Explanation of the Prediction Code Components

This script uses a trained model to predict whether an image shows fire, no fire, or smoke.

1. Loading the Model

- First, the script loads the trained model from a file. This model is like a trained brain that's ready to analyze images and make decisions.

2. Preparing the Image

- Before making a prediction, any new image needs to be prepared in the same way the training images were. This includes resizing it to fit the model's requirements and adjusting its color values.

3. Making a Prediction

- The prepared image is then fed into the model, which assesses it based on the patterns it learned during training and predicts whether the image shows fire, smoke, or no fire.

4. Displaying the Result

- The prediction result, such as "fire", "no fire", or "smoke", is then output, showing what the model thinks is in the image.