

Getting started with CV Studio

CV Studio is a Computer Vision learning tool made for you which makes building your Computer Vision application fun and interactive. CV Studio can be accessed through this [link](#) or if you are accessing this doc through our course, you can find the link in the lab section of your course. We are continuing to expand our learning modules and we currently have applications for Image Classification and Object Detection

Each of the learning modules are standalone with instructions and resources about each algorithm. To build, train and deploy your Computer Vision model, here are some quick simple steps:

1. **Start a New Project:** After logging into [CV Studio](#), you can create a **New Project**. You will see a box like this. Choose a **Name**, the **Type** has been chosen for you based on the algorithm you will be using.

Create a new project

X

In this lab, you will use K-Nearest-Neighbor (K-NN) to classify dogs and cats.

Name

Training_an_image_classifier_with_KNN

Type

Classification

Training Runs

Notebook

k-nearest neighbors algorithm (k-NN)

Applications

Notebook

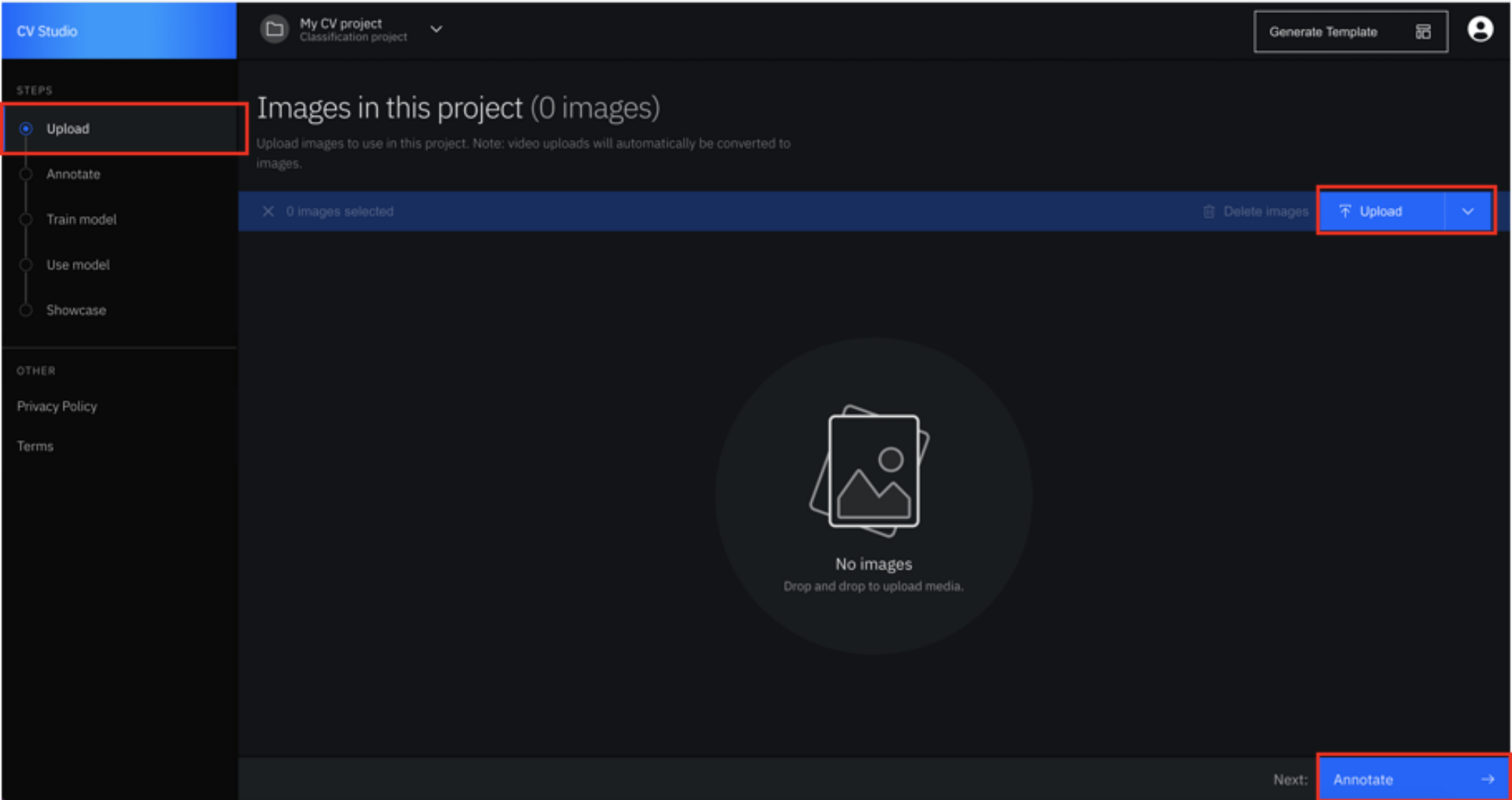
k-nearest neighbors algorithm (k-NN)

