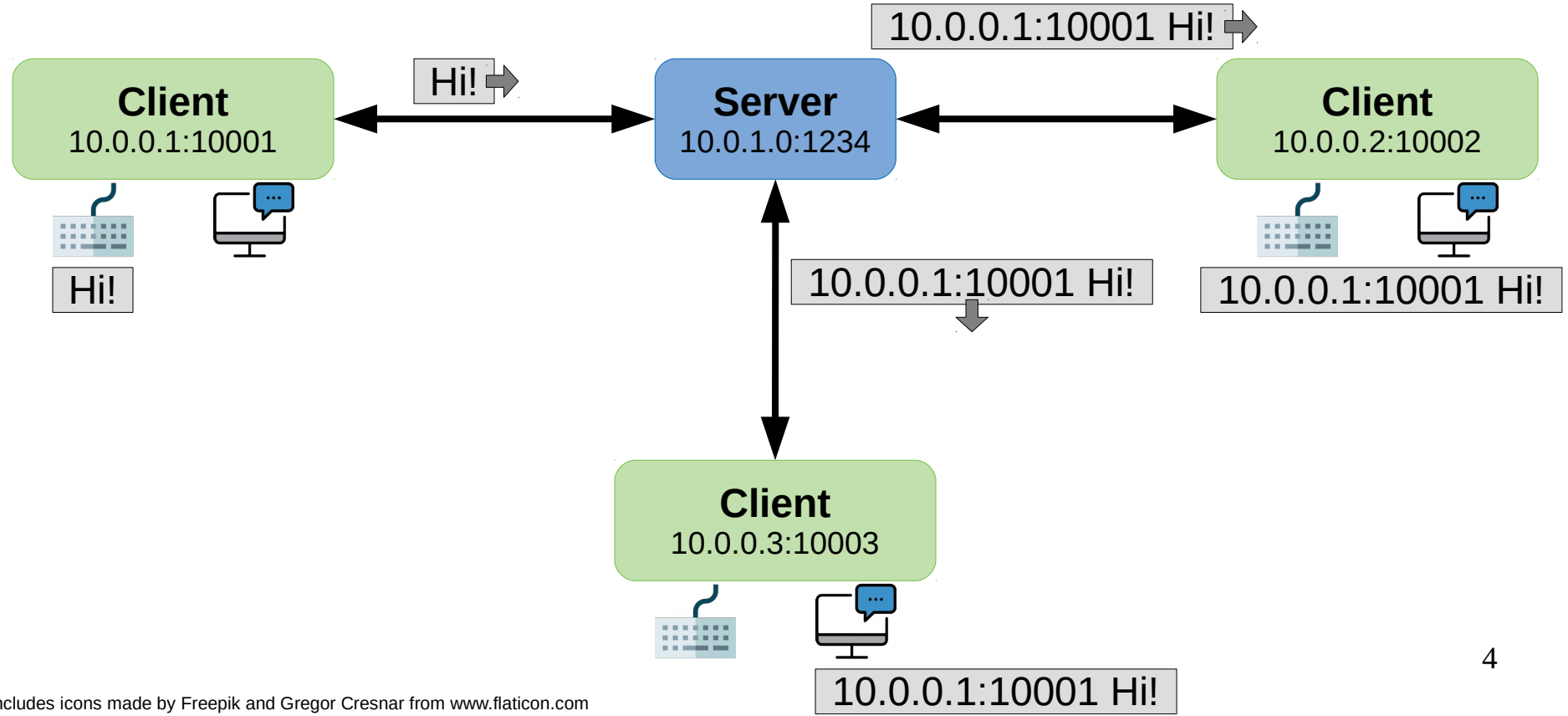


Includes icons made by Freepik and Gregor Cresnar from www.flaticon.com

