

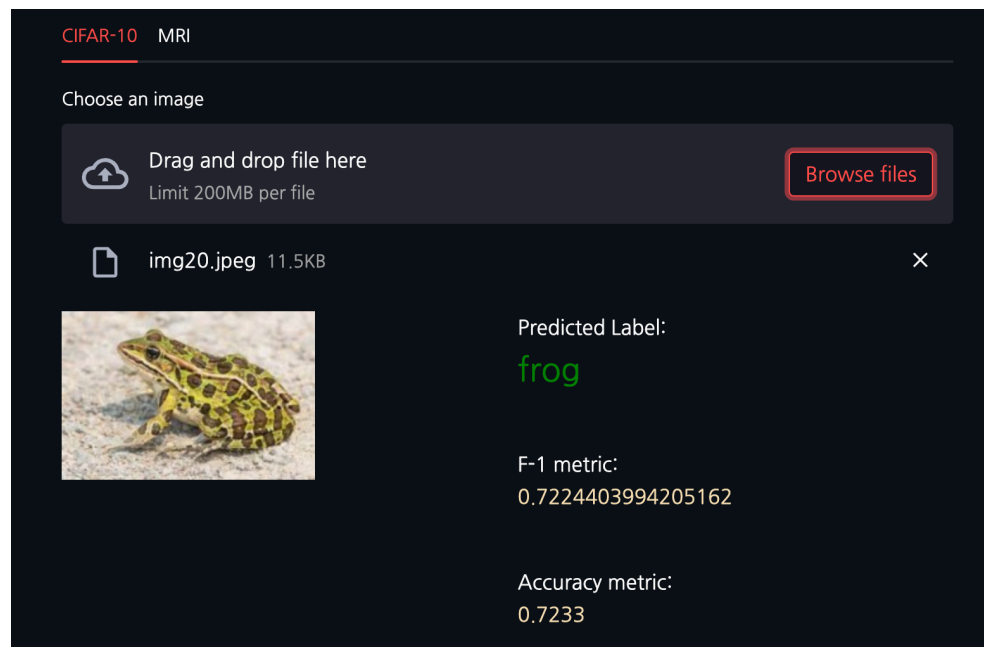


VMware Tanzu

# Sample ML App frontend with Multi- step MLflow workflows

## Overview

Use this sample template as a baseline to bootstrap an ML application whose embedded model is trained, evaluated and promoted using multi-step **MLflow** workflows. The sample template demonstrates using **Tensorflow** to train an object classification model on the CIFAR-10 dataset. The application is a **Streamlit** web app which also exposes a **FastAPI** based ML API. Workflow steps may be configured for each run with MLflow's **MLproject** file.



## Workflow Steps

The workflow steps are as follows:

<b>upload_dataset</b>	Uploads the training dataset to the training environment ( <i>supports local environment or Ray clusters by default</i> )
<b>train_model</b>	Builds and trains the candidate model
<b>evaluate_model</b>	Uses defined metrics and thresholds to perform model evaluation on the candidate model ( <i>supports Evidently by default</i> )
<b>promote_model_to_staging</b>	By default, promotes the candidate model to Staging if it passes the evaluation stage