**1- Project Definition :**

Group chat application

**2- General Functions**

**2.1** Sign UP

**2.2**  Sign IN

**2.3** List of groups

**2.4**  Create new group and notify all the user about new group

**2.5**  Join to group : Load chat history on join

**2-6** Left the group

**2.7** Chat with other group members

**2.8** Load history of chat on connecting

**3- Technologies Used**

**3.1** Backend: In the backend I am using asp.net core api(to handle http request) and using

signalR(to handle the websocket) and also using EF Core, Sql Server(DataAccess)

**3.2** Client : Using reactjs

**4- Architecture**

using clean Architecture

**CLEAN ARCHITECTURE**



**API**



**5- SCALING :**

For scaling Iam using Azure signalR Service by this way in case number of connection

growing up can add more unit to azure SignalR Service



**6- Improving Performance**

**1.6**  In the future need to do partitioning in the message table

**2.6** Add limiton on loading number of message and using paging in the chat

**3.6**  If want to send huge message better to use message pack hub protocol to send

Message by binary format

**7- Not implemented features**

Because of the time I couldn't add unit test and integration but the architecture support

them also I didn't add logger