

System Planning

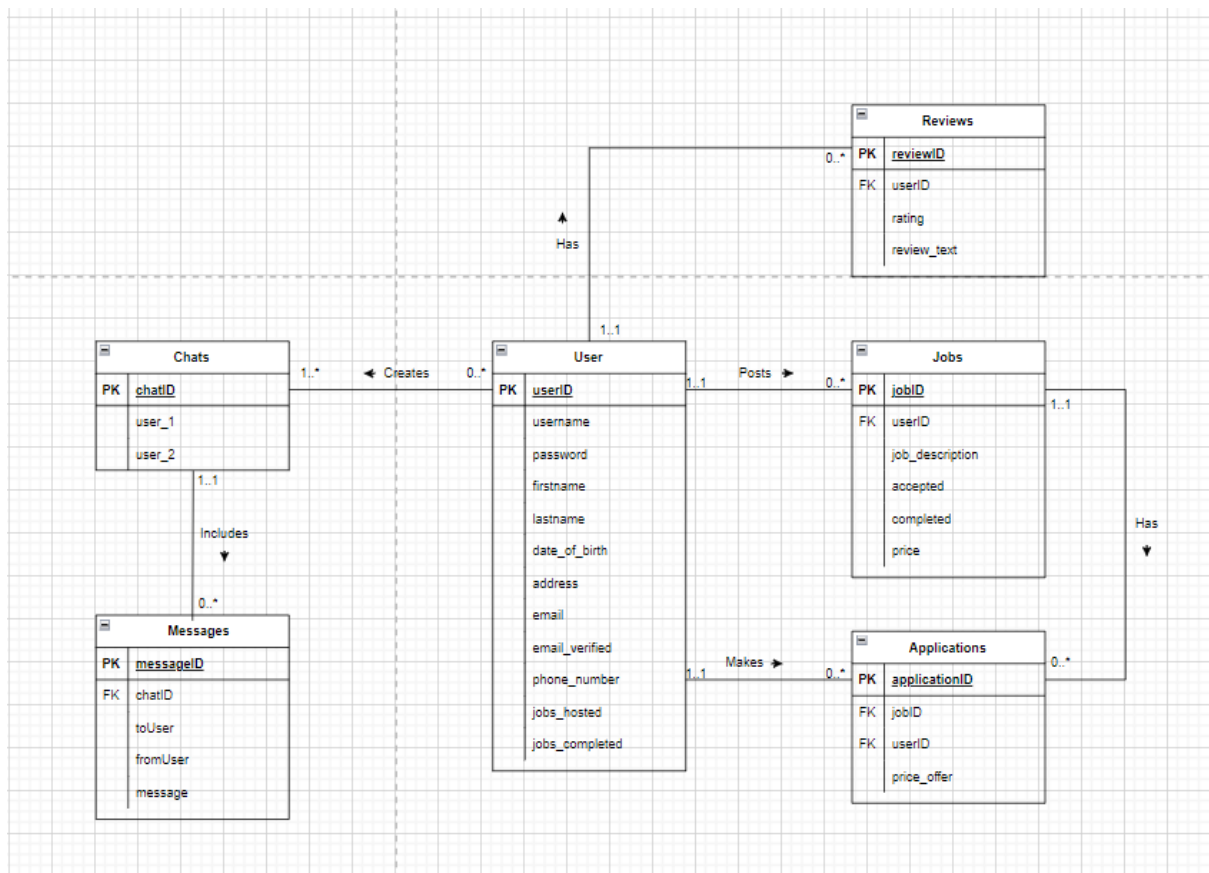
Framework

We plan on using React Native as our Framework for the project. We chose this as it's very good at implementing for both Android and IOS, being one of our main goals for the project. React Native also offers a lot of reusable components and libraries, making development faster. In addition, everyone in the group is very keen to learn something new, and none of us have work with react native before. It is also very well documented, making it a lot easier to learn.

We are also going to use Expo Go to build and deploy our React Native applications, as they work very well together. In addition, we will be using Node.js to install all our required packages.

Database

We are going to use a MySQL database to store all our data. A lot of us are quite well educated on MySQL databases and writing SQL queries. Here is a photo of an initial ER diagram for the database:



However, we don't like having the chat system storage on MySQL, as it might be hard to

implement so the chats will load in real time. We are thinking about using Firebase instead and make the two databases work together, as Firebase has a Realtime database feature and is free.

Backend

We are thinking about using PHP as our backend, using JSON fetch calls in our React Native JavaScript code to fetch data. Lukas has a lot of PHP experience prior to this project and the rest have a little prior experience, so it shouldn't be that difficult to use.