# A. MongoDB

1. install mongoDB Community Server from https://www.mongodb.com/download-center#community (.msi file Default installation)

https://docs.mongodb.com/manual/tutorial/install-mongodb-on-windows/

2. install adminMongo tool from https://www.npmjs.com/package/admin-mongo:

Navigate to folder & install adminMongo:

git clone https://github.com/mrvautin/adminMongo.git && cd adminMongo

Install dependencies: npm install

3. Start application: npm start or node app

Visit http://127.0.0.1:1234 in your browser

Add a connection (Connection string: mongodb://127.0.0.1)

Connect to the connection and create your database and collection:

Database: chat / Collection: messages

{

"messages": [

{

"sender": "George",

"content": "Hi..."

},

{

"sender": "Evgenia",

"content": ":)"

},

{

"sender": "George",

"content": "How are you now?"

}

]

}

# B. Node & Express

1. In an new folder run:

npm init ( "main": "server.js")

npm install express --save

npm install mongodb --save

2. Create server.js file and add some code to create a server that sends data from your database:

var express = require('express');

var app = express();

app.use(function(req, res, next) {

res.header("Access-Control-Allow-Origin", "\*");

next();

});

app.get('/', function(req, res) {

var db = {};

var MongoClient = require('mongodb').MongoClient;

MongoClient.connect('mongodb://127.0.0.1', function(err, client) {

db.collection = client.db('chat').collection('messages');

db.collection.findOne({}, function (err, doc) {

if (err) {

console.LogError(err);

} else {

//console.log(doc);

res.status(200).json(doc);

}

});

});

});

app.listen(3500);

3. Run the file with:

npm start

or

node server.js

# C. React Client

1. In a new folder create a react App.js that fetches data your server:

import React, { Component } from 'react';

import './App.css';

class App extends Component {

componentDidMount() {

document.getElementById('get-chat-button')

.addEventListener('click', this.getChat);

}

getChat = () => {

fetch("http://127.0.0.1:3500/")

.then(result => result.json())

.then(result => {

let chatDiv = document.getElementById('chat-div');

chatDiv.innerHTML = '';

let chat = '';

result.messages.forEach(message => {

chat+= message.sender + ': ' + message.content + '<br>';

});

chatDiv.innerHTML = chat;

})

.catch(error => {

console.log(error);

});

}

render() {

return (

<div>

<input

id="get-chat-button"

type="button"

value="Get Chat"/>

<div id="chat-div"/>

</div>

);

}

}

export default App;

2. Run the app with:

npm start

and visit it in http://127.0.0.1:3000/