+ Advanced settings

Cancel

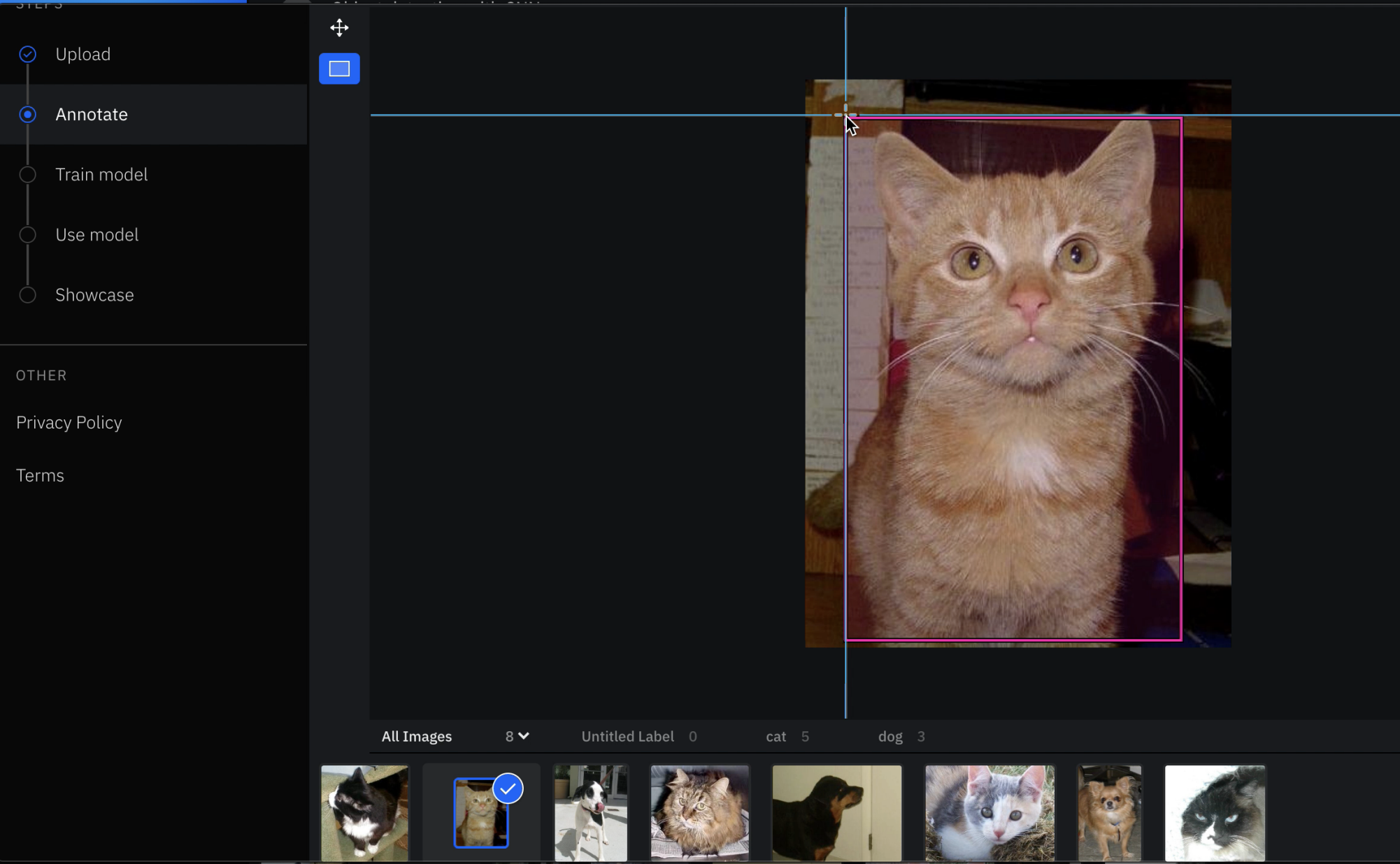
Create project

2. **Upload Images:** Once you create your project you will land on the **Upload** page. Here you will upload your images for training, you can do this by using the **Upload** button at the right or dragging and dropping