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**Documentation:**

I decided to divide the workflow. I was going to make the simple prediction model and integrate it to a simple web page while testing and evaluating data in my google collaboration notebook.

**For the notebook, I did these tasks:**

1. First I decided to import all the necessary libraries.

2. I downloaded the dataset and imported it in my program.

3. I divided the independent and dependent variables.

4. To see how the dataset looked, I used head function.

5. To visualize the dataset I used the pairplot method from seaborn. I got to know about the size of the flowers, the iris virginica was the longest flower and the iris setosa was the shortest. I also got to know that the iris setosa is separated from the other two flowers.

6. I encoded the dependent variable using the LabelEncoder.

7. I split the dataset using the train\_test\_split function and the decided to keep the test\_size as 0.2.

8. After splitting the dataset, I trained the support vector machine model on the training dataset.

9. I predicted a single value just to see if the prediction is working or not.

10. I predicted the test set through the model.

11. I used the classification report function to check the precision, recall, f1-score and support of the model.

12. To visualize the performance, I used the confusion matrix to get the accuracy.

**For the app, I did these tasks:**

1. I used the same model and removed all the visualization functions.

2. To make the web page, I used flask as the backend.

3. I created two templates, one was the home page and the other was the result page.

4. I used tailwindcss for styling.

5. I used three pictures to display in the result page according to the prediction made by the model.

6. I made a form in the home page with four values to get the required features.

7. I created a route to send the data received through the form to the result page.

8. I displayed the image and the name of the flower according to the data.

**Problems I faced:**

I was experiencing some weird behavior by the model when I used feature scaling. After testing it out I decided not to use feature scaling.