QPractice ..

-- Online Questions Practice Application

Objectives:

- **Creating an online questions practice application in which multiple users can attempt those questions anywhere at the same time.**
- **In this application only the administrator should have access to create/add questions.**
- **Others clients/users can attempt those questions individually or by pairing with other users.**
- **If a user decides to pair with other users, they should be able to chat and discuss the question with each other.**

TCP/IP Model

A model designed to standardise computer networking

Image source: https://www.youtube.com/watch?v=OTwp3xtd4dg

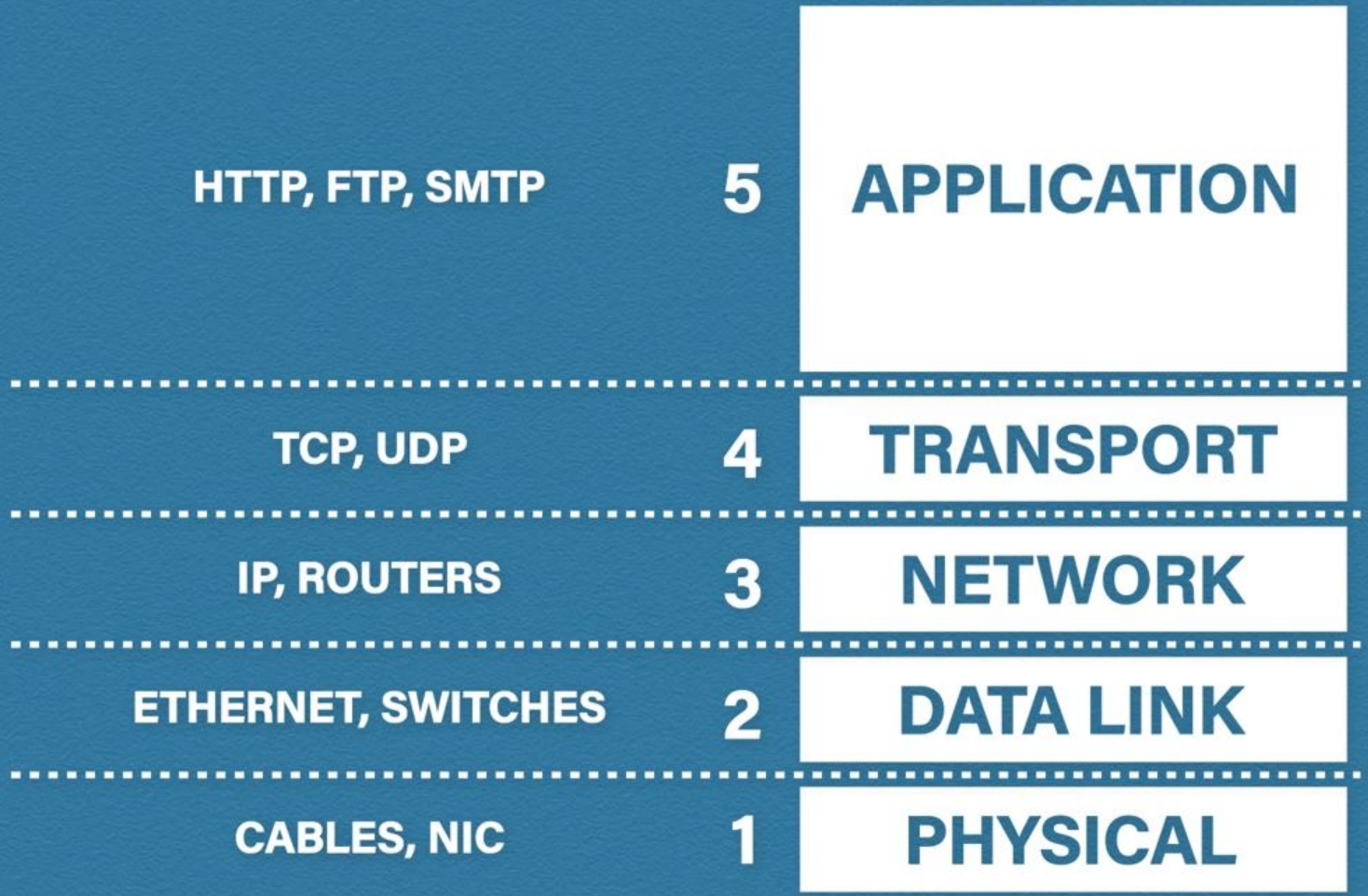
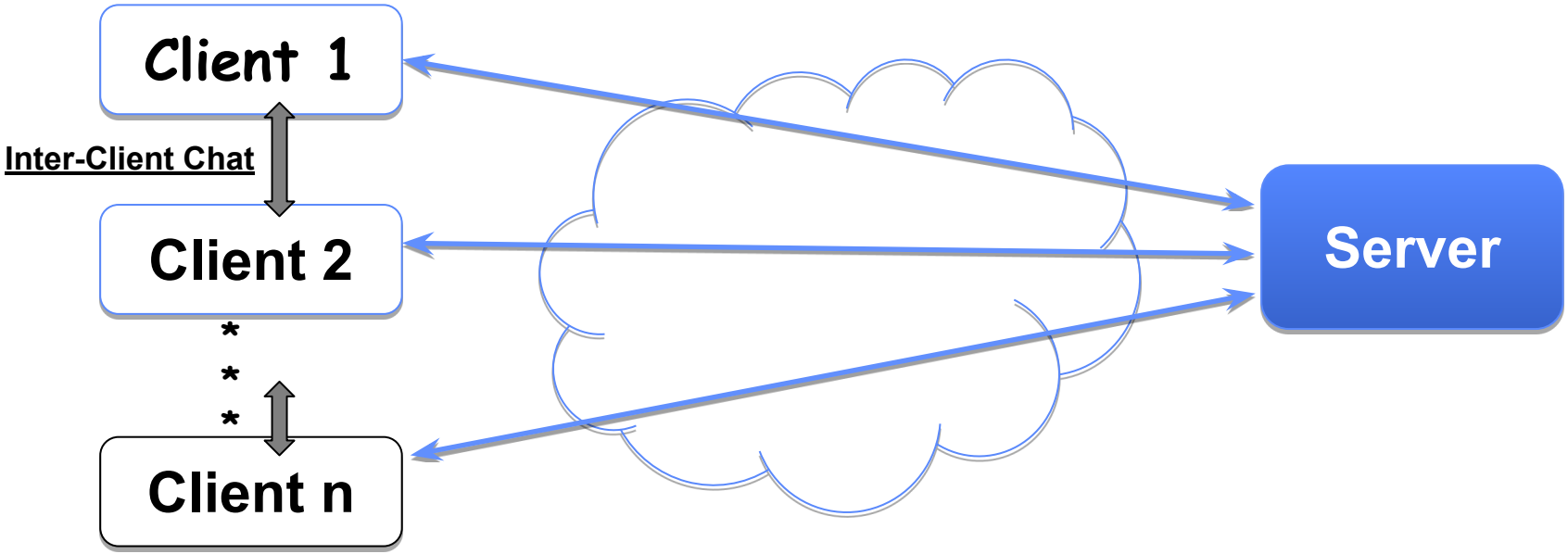