your files or folders. The current accepted formats are **.jpg**, **.png**, and **.zip** files and folders containing **jpg** and **png** files.

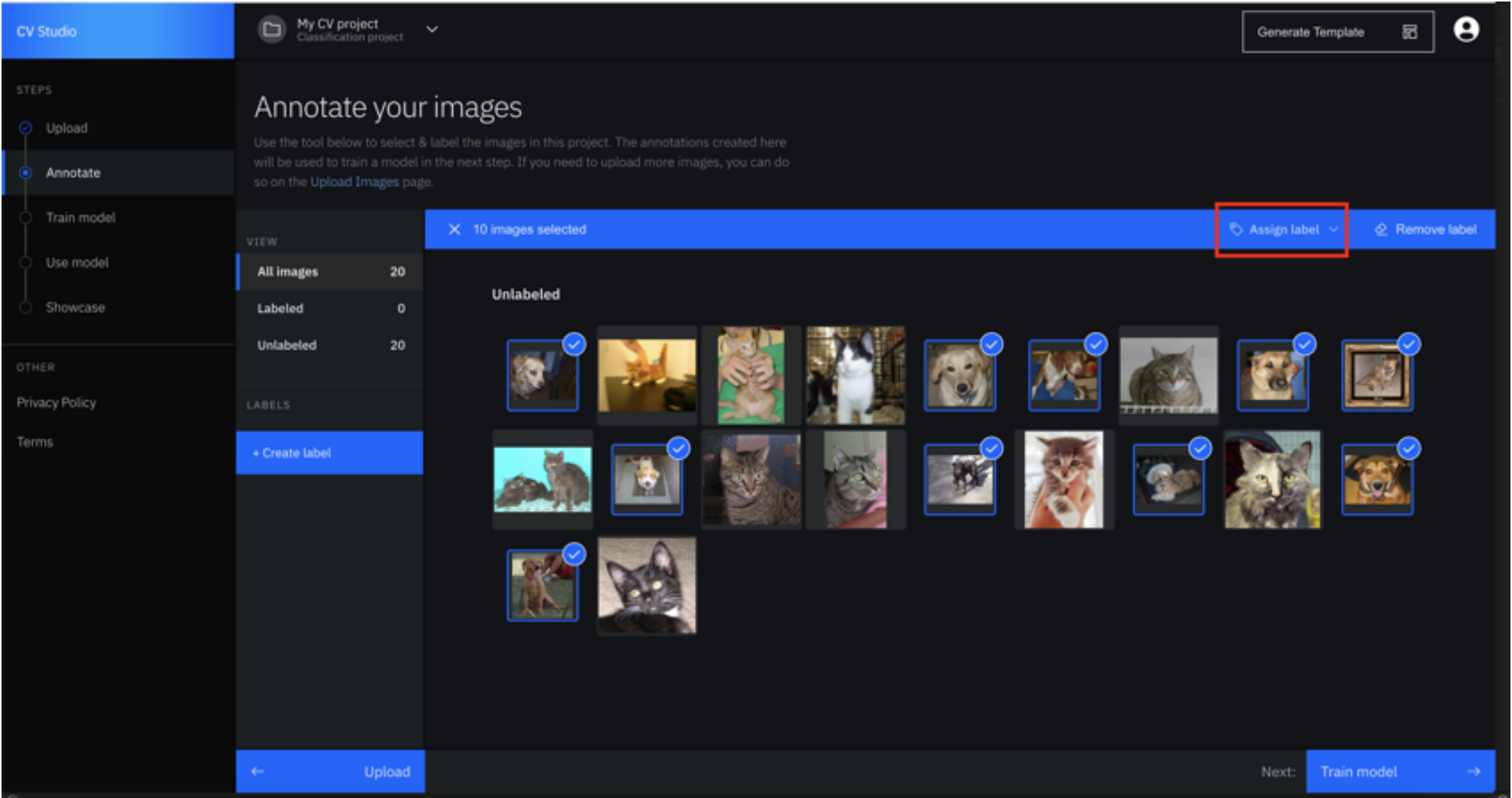


3. Annotate your images:

For object detection, use the integrated tool to highlight target elements in your images.



