## CHAPTER 46 KUBEFLOW AND KUBEFLOW PIPELINES

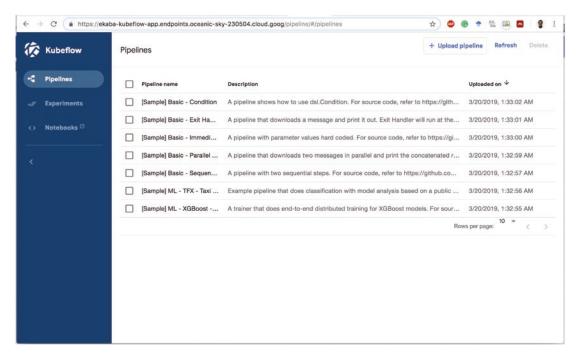


Figure 46-6. Kubeflow Pipelines dashboard

## **Components of Kubeflow Pipelines**

A Pipeline describes a machine learning workflow, where each component of the pipeline is a self-contained set of codes that are packaged as Docker images. Each pipeline can be uploaded individually and shared on the Kubeflow Pipelines user interface (UI). A pipeline takes inputs (parameters) required to run the pipeline and the inputs and outputs of each component.

The Kubeflow Pipelines platform consists of

- A user interface (UI) for managing and tracking Experiments, jobs, and runs
- An engine for scheduling multi-step ML workflows
- An SDK for defining and manipulating pipelines and components
- Notebooks for interacting with the system using the SDK (taken from www.kubeflow.org/docs/pipelines/pipelines-overview/)

## **Executing a Sample Pipeline**

1. Click the name [Sample] Basic - Condition (see Figure 46-7).

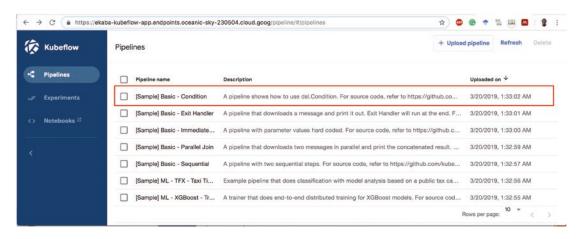


Figure 46-7. Select a Pipeline

2. Click **Start an Experiment** (see Figure 46-8).

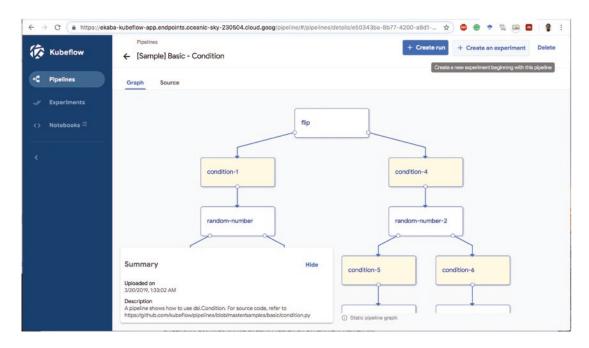


Figure 46-8. Create a new Experiment