Overview



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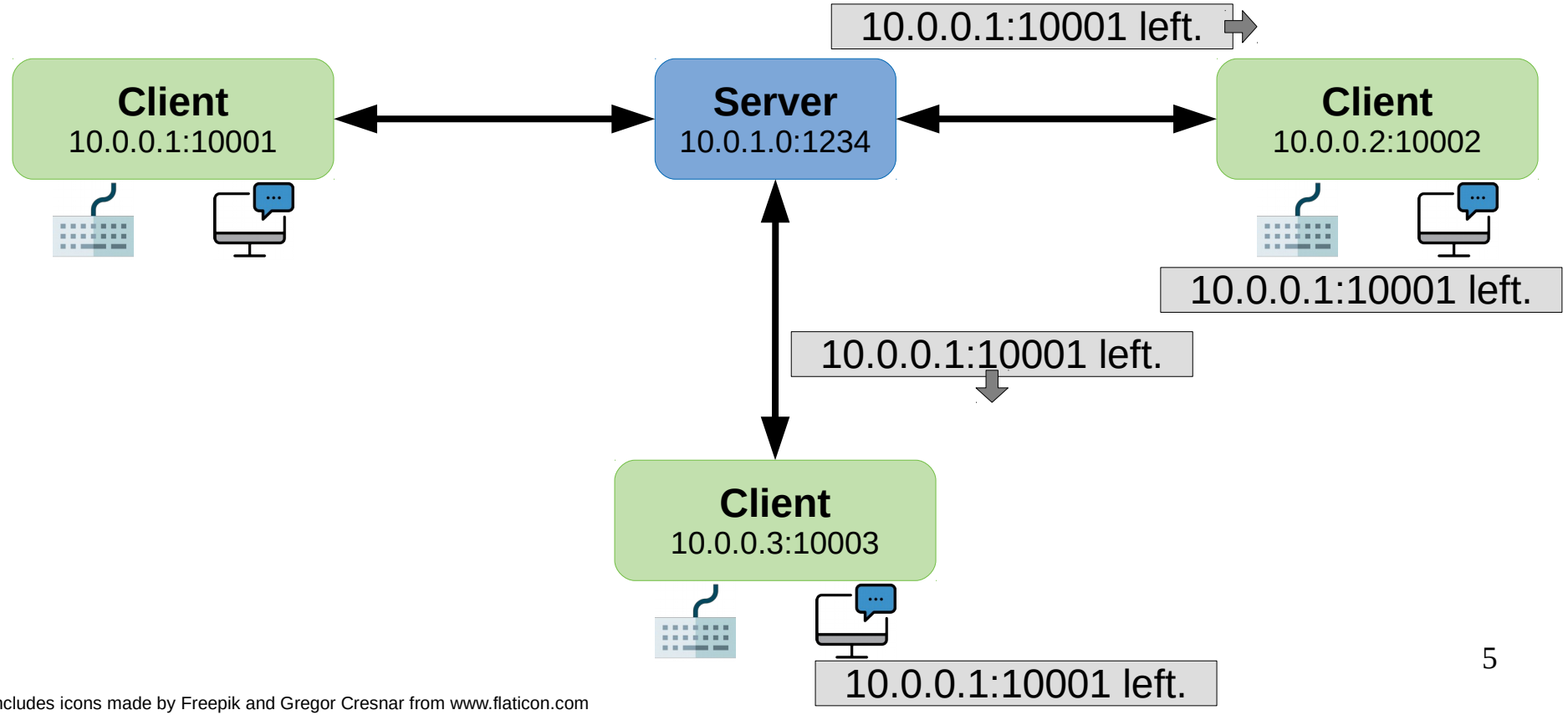