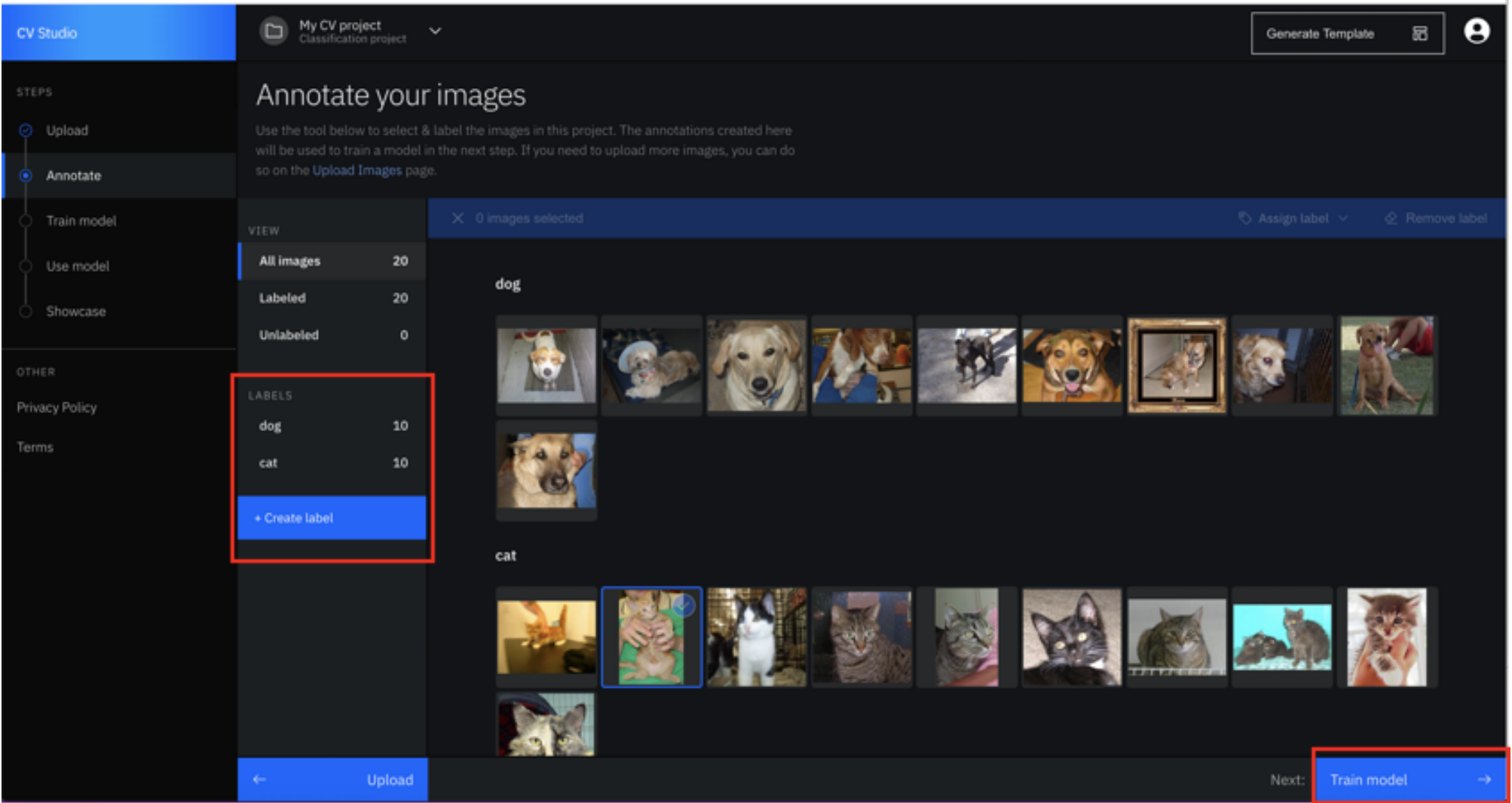
For image classification, you can annotate within the tool by clicking on the images and adding them to a label. You can add them to a new label or a label you already created.



