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REPORT

How we implemented the project: We create 3 functions to resize, extract SIFT features, and histogram features. Each function will receive a Mat reference and return a Mat to represent that data. Then, we would prepare the data for training and testing by creating 4 Mat to store training data, labels, testing data and testing labels. After we populate the data for that question, we would train the model and perform testing. After that, we would release the memory for the data Mat and reuse them for the next question.

Text

Description automatically generated

I think the reason for increase in accuracy when using SIFT data as training data is that when we perform the SIFT extraction, we already extracted a lot of features that could be key in determining the category of that image