# MLOps Lab

## **Lab Description**

In this lab, you will practice MLOps principles by creating a simple machine learning model deployment pipeline. Follow the steps below:

### 1. Create a Repository on GitHub:

o Create a new repository on GitHub to store your code.

#### 2. Develop or Load a Machine Learning Model:

• Develop a new machine learning model or load an existing one. Ensure that your model is saved in a format that can be easily loaded and used for predictions.

#### 3. Create an API using FastAPI:

 Use the FastAPI framework to create a RESTful API for your machine learning model. Define endpoints for receiving input data and returning predictions.

#### 4. Test Your API:

 Use the FastAPI documentation page to test your API. Visit the URL of your FastAPI instance followed by /docs (e.g., http://127.0.0.1:8000/docs) to access the interactive API documentation. Use this interface to send sample requests and verify that your API is working correctly.

#### 5. Push Your Code to GitHub:

- o Commit your code to the local Git repository.
- Link your local repository to the GitHub repository you created in step 1.
- Push your code to the GitHub repository to make it accessible remotely.

Follow these steps to create a basic MLOps pipeline for deploying and testing machine learning models via an API. This lab will help you understand the workflow involved in deploying machine learning models in production environments.

Happy coding!