

# Brand Recognition

## **Detailed Project Report**

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# Objective

To develop a custom computer vision model that can identify and recognize a brand's products and logos in visual content such as images and videos. This model has been trained on the specific products and logos of a particular brand.

To leverage the insights generated by the computer vision model to gain a better understanding of the brand's target audience and their behaviour. .

## Benifits

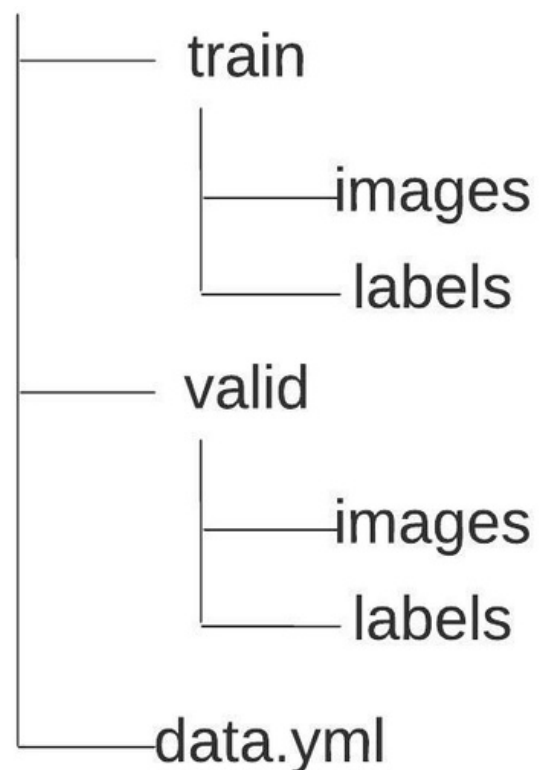
- Enables brands to identify and recognize their products in various forms of visual content, such as images and videos.
- Helps extract valuable insights from the content and understand audience behavior to improve advertising strategies and achieve higher ROI.
- Offers a more effective way to target the audience and personalize messaging.

# Data Sharing Agreement

- **Image and Label format:**

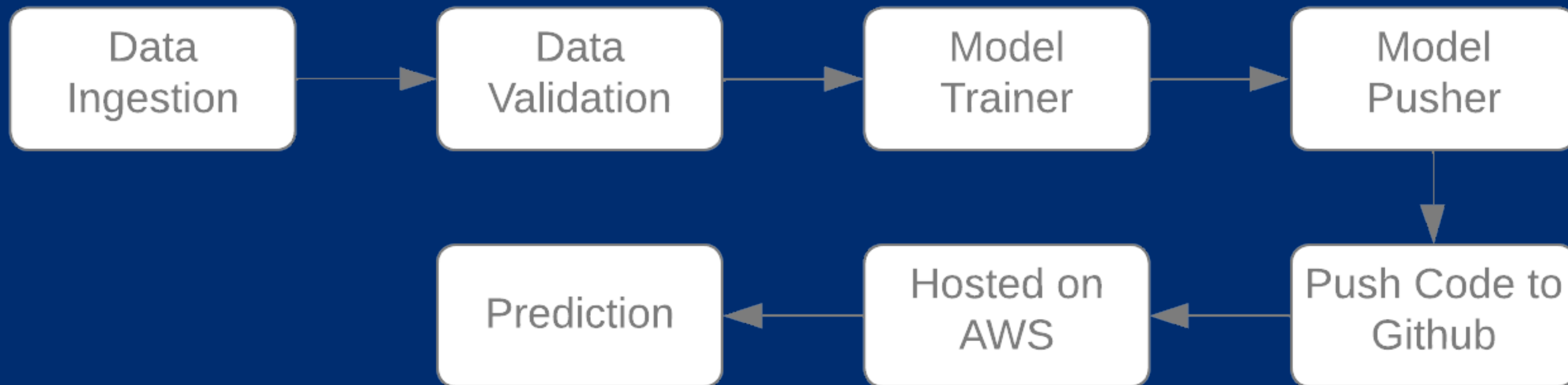
- The image file format should be in ".jpg" or ".jpeg" and the label file format should be in ".txt".
- Each label file should have the same name as the corresponding image file.
- Each label file should contain information about the objects present in the image, their class, and their bounding box coordinates.

- **Directory Format:**





# Architecture






## DATA INGESTION

- Download the dataset from Database.
- Extract the dataset.
- Storing the dataset into Data Ingestion Artifact.



## DATA VALIDATION

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- Verify that all the directories in correct structural format.
  - Store the validation status in Data Validation Artifact.

# MODEL TRAINING

- The model is trained using YoloV8 framework.
- The trained model is stored in Model Trainer Artifact

# MODEL PUSHER

- Upload the best model to S3 bucket

# Conclusion

In conclusion, the successful completion of this end-to-end computer vision project has demonstrated the power and potential of ML-powered computer vision in marketing. The project showcased how computer vision can be used to identify and recognize products in visual content, extract valuable insights, and understand audience behavior. With this understanding, marketers can optimize their advertising strategies and personalize their messaging, leading to higher ROI. As visual content continues to play a significant role in marketing, the exploration and implementation of computer vision technology is crucial for brands and marketers to stay competitive in the market.





# Thank You

SLIDE PRESENTATIONS DESIGN