### network\_week2\_tutorial2-20240912

说话人1 00:00  
Messages. And once the connection is established, the private says an HTTP request message, and this message can include the URL of the specific object be investing. For example, html file. At the step three, the stv servers received the request, a message and send a response. You need to send a response and servers once received the request message, they need to locate to requesting objects for same oldest female violence. That is calculate it in AHTV response message and same effects to private. They at this step, the service has finished this job. So we need to close, especially the connections ok so the sttp clients on the left side, the response received in response, and they need to freeze in context and the client this to distract the object htvl file, for example, and process it.

In this example, the html file, you compare reference to other objects such as images.

For example, we have ten jdg objects. We need to repeat the above steps over 10 times until ten objects has been completed in the process professors.

So if this is the whole process of procedures of how long persistent HTTP to request the multiple objects. So these slides focus on the time case to Complete enough assistant HTTP crash response cycle. And for a single objects. First of all, we need to define the rttd round trip time. It gave the definitions that the time case for a small package to travel from the prior to the service and back. This is call for one rpt one round trip time. The basics htv response times can consist of one rpt two, initialize in TCP connections, and one rdp for HTTP request. And but at the first five, a few bytes of the htpu sports and to put and then the objects file and a transmission time, it means that the remaining time is spent transmitting the entire objects from the service to requirements.

The total response time for a single object is in London. Consistent HTTP is all partially 2 types. Rtt passed the file transmission time.

Any questions? We start to work on some questions. There are four questions and just start to and so on. Questions and the story. There are two questions you are in the first questions and some questions. And I did 5 minutes to finish this, right? The first questions? So we need to know that transmission time is that negligible? Ok so we don't need to come back up to our combination, I thought, for the first some questions in as for the none of the status CP you just need to calculate how many objects we need to chance these in this thing. And that we just need to break down. They need to trustee one base html file and all eight objects. So takes two rp ps to transmit each objects, the each some, the base html and a objects, nine, the total objects number. So we need to multiply to rdbs equal to 85 years.

Any questions? So as for the numbers is the hdd as plus for the persistence to be. So we need to use one, establish one TCP connections, one time. And then sequence sequential of just transmission can be rules by the same. It takes two bodies to see the base html file. And it's the same as for the now persistent htp does, and that the all requests for the following eight objects and need to send back to that. So they need to use formal parties to trust me, or is able just that's for the whole procedures. It takes 300 years to building this transition.

Okay? As you thought. So here is the second question. I several minutes for you to finish this purchase. So you might knew that the expecting value of the geometric distributions is one WiFi the company. So we need to if I get to use this much, okay.

Okay, I'm sorry for the some questions. Eight, given the package laws, probability p simply get the probability for the ice links doesn't feel is one minus p okay? So the successful. So we have the and links. And the lost probability for this link is, and it means the p is is safe for all the leading ok so the total, how are you man?

Okay? Who is for the some questions, a and for some questions b and before all of these group. So we just need to put the total successful rates here. And then we get the expectations for the how to transmit a package until the prior successful to receive the package. It means it needs to pass all these things. Have you the prior to receive this package? Is the answers for the suppression to be? Any questions as Google? It is several minutes for you to finish this. Questions? He comes up. So if we have a package p and it is solution, and then we need to break out two scenario. The first package is being interested in all of it. So we think seems that one package is only 1/2. And then the other four package is in the queuing delay, right? So we need to some facts up. And then for this thing, we do the less it transmission rates, right? For this all package, in calculating these smear, all formulas. And then we need something about. This is a total, don't know, giving play.

Any questions? So the last prejudice is a bit harder than the other ones. I believe, 10 minutes for you to put it out. Here is the things that the answers of the subvergence, a and b can lead to the answers of sub function c you can utilize this logistic to get to be out. This country's comes up. We need to notice, max, suppose that at time zero, the first, 1/2 and an package arrives intensity and return. And after the l divided by r seconds, the remaining another half of, and they each arrived. So for the sub questions, eight, if I less than n divided by two, it leads to calculate for each items. For example, if sorry, in the first package, the true delays for the first package should be zero, right? Because he has been transmit, have been finished these transitions for the second and for a physical package. It should be. Yes. That's why are so should be I five minus. This is for the answers, for the first questions.

The second question is, if we need to calculate, I am larger than and divided by two. So the same, but needs to notice that we need to start from. Right? Because ny by two, it just also be belongs to the first value. We need to begin separate to be from here and divide by two cross border. So the given delay should be, thank you. So we gave her to the, so I just mentioned before you need to English, the answers for the first two questions to figure out the final questions. So the average during delays needs to as take these two parts into account, right? When we just calculate the whole process and came through the final answer, you can take a pictures and to calculate the whole process after this class. If you have any questions you need and you ask me it, otherwise you can leave now. Not so good. Thank you. So you. I rain.