

Containerize
RESTful Services
and Database by
Using Docker







## Implementation Environment

- You must have access to <u>GitLab</u>.
- Install git to be able to clone and push code to the repository.
- You must be familiar with forking and cloning a git repository.
- You must have Docker installed on your machine.
- Steps to install Docker
  - Install <u>Docker Desktop</u>
  - Register on <u>Docker Hub</u> so that images can be pulled







#### PRACTICE

#### Create a MongoDB Container

Containerize a MongoDB database, execute the container, and execute commands on the MongoDB terminal running on a Docker container.







### Instructions for the Practice

- There is no boilerplate for the practice.
- List the steps for executing a MongoDB container in a text editor.

#### **Tasks**

- Dockerize a MongoDB database.
- Pull the Mongo image from Docker Hub.
- Run the Mongo container.
- Execute the Mongo terminal.
- Create a database to store customer details.
- Create a collection called Customers.
- Insert customer name, age, address, phone number, and email into the Customers collection.







#### **Submission Instructions**

- Create a Git repository named BEJ\_C3\_S2\_Containerize\_REST\_API\_And\_Database\_PC\_1.
- Push the text file to the repository and submit for review.





# Create a MySQL Container

Containerize a MySQL database, execute the container, and execute commands on the MySQL terminal running on a Docker container.









### Instructions for the Practice

- There is no boilerplate for the practice.
- List the steps for executing a MySQL container in a text editor.





#### **Tasks**

- Dockerize a MySQL database.
- Pull the MySQL image from Docker hub.
- Run the MySQL container.
- Execute the MySQL terminal.
- Create a database to store user details.
- Create a collection called Users.
- Insert username, address, phone number, and email into the Users collection.



#### **Submission Instructions**

- Create a Git repository named BEJ\_C3\_S2\_Containerize\_REST\_API\_And\_Database\_PC\_2.
- Push the text file to the repository and submit for review.

