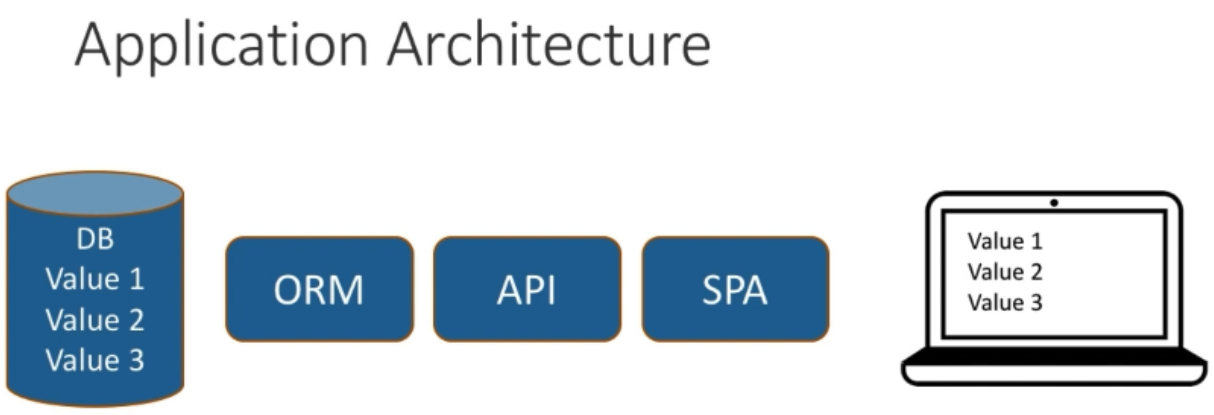
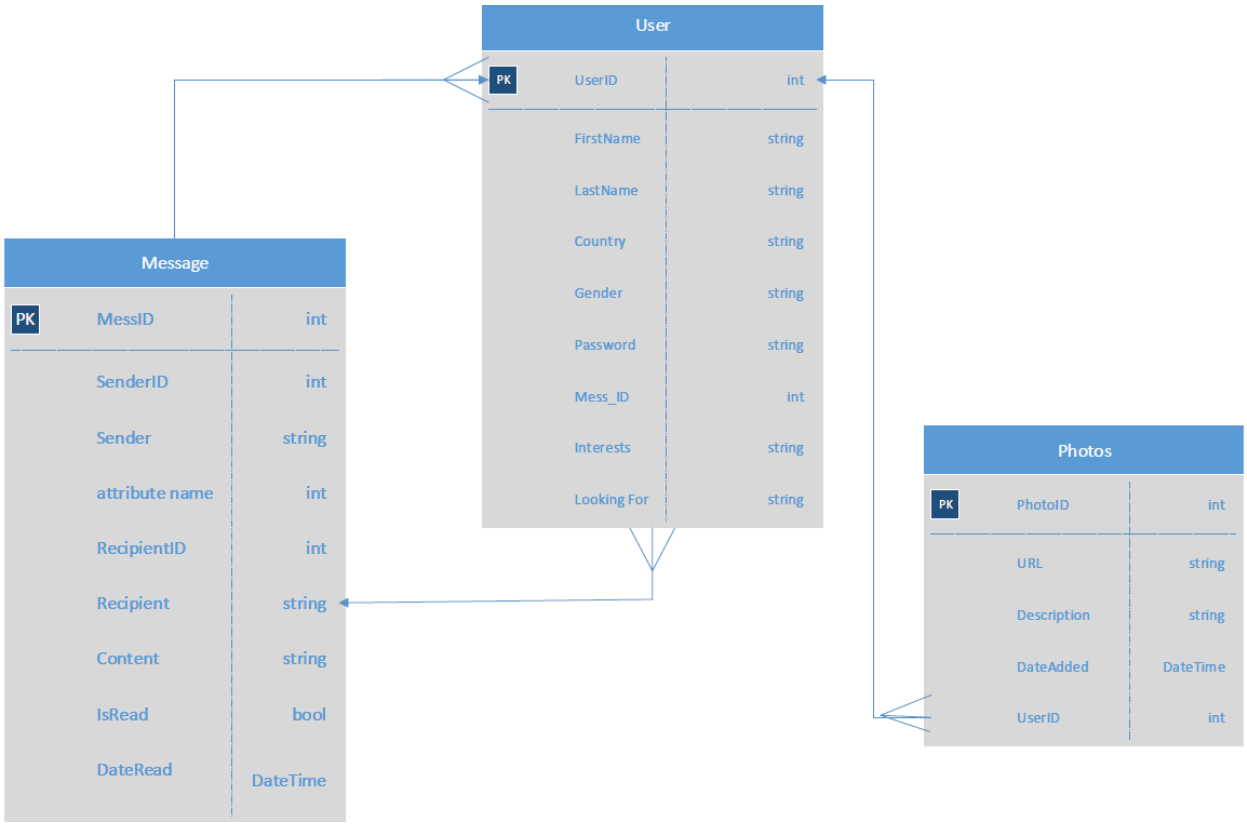
1/ My application will be utilizing SQLite database from Microsoft EntityFrameworkCore 2.2 to store and process data interaction between end users and the server. The data structure for this project is very simple and straightforward, SQLite works great as the database engine for most low to medium traffic websites. Therefore, SQLite is a good choice because it is easy to manage and configurating, and support concurrency users' interactions

2/ Below is the demonstration of the revised database diagram. I kept the same data structure but eliminated unnecessary table to simplify the architecture and also add some more columns to the table details.





3/ New Users will initially be directed to the signup to enter personal information. User table is used to store user's personal information such as FirstName, Last Name, Gender, Interest… One user can upload multiples photos and store in photo tables which contains all photo details. Password will be store into user table and encrypting by using Hash and Salt method to improve security perspective.

Photos table will store all photos URL that users uploaded, this contain extra information such as date added, descriptions. One user can upload multiple photos to their accounts, this is a one to many relationships.

Messages system will store chatting contents involved with different users, one user can interact with different chat messages, and one chat section can contain multiple users.