Task 2A: Critical Thinking Assessment: [/ 2P]

The proposed solution to the specified problem statement has many inherent flaws that can be seen from these visualizations (or flaws that will appear on choosing a different dataset for a similar problem statement). **Please mention ONE of the main flaws in the proposed solution.** This task is meant to assess critical thinking which is necessary in identifying research gaps/problems with existing solutions.

The given solution lacks quantitative masures. These would be important to measure the performace of the two models. In the next part I have prosed a solution inaddition to it we can employ dense maps as well.

Task 2B: Literature Search: [/ 1P]

Kindly provide a literature reference (paper) that pertains to a comparable problem statement and employs information visualization or visual analytics techniques to address the challenge.

Image-Based Visualization of Classifer Descision Bondries "Francisco Caio M. Rodrigues" University of Gronigen

→ (They take the 2D image space for classifer)

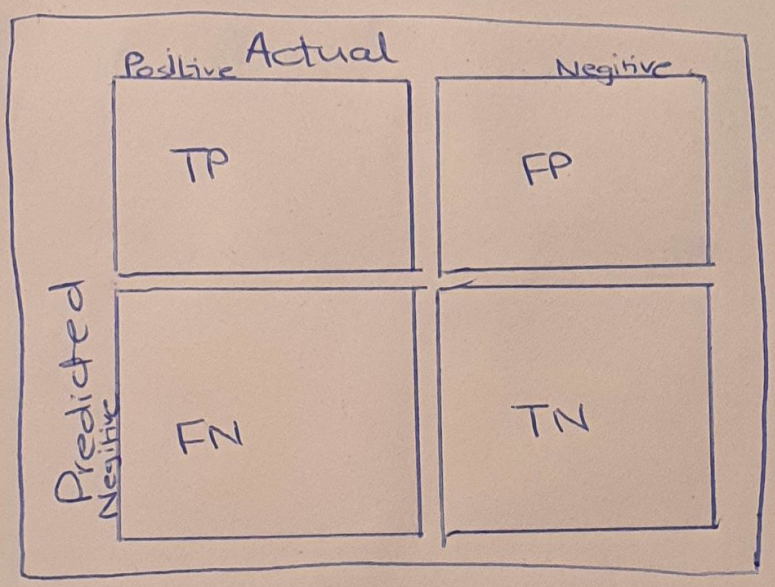
Task 2C: Brainstorming New Ideas: [/ 2P]

Your thesis work entails generating innovative concepts to rectify the shortcomings you have detected. In this particular assignment, **present a modification you would like to add in order to enhance the proposed solution.** Alternatively, you can propose adjustments to the existing solution methodology to enable the comparison of outcomes from 20 distinct classifiers instead of limiting it to just 2.

Briefly describe the problem that you mean to solve:
(Indicate "2A" if you are presenting a solution for the issue outlined in task 2A.)

We can use Confusion matrix for checking performance of ML modes

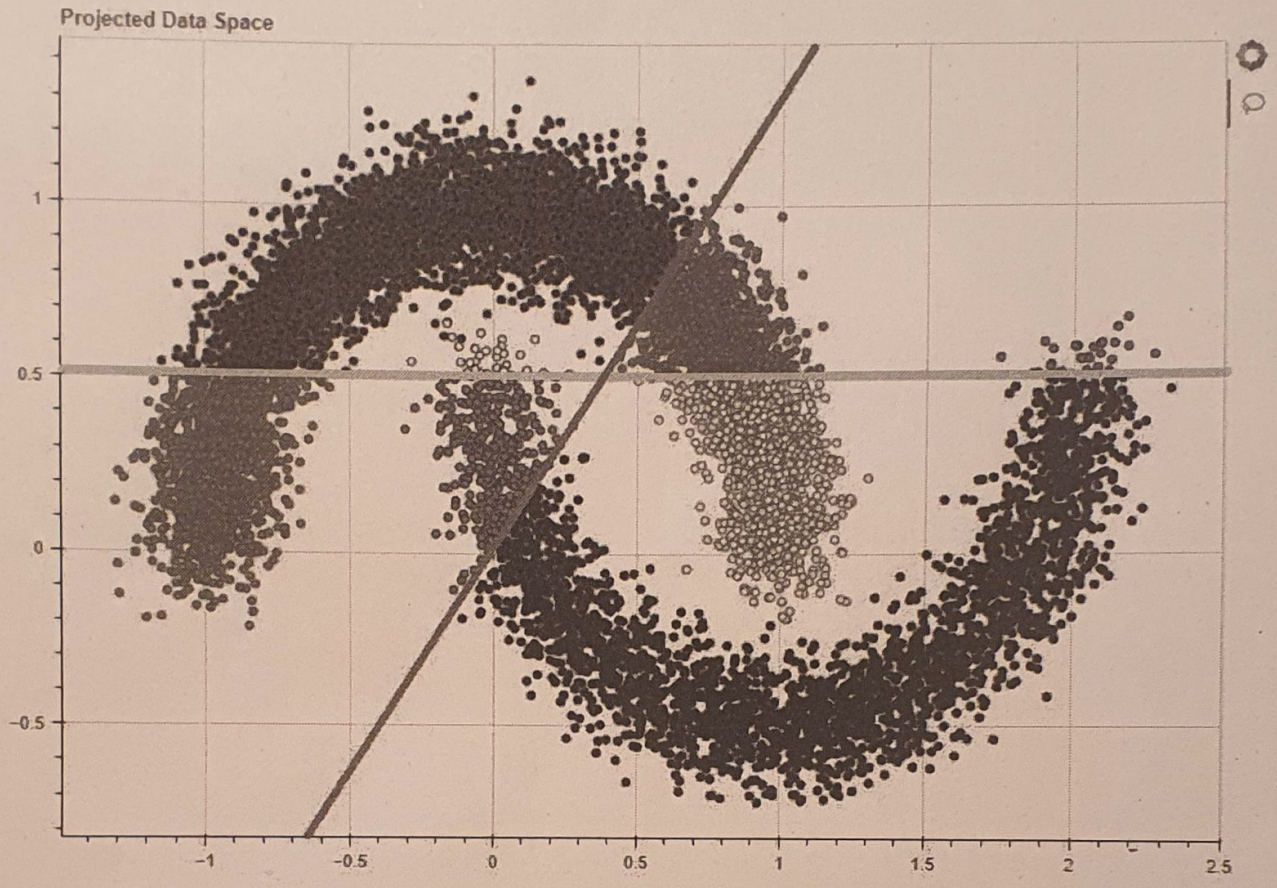
Proposed Modification:
(You can use words, a rough sketch, or both.)



We can get a deeper analysis running classification reports and also this for our multi class classification

Task 2D: Visual Analysis - Gaining Insights: [/ 2P]

What purpose does a visualization serve if it doesn't allow for interpretation and insights? Both classifiers (A and B) employ a linear decision boundary represented by green and yellow lines in the scatterplot below to differentiate between cat and dog images. **Your task involves determining the association between the decision boundaries and their respective classifiers, based on your analysis of the given dataset.**



Your answer:

Green Decision Boundary: Classifier A (A/B)

Yellow Decision Boundary: Classifier B (A/B)