Message exchange flow Client Server Events: -SQL query for username/password || register new user -Send<REST API>: CredentialModel/ UserModel data--Login / Register If ok: -Update auth state -Update online users list (socket id:username) -Return<REST API>: Token--Return token -SQL query for all users -Return users -Send<REST API>: getAllUsers()--Route to home - We should somehow return data about unread -Update users store -Return<REST API>: userModel[] arrmessages to logged user – and include it in returned data table..(Not done yet) -User click on chat partner, -Click on users list<REST API>: getUsersMessages(id1,id2)--SQL query to messages of 2 users with -Update chat store usernames(join) order by date ·Return msg arr<REST API>: ExtendedMessage[]-(ExtendedMessages, -Return extended messages activePartner) -Logout (send userId to WS) -Send<WS>: UserId--Remove user from online list -Clean auth and chat stores -Return -Route to login page -Return<REST API>: Token-Chat using socket io -If recipient online: -Click on msg send btn <WS>: ExtendedMessage--User send Extendedmessage *SQL query update messages(unread = false) -Update chat store with -Return posted message<WS>: ExtendedMessage with id-*Emit the message to recipient(wait for ack? => received extendedMessage this will unsure that message delivered, but complicate code); -If recipient offline: * SQL query update messages(unread = true) -Return posted extendedMessage with ID Date: Project name: 07-03-2023 Messanger Design: Drawing name/no Draw: Ver. Messages flow 1.0 Approved:

Database tables and relations messenger gender messenger users messenger messages userId : int(11) genderld: int(11) messageld : int(11) firstName: varchar(20) gender : varchar(10) messageDate : timestamp lastName : varchar(30) messageBody : varchar(5000) # gender : int(11) # senderUserId : int(11) username : varchar(20) # recipientUserId : int(11) password : varchar(20) # unread : tinyint(1)

User Model:

userld: number; firstName: string; lastName: string; gender: number; username: string; password: string;

Credentials Model:

username: string; password: string;

Message Model:

messageld: number; messageDate: string; messageBody: string; senderUserld: number; recipientUserld: number; unread: boolean

Extended Message Model:

messageld: number; messageDate: string; messageBody: string; senderUserld: number; recipientUserld: number; unread: boolean +senderUsername: string;

* usernames data comes from join sql

+recipientUserName:string

query.

	Project name: Messanger		Date:	07-03-2023	
			Design:		
	Drawing name/no	Ver.	Draw:		
	DB & Models	1.0	Approved:		