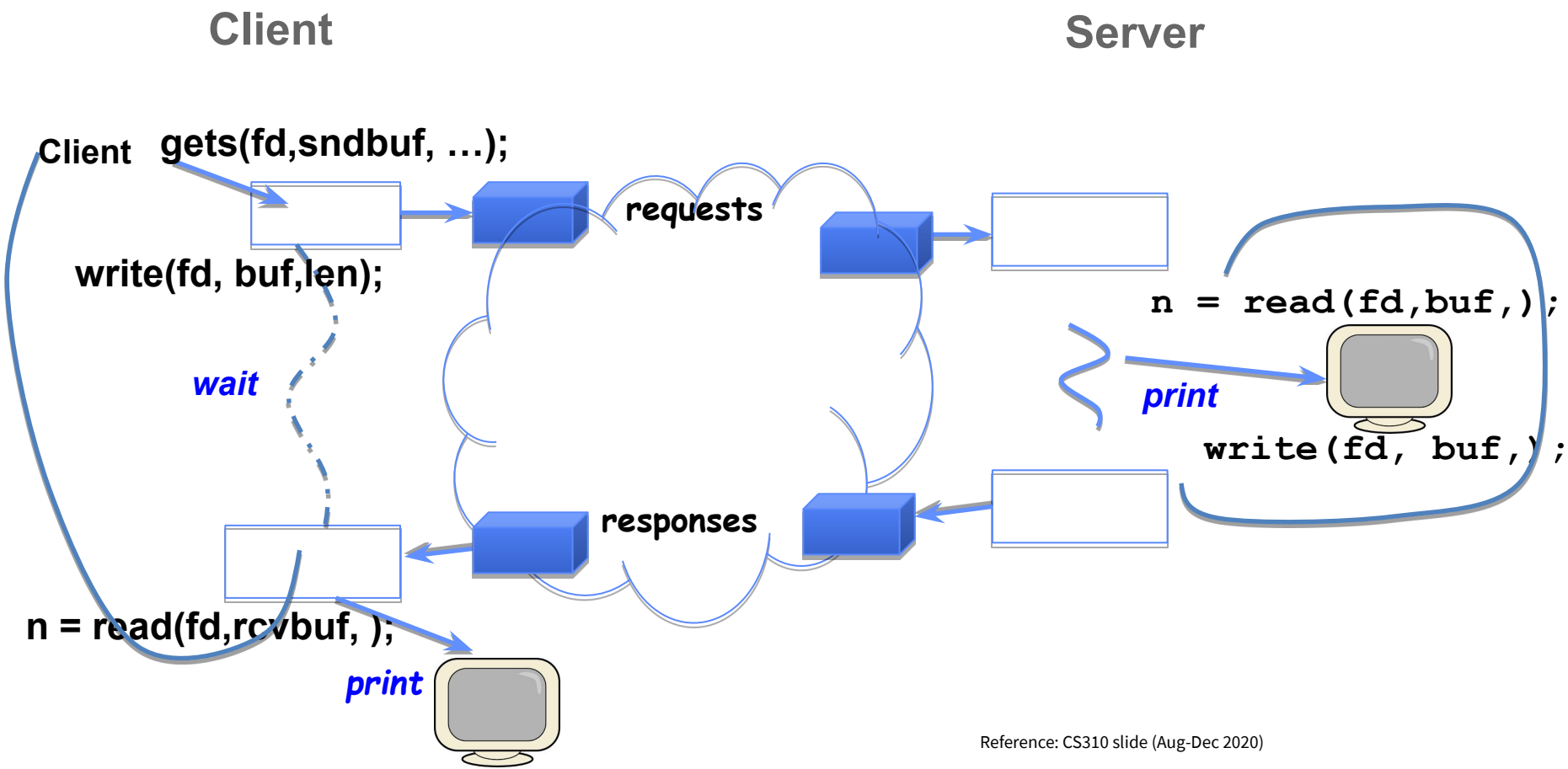
Image source: https://www.youtube.com/watch?v=OTwp3xtd4dg

