**Technical choices**

**ERD**

A screenshot of a computer

Description automatically generated

On my database scheme I made several adjustments that have impact on the application. I made one general user that can both be a student or a teacher, this is because a teacher has can do different things on the “canvas” part of the application. This is the part that is down from the user, everything that is related to Education itself. I made this choice because the other part of the application requires no difference in users, every role can send messages or be in group chats, teachers, and students. Because a part of the application is the same for all roles it was more efficient to create a general user role that can do everything both students and teachers can.

I’ve chosen to split group messages and private messages because of the way I want my system to work. I want to show who the sender and receiver are in a private message. This is not necessary in a group message where only the sender will be shown. Here is however a group ID passed, so when a possible notification system will be implemented in the future, it can show the group name above the message.

**C3 Model**

A diagram of a company

Description automatically generated

I have chosen to split my application into 3 controller components, these will rely on 6 services that provide logic to them. This is because many of some services can be combined into one controller, for example the group controller has a message service but also has a user service, these can be combined into one controller. Assignments are related to or can be made inside of courses that is why only one controller is needed. The usage of the extra API is crucial for starting video calls or chats.  
  
I have chosen for a MySQL database because its expandable and requires a predefined schema. This is good for an online education platform because everything is predefined and can be stored in only one way. Because I am creating a web-based education platform, it is good practice for teams because they could easily install LAMP which MySQL is a part of to start developing right away.