Advanced Telecoms
Assignment 2
Social Media Application D-Book
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Introduction

The goal of this assignment was to create a social media application. It had to be capable of allowing users to sign in and go into a chatroom where they could talk to people. The chat had to also be encrypted.

Implementation

I decided to build this project in React. I split it into a frontend and backend. The backend was implemented using a node js server. The backend handled the sockets and server/client connection.
The react frontend made it easy to make the app easy to use and made it appealing. The login was handled using Gmail.
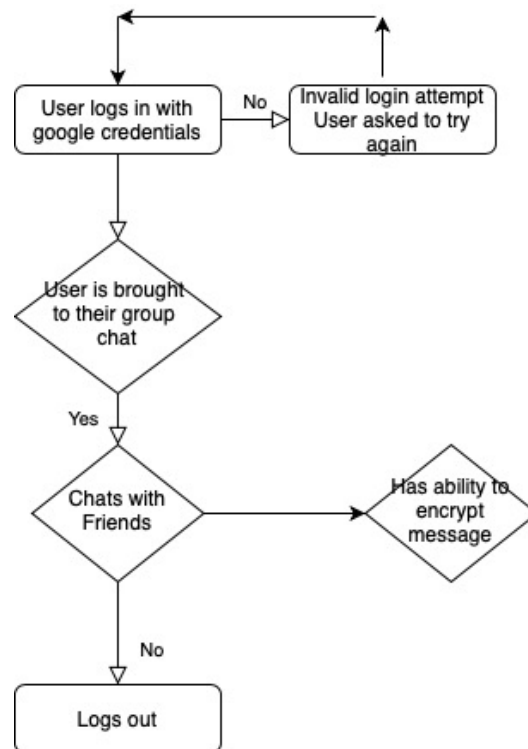I used some public libraries along the way to help, they were
- Bootstrap
- CryptoJs

Encryption

I decided to use AES to encrypt my chat as I felt it was one that could be easy enough to implement. It is a symmetric block cipher that can be used to encrypt and decrypt electronic data. It is one of the most widely used encryption algorithms. It is encrypted and decrypted using a public key.

UML Flow Chart

Code
The full working code can be seen in full on my Github. The link to which is here
https://github.com/DillonRyan/AdvancedTelecoms

A working demo of the code can be seen by clicking the link below
(If there is a problem viewing the video please let me know
ryanp30@tcd.ie)

patrickdillonryan-finalpresentation.mov