**Assignment**

A group of a maximum of 4 students will be created and they will be doing the following as a part of lab and assignment

1. Create a Microservices based application with 3 to 4 microservices. Each service should be maintained as a separate code repository so that it can be developed, deployed, and tested independently.

2. Use a suitable database and database related pattern for these services.

3. Use a suitable approach for the communication between these services.

4. Add a security layer to authenticate the services using Oauth/Tokens **(optional)**

5. Deploy the application using Docker/Kubernetes **(optional)**

Submission details:

a) Submit elaborate documentation with group details, contribution by each group member, brief application description, the architecture of your application, steps, and screenshot for each of the above-mentioned tasks. Also, provide a link to the GitHub repositories in the document.

b) Create the first demo video to explain your microservices, the database, and communication between the services (for points 1,2, and 3)

c) Create the second video to show a demo about security and deployment (for points 4 and 5)

**All of this has to be submitted in a single zip file with the file name as <Group member Bits IDS>\_<application name>. Each member of the team has to upload the document**

**In case, you copy your assignment from the internet or other people in the other groups then no marks will be awarded.**

**Marks will be awarded based on the individual contribution.**