If you name your folder with the respective classes, the annotation will happen automaticallly when you upload your images.

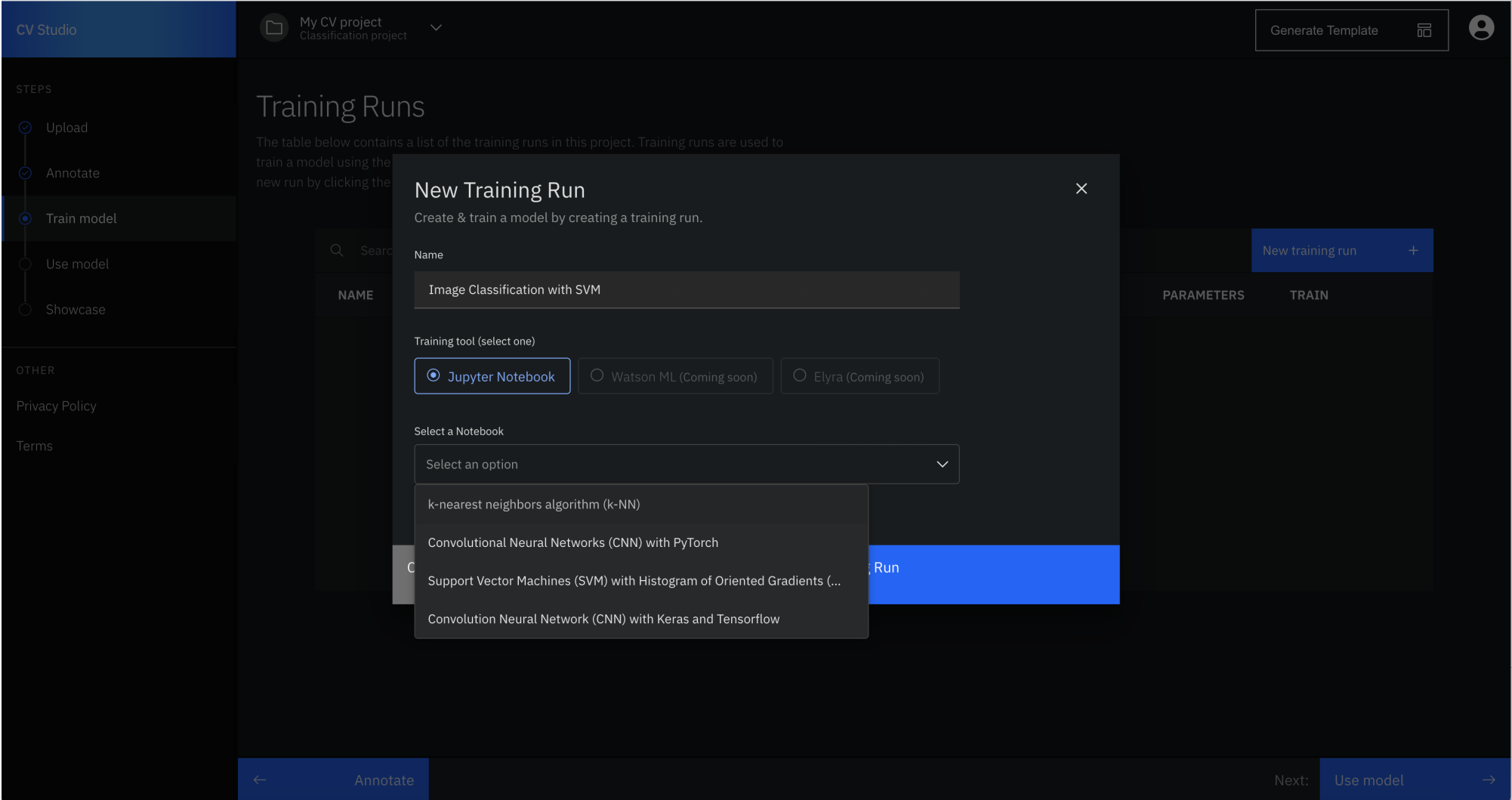
Name		Date Modified	Size	Kind
▶ cat		Today at 8:29 PM	--	Folder
▶ dog		Today at 8:27 PM	--	Folder

We will see the classes cat and dog.