Client-Server Models



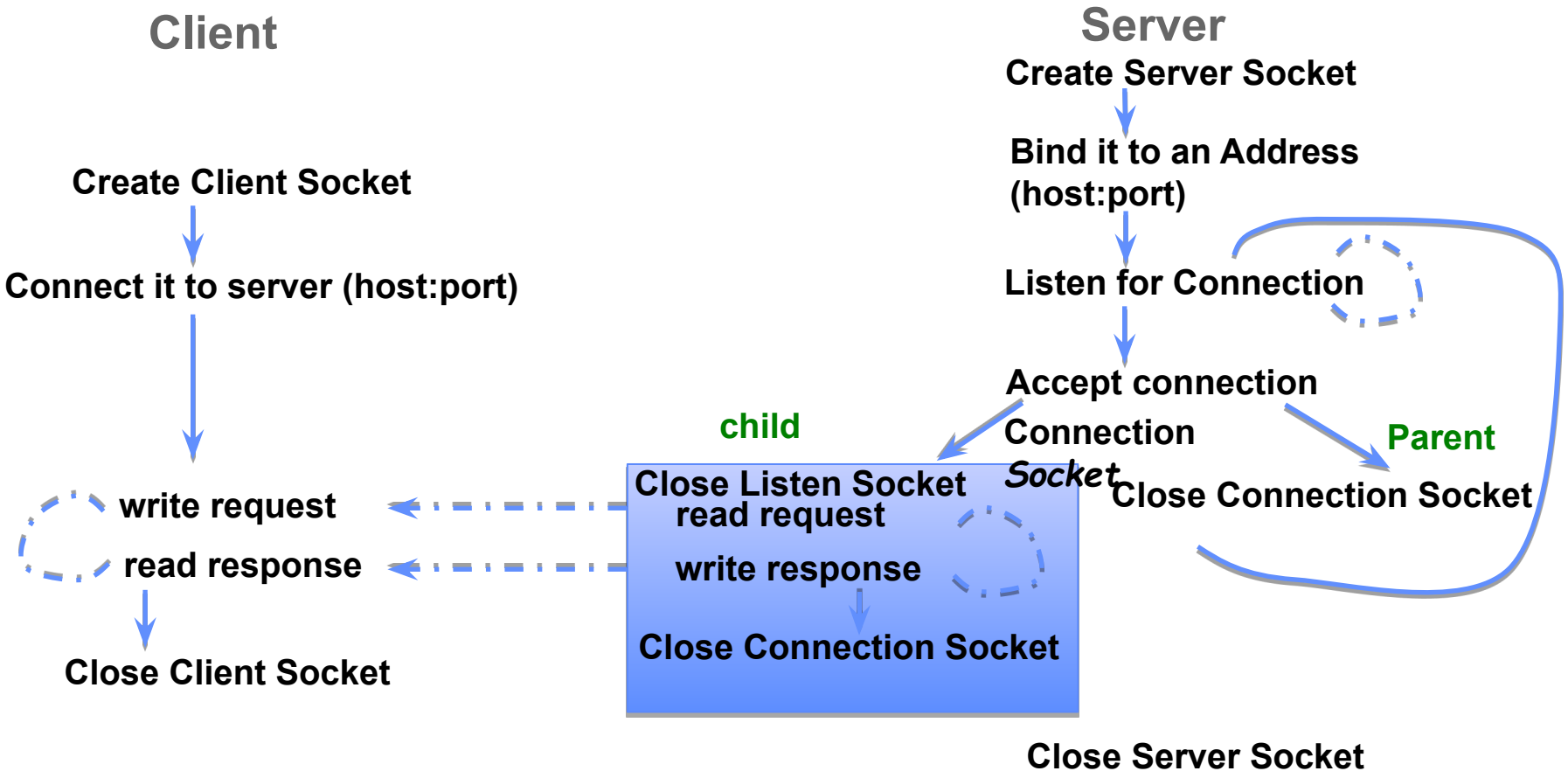
Reference: CS310 slide (Aug-Dec 2020)

