Hackathon Instructions:

Building a Brand Detection Model with YOLO

Objective

The goal of this hackathon is to use neural networks, computer vision, YOLO to detect objects. This means you have to use YOLO to identify the objects in the image.

Dataset

You'll be using the chocolate brand **Dataset** from. The dataset contains 162 pictures of popular candies (Skittles, Snickers, etc.)

Download Link for dataset: Dataset

Download Link for Train-Validation Folder Structure Split : train_val_split.py
(This script needs to executed before the training process starts, you can refer the practical guide)

Step-by-Step Instructions

1. Uploading and Preparing the Dataset

2. Preparing the Data for Training

3. Install YOLO Training Requirements

4. Create the Configuration File (data.yaml)

5. Configure Training Settings

6. Test the Trained Model

7. Run Prediction on New Images

8. Prepare PowerPoint Presentation

9. Recorded Demo

Deliverables

Files: Submit all the Python code files, Jupyter Notebook.

PowerPoint Presentation: Prepare a PowerPoint presentation having all the steps performed along with summarizing the problem, approach, findings, recommendations, also convert them to a .pdf file as well

Recorded Demo: Record a brief demo (5 minutes) walking through your code, explaining your methodology, and showcasing results.

Additional Notes

Documentation: Ensure your python code is well-documented with comments explaining each step.

Submission: Push all the deliverables in your github and share us your github link by submit in this Google Form here

Good luck! We look forward to seeing your innovative solutions and insights. Remember, this hackathon is not just about reaching the answer, but also about experimenting and learning along the way. Happy coding!