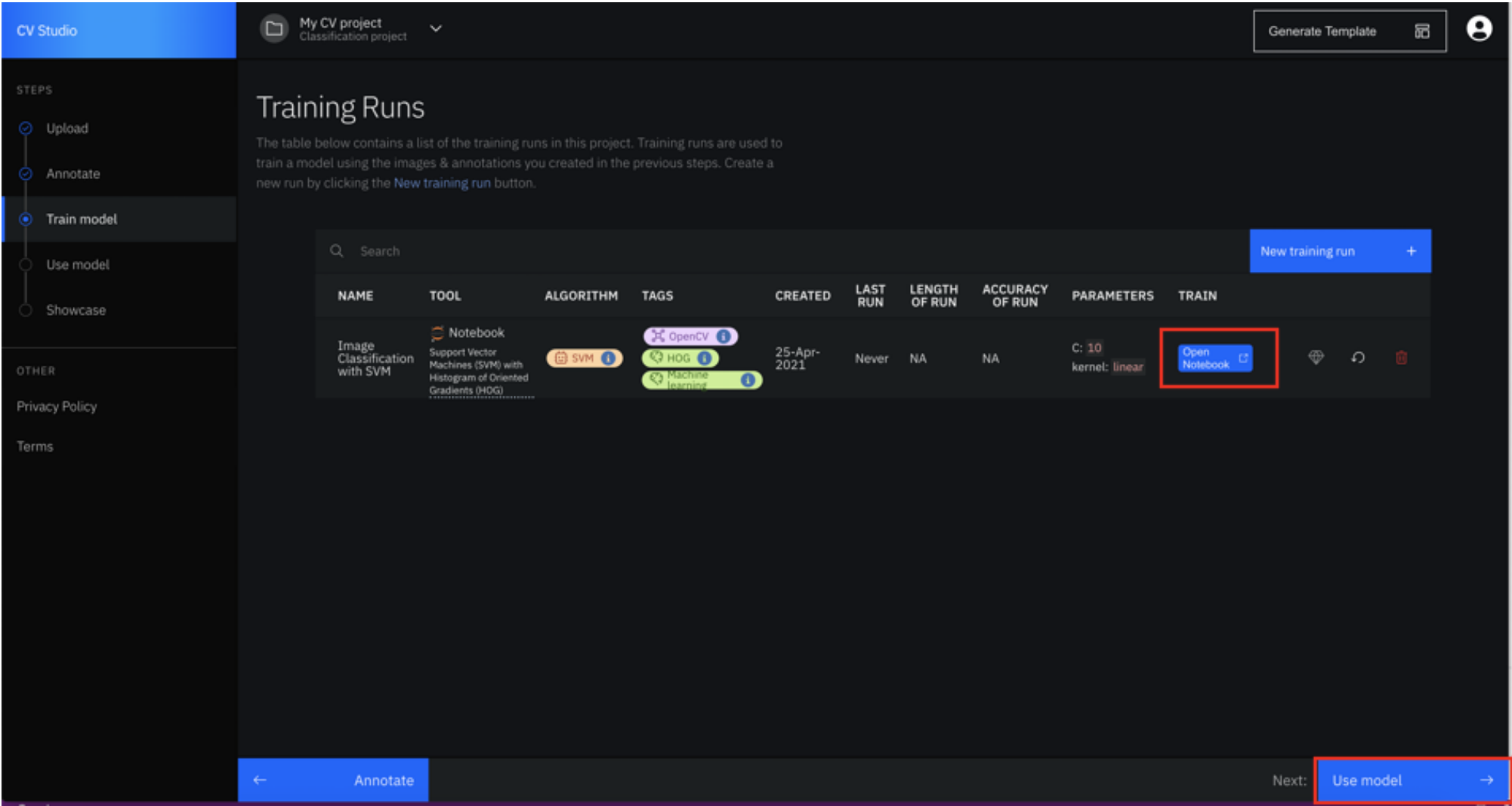


Next we go to **Train Model** on the bottom right.