Basic Idea .



Reference: CS310 slide (Aug-Dec 2020)

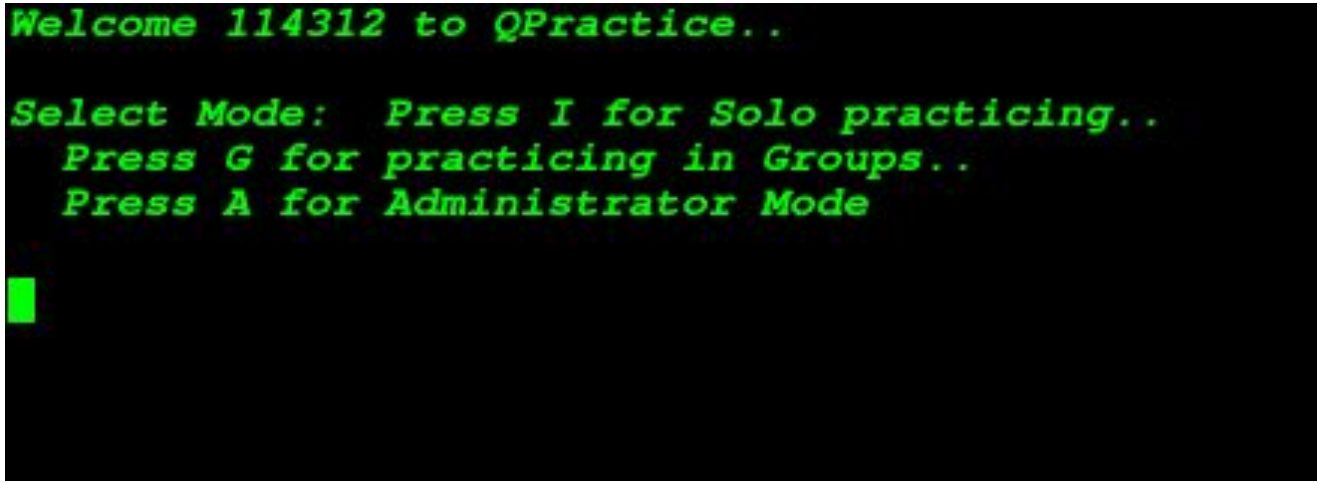
Server With Protection and Parallelism



Reference: CS310 slide (Aug-Dec 2020)

To Summarize ..

3 Modes to use the QPractice ..



Solo Mode ..

- *Choose Question*
- *Answer them*
- *Get the correct answer(if wrong) and explanation.*
- *Multiple users can attempt the question at a same time.*

Admin Mode ..

- *Choose Admin mode*
- *Provide/Add the question in required format.*
- *If question is added, “Successfully inputed Question” message is received.*

```
Select Mode:  Press I for Solo practicing..
  Press G for practicing in Groups..
  Press A for Administrator Mode

A
Enter the question in the Assignment format:
Question_Topic;Question_Type(0 for MCQ, 1 for Fill in the blanks);Question_test;Question_Answer;Question_Explaination

Cricket;1;What is cricket;Sports;Cricket is a sport
Sucessfully Inputed Question
```

Group Mode ..

- Find active users.

```
G

Active users are:
106570 114312 120876 177731
Specify the userId with whom you want to collaborate:

114312

Collaboration Established.
```

- Accept the request in other client machine

```
Request to collaborate from 121000
Press 'Y' to affirm, 'N' to reject.

Y
```

Group Mode ..

- After connection request is accepted, discuss with each other by sending message in format. (Client 1 in first image and Client 2 in second image)

```
Collaboration establising..
Please wait for it to begin.To send a message: @userId:msg
@117471:hi ankit here
```

```
from @117471:
hi ankit here
```

-- >Discuss and solve the questions.

Future Challenges.

- Adding Graphical Interface.
- Marking system to judge the performance.
- Live competitions.
- Buzzer Competitions.
- Leadership board.

Thank You !