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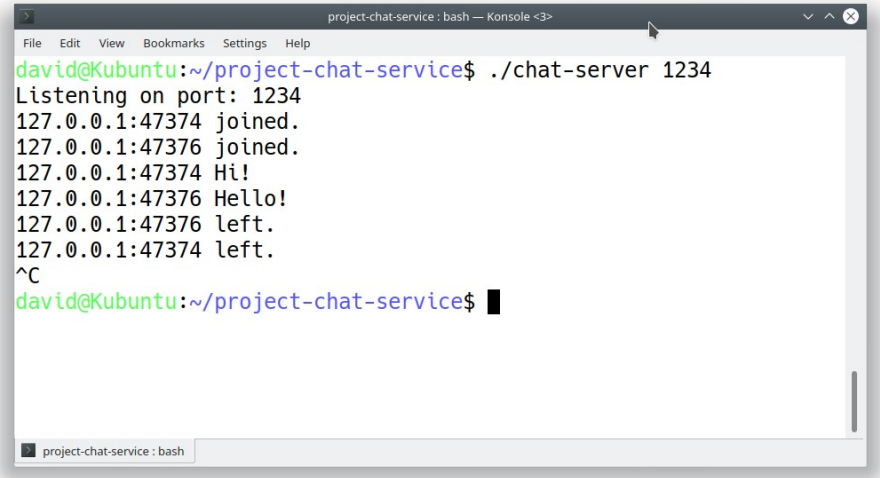
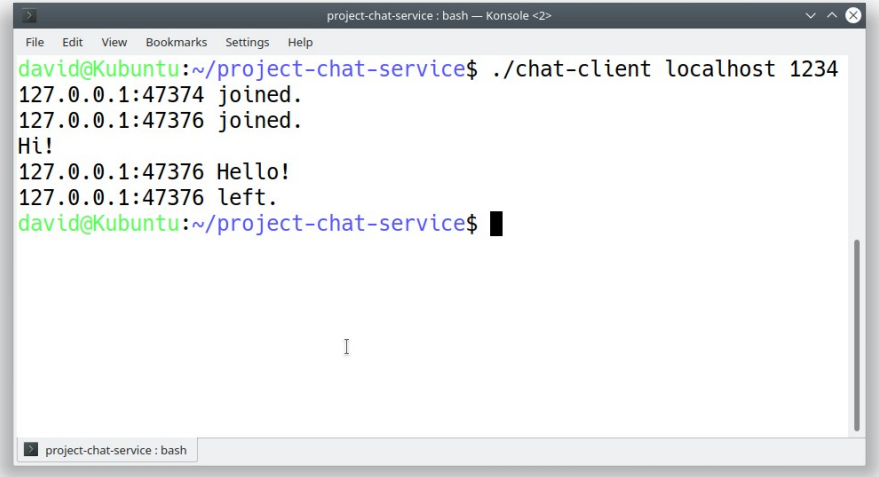
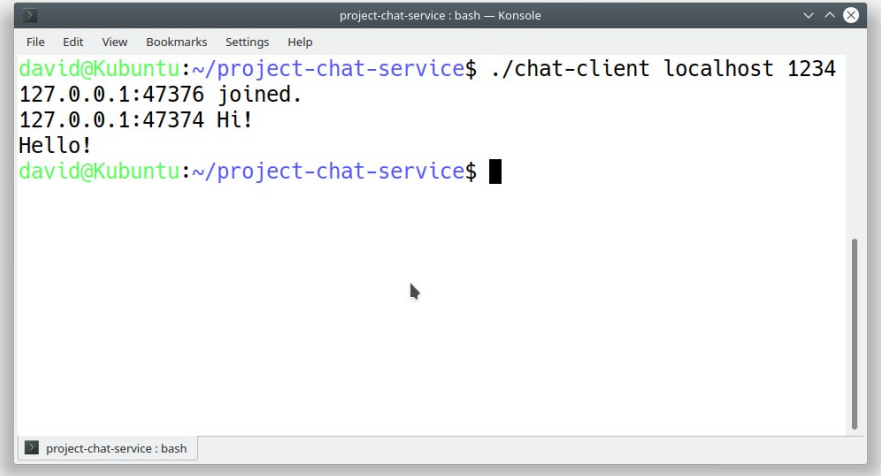
Chat Service in Action

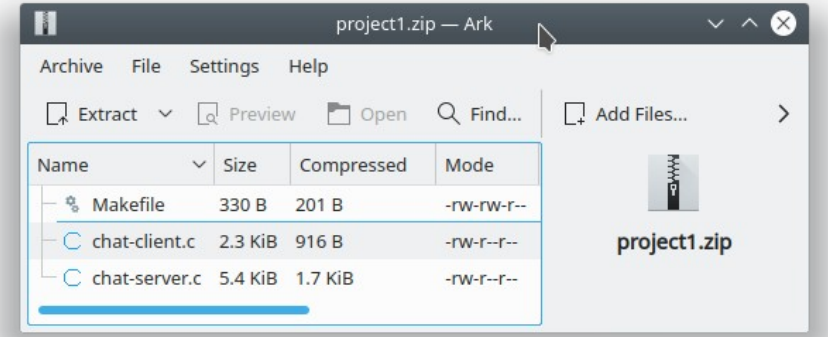






Submission

- Submit project1.zip to Fénix
  - Code
  - Makefile in base folder
  - No build artifacts
- Must build with **`make`**
  - Generate chat-client & chat-server