4. **Train Model:** You will be able to train your model using the image annotations from the previous step. You will be required to enter a name, pick a tool and select the training algorithm.

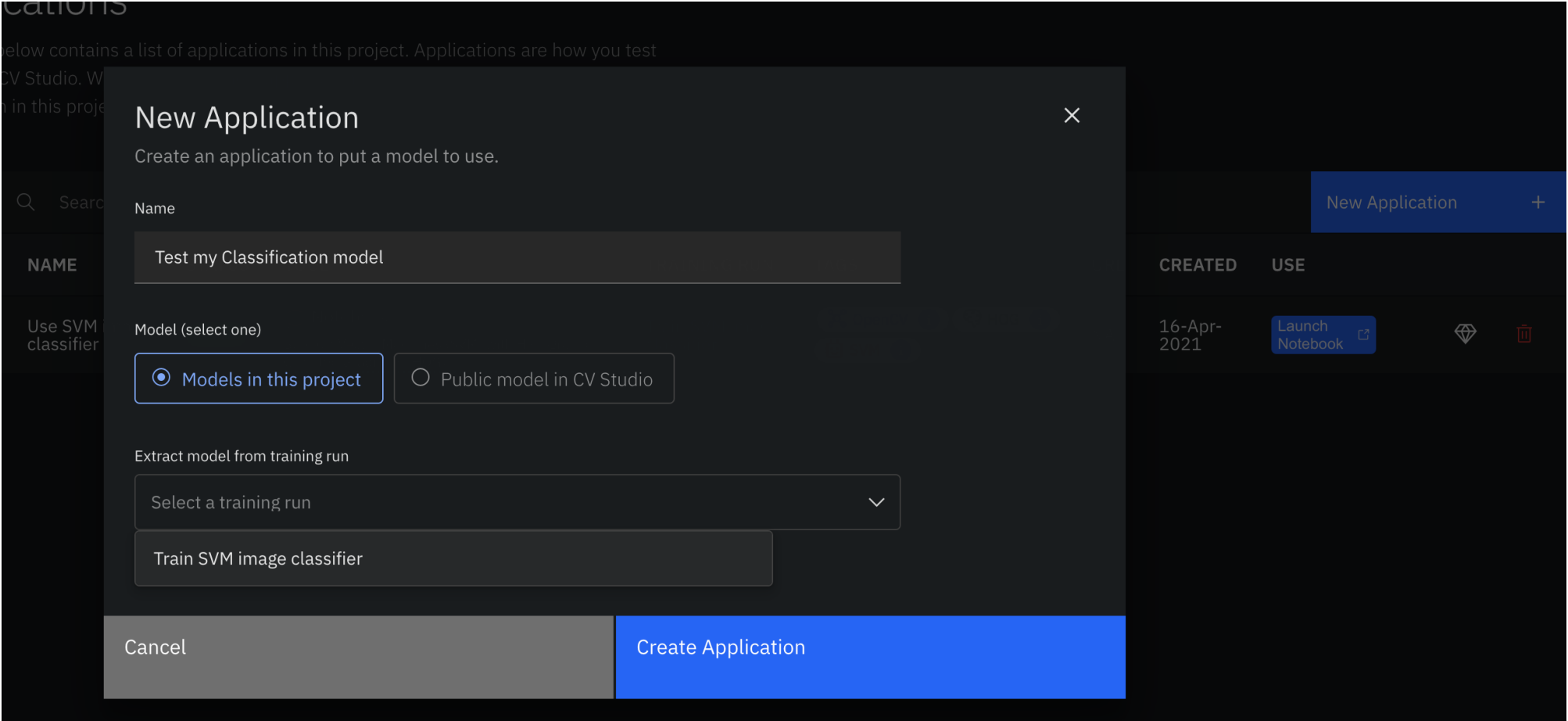


Once you fill this in, you can now open the tool and run your model. Once the model is done running, you will come back to this interface and create an application.

