

## Emerging Technology Lab

### Assignment 7

#### Development and Testing of REST API with NodeJS, ExpressJS, and MongoDB

Create a NodeJS application to provide endpoints for a project called **Campus Trade**. The objective of the project is to trade used items (like book, calculator, Engineering Equipment, Sports equipment etc) with in the campus. There are two collections **Users** and **Listings**. Complete the below tasks to provide endpoints for the project.

Install required packages like – express, mongoose, nodemon and perform the following operations. Handle asynchronous behaviour and exceptions properly.

1. Define schema and model for **User**, with field name, mobile, email, sic number and password. All fields must be required and sic, mobile, and email must be unique.
2. Create a file to establish the connection with MongoDB and select the database.
3. Create a controller file for **User** and add functionalities for –
  - a. Add a user.
  - b. Retrieve all users.
  - c. Retrieve a single user based on ID
  - d. Retrieve a single user based on SIC/email/mobile
  - e. Update a student based on SIC
  - f. Delete a student based on SIC
4. Create a router file to connect with the User controller methods. Link the router to entry point of the project and test all the endpoints using Postman.