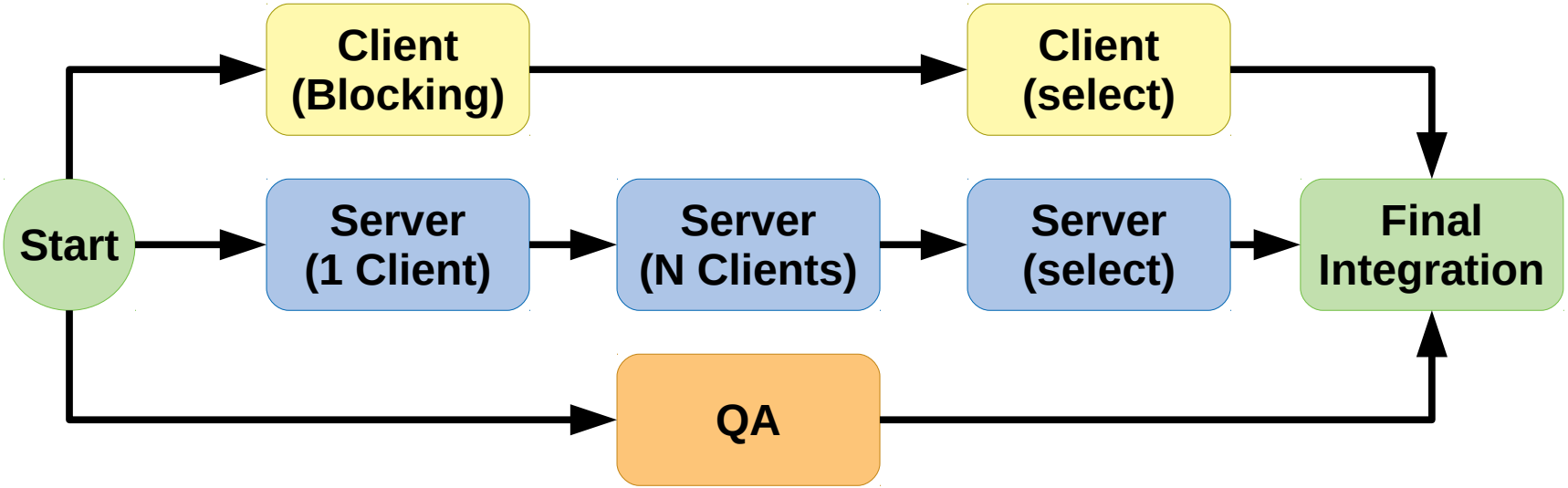


Pre-Submission Checks

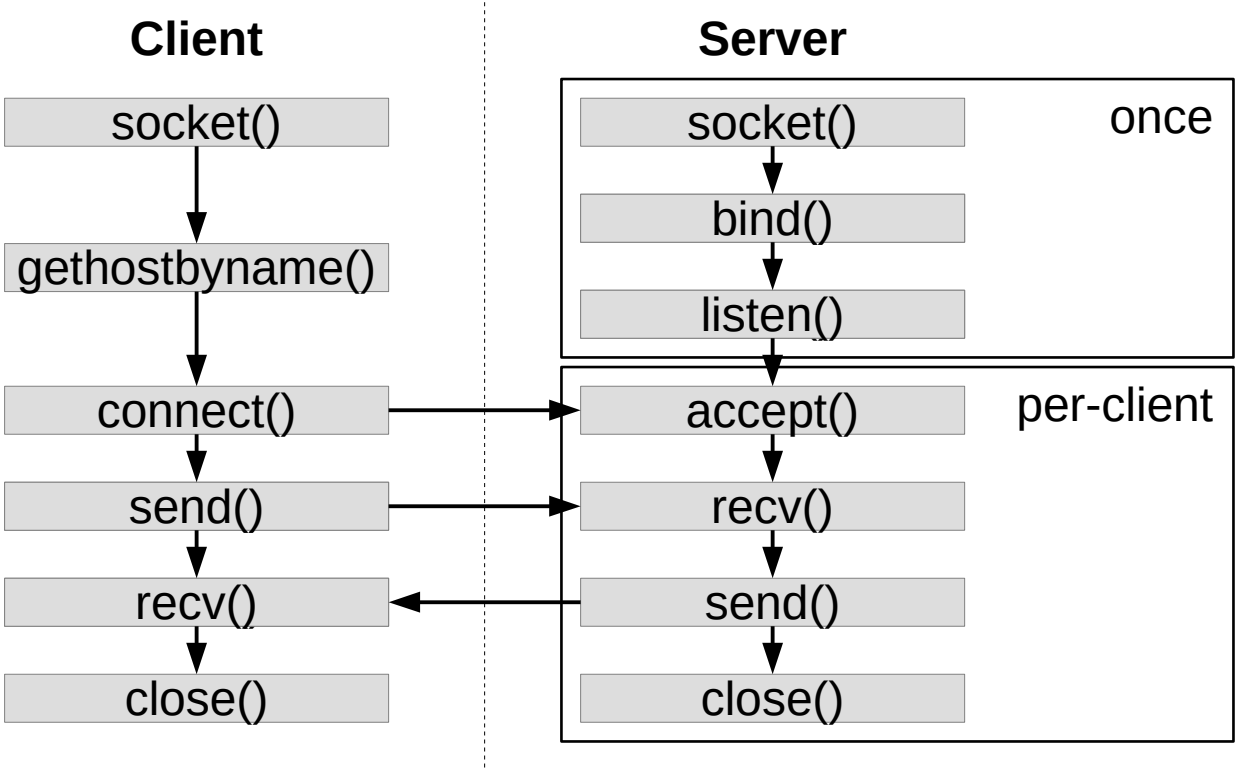
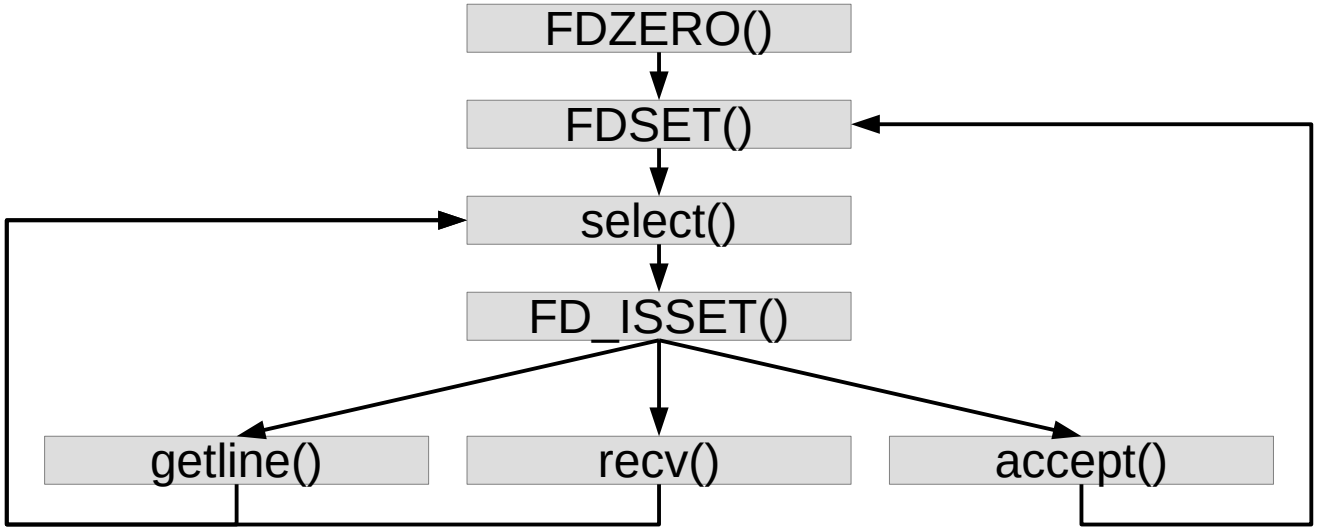
Advice: Debugging

- Standard error will be ignored during grading
  - `fprintf(stderr, …)`
- Telnet client can be used to debug chat-server
  - `telnet <host> <port>`
- Netcat server can be used to debug client
  - `nc –l <port>`
- Testing
  - Look into **test-submission.sh** for ideas.

Advice: Task Breakdown



Sockets 101


Client
Server
socket()
gethostbyname()
connect()
send()
recv()
close()
socket()
bind()
listen()
once
accept()
recv()
send()
close()
per-client

Sockets 101