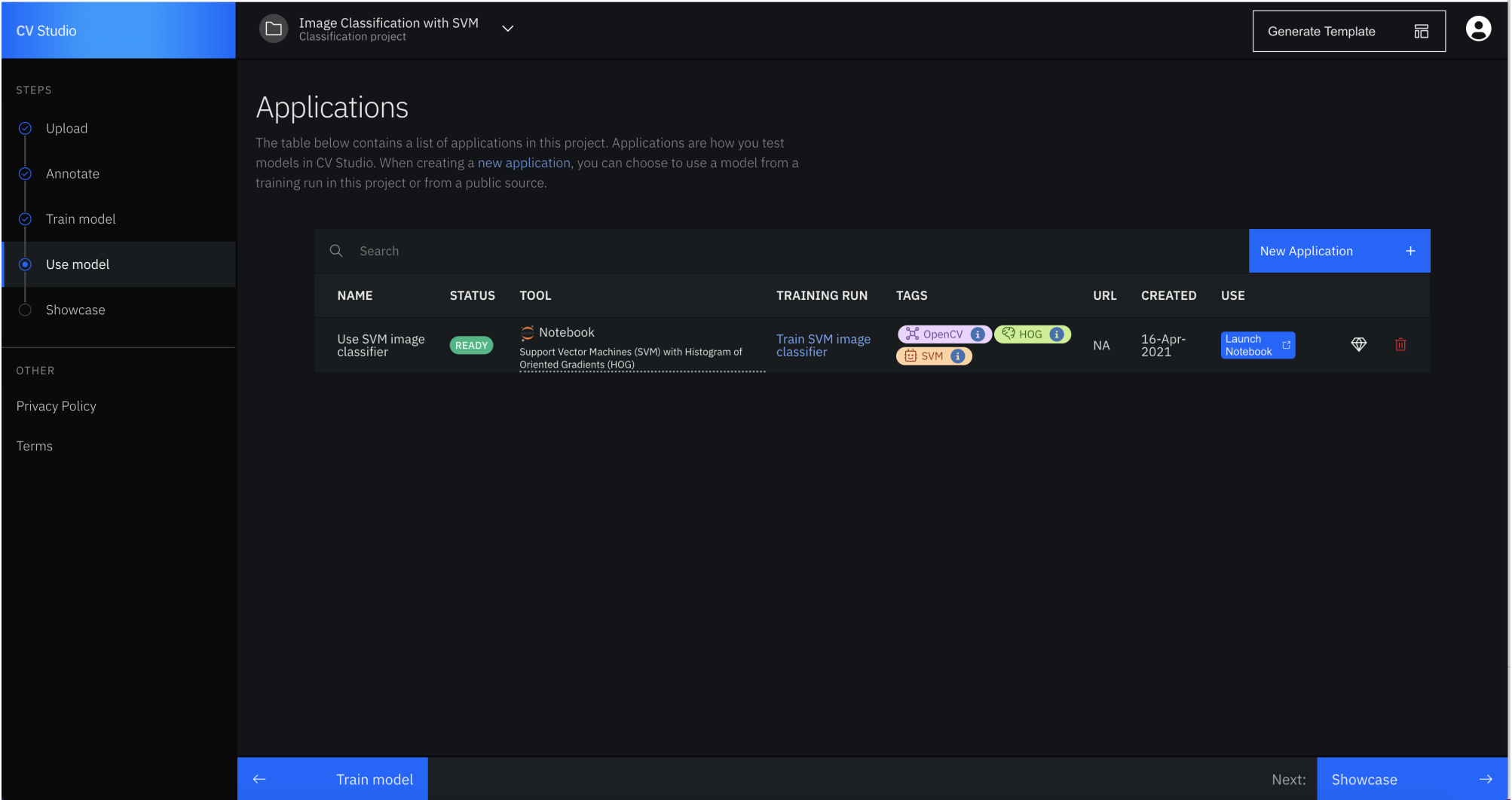


5. **Use Model:** You will come back into this interface and create a **New Application** to test the model.

- Choose a name for your application,
- Choose a Model
- Choose the appropriate Training Run



Once you are done, you will now launch a tool to test the app.



6. **Showcase your app:** If you are using a learning module that supports deployment to the web, you will be able to click on the showcase tab to deploy your web app to code engine.

Date (YYYY-MM-DD)	Version	Changed by	Change Description
2021-06-07	0.2	Aije Egwaikhide	Changed image to match new CV Studio interface

2021-04-25	0.1	Aije Egwaikhide	Created original version
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