front end: React
Back End: NodeJs
DataBase: SQL or MongoDB

SQL

NodeJs
ExpressJS

React / React-Native

user A

Front
End

Load
Balancer

NGINX

user B

Server/API

Server/API

Server/API

Message Service

QUEUE
Messages
Async

store message in DB
for offline users

NO

Database

user online

YES

store media and send
link to user

Notification Service
in this case we are using Twilio

Data Model

user
id int
first_name string
last_name string
create_date timestamp
is_active char(1)
phone_number string

Message
id int
user int
from int
to int
conversation int
text string
media_url string
date timestamp

Conversation
conversation int
user int