Note: Please treat this information as confidential and please share your responses to the given information. Any kind of data loss or misuse of the company's services will not be entertained.

PRACTICAL

1. REST API/GraphQL

Group Chat Server with Authentication

Required-:

- Programming language: Java
- Framework: Springboot
- Database: MongoDB/ MySQL

Build a real-time chat application using Java with authentication

- User/authentication module
  - Should have an API to register the user and login into the application.
- Chat module
  - Only authenticated users are allowed to access this endpoint.
  - Should be real-time (Websockets)
  - Should have an API to create/list the messages of the authenticated users.
- NB: No need to create the frontend

Reference -:

https://www.youtube.com/watch?v=1iQGoenm0ug&t=6s

2. GraphQL

Simple Group Chat Server

Required-:

- Programming language: Java
- Framework: Springboot
- Database: MongoDB
- GraphQL approach should be schema first.

Build a real-time chat application using springboot

- Chat module
  - Should be real-time (Websockets)
  - Should have an API to create/list the messages
  - NB: No need to create the frontend

Reference -:

https://www.youtube.com/watch?v=1iQGoenm0ug&t=6s

Sample Data

1. **User table/ collections**
    a. **For the GraphQL task, this table is not needed.**

```
[
  {
    "name": "User1",
    "username": "username1",
    "password": "password"
  },
  {
    "name": "User2",
    "username": "username2",
    "password": "password"
  }
]
```

2. **Chat table/ collections**

```
[
  {
    "username": "username1",
    "message": "test message"
  },
  {
    "username": "username2",
    "message": "test message 2"
  }
]
```