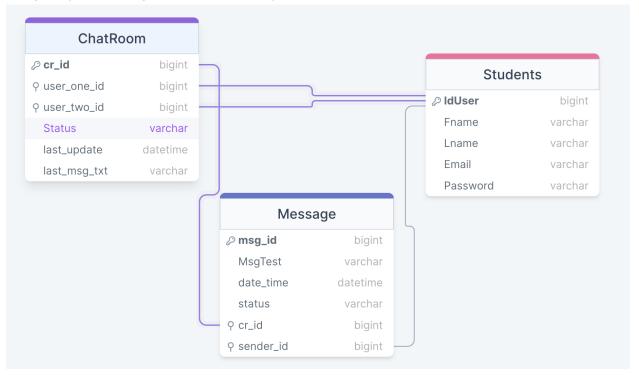
Last\_msg\_txt; is that supposed to be the last message of the chat? If so we could just make it a foreign key to the msg\_id and then display the previous 10 ids from there.



1) The "Chats" tab/button is clicked, we query all the chatrooms where the current user is the first or second user/participant in the chatroom.

(I could be a little confused here but are you saying when the chat tab is clicked, all different chats are displayed (like dm's). If thats the case we would only need to query chatroom for current\_user\_id.)

Ex:

SELECT \* from ChatRoom where user\_one\_id==current\_user.id or user\_two\_id==current\_user.id
ORDER BY last\_update ASC | DESC

-we will get a list that later on we can make display conversations slowly(10 at a time or something like that).

After querying it, we just display them to the user.

2) When the user clicks on a specific conversation/chat, we will query all the messages that belong to this chatroom.

#### De acuerdo

Ex:

SELECT \* from Messages where cr\_id==current\_chatroom ORDER BY date time ASC | DESC

-same, displaying it 10 by 10 or something.

With the column sender\_id, we can decide how to show it on the chat (leftside,rightside,names, and shii)

3) When they type a message and press "send," we will collect the message, then insert it into the Messages Table, as well as make some updates to the chatroom. When the update is made to the chatroom, SignalR will pick up that update, and we will repeat step 2.

## SignalR

SignalR will be checking ChatRoom Table and when it detects a message it will call a function that will update all the messages in a specific chat

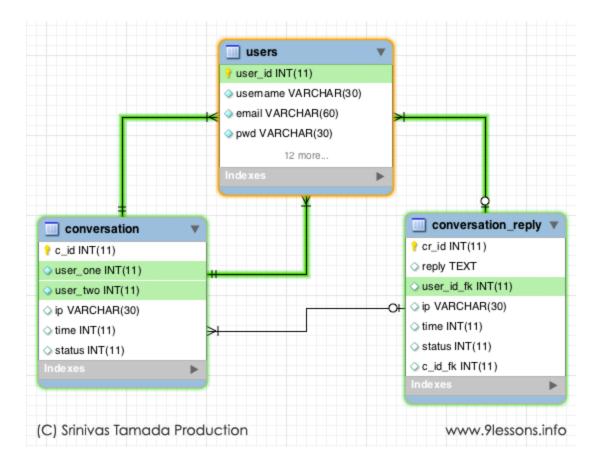
## Dataflow:

- 1- Collect the message
- 2- Insert it into the Messages table with the extra information
- 3- insert it into ChatRoom last\_msg, and update some other columns
- 4- SignalR picks up this update and queries the messages for the latest messages (in this case all the old messages + the message that was just sent).

## Optional shii:

- On the chatroom table, we could keep track of who has seen the chat already by adding two columns: 1) user1\_seen 2) user2\_seen. And updates them at some point.

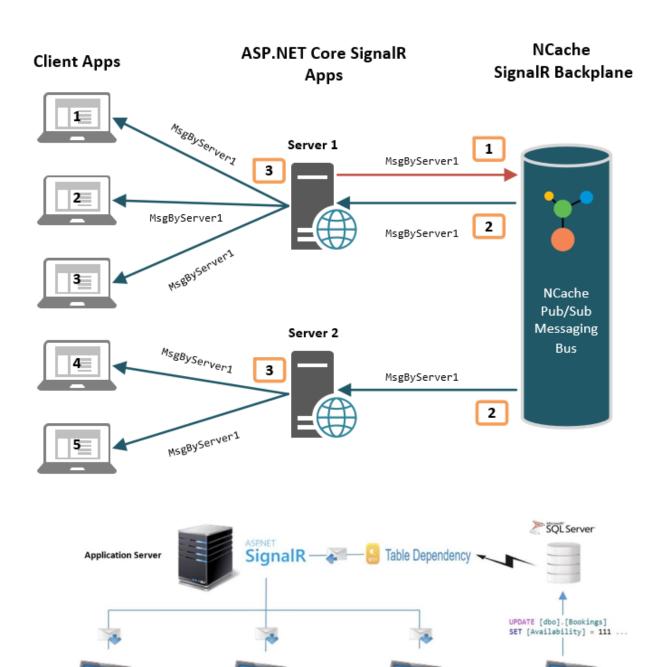
References:		



# SignalR Notify updates:

-There are a lot of videos on youtube aswell.

https://www.c-sharpcorner.com/blogs/how-to-use-signalr-in-mvc-communicate-with-sql-server-d atabase



**Clients Applications**