GARBAGE CLASSIFIER USING IMAGE RECOGNITION

Tensorflow - is used to train and build neural network models
TensorflowHub- it is library which stores pretrained models that can be used

EfficientNetV2 is an improved version of EfficientNet, developed by Google. Key features:

✅ Why it's good:

- **Efficient**: Optimized for both speed and accuracy
- **Lightweight**: Smaller and faster than ResNet, Inception, etc.
- **Transfer Learning**: Pretrained on large datasets like ImageNet
- **Better Performance**: Fewer parameters, lower latency

⚙️ Technical:

- It's a **Convolutional Neural Network (CNN)**
- Uses compound scaling: it scales depth, width, and resolution together
- EfficientNetV2 introduces faster training and better regularization
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What have you done with the pretrained model?"

👉 Example Answer:

> We used EfficientNetV2-B0 as a **feature extractor** since it's pretrained on ImageNet and known for high accuracy with low computational cost. We removed its classification head and added our own dense layer to classify garbage images into categories. We trained only the final classification layer to adapt it to our dataset, which saved time and improved performance even with limited data. This approach is called **transfer learning**, and it helped us achieve good results without training a deep network from scratch.