

Assignment- 11

Q.1. Q1. Design a Cognitive Assistant for Reading Labels of medicine bottle (You can download Dataset from Internet)

Ans:

The screenshot displays the LandingLens web interface for a machine learning project. The top navigation bar includes 'Home', 'Projects', 'Examples', and 'Community'. The user is logged in as 'Thapar'.

The main workspace is titled 'Build' and shows '20 images'. It features a 'Train' button and a 'Model list' dropdown. The interface is divided into two main sections: 'Images' and 'Instances'. The 'Images' section shows a grid of medicine bottles and boxes, with some images highlighted by colored bounding boxes (red, yellow, green, blue, orange). The 'Instances' section shows the model's predictions for these images, with a 'Prediction: Model-05-07-2025_1 (0.38)' displayed.

On the right side, a sidebar displays the model's performance metrics for 'Model-05-07-2025_1', which was trained 7 minutes ago. The metrics are as follows:

Metric	Train set	Dev set	Test set	F1
63%	--	--	--	F1
False Positive				11
False Negative				9
Misclassified				1
Correct				19

Below the metrics, there are buttons for 'View Confusion Matrix' and 'Try Model'. A 'Feedback' button is located at the bottom right of the sidebar.

Home


Projects

Examples

Community

Thapar

Try this model



Confidence Threshold

0.38

Deploy

Prediction

JSON output

Rocky mountain (2)

Home


Projects

Examples

Community

Thapar

Try this model



Confidence Threshold

0.46

Deploy

Prediction

JSON output

Cofsil (1)

Q2. Design an Emotion-aware Cognitive Assistant using Facial Expression Detection

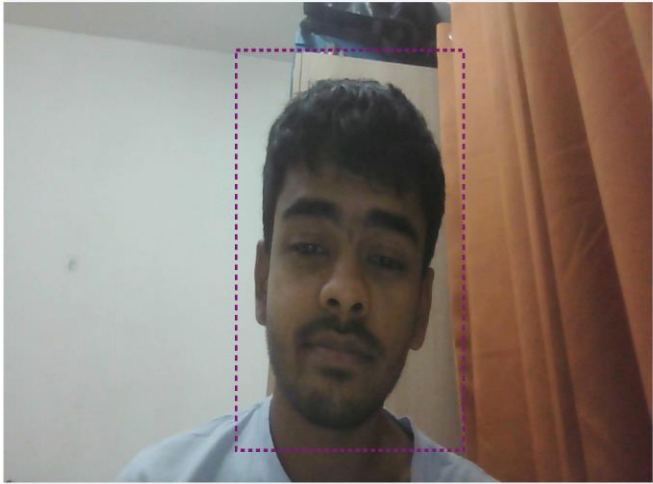
Ans:

The screenshot displays the LandingLens web interface for a facial expression detection project. The interface is divided into several sections:

- Top Navigation:** Includes links for Home, Projects, Examples, and Community. The user's name 'Thapar' and a profile icon are visible on the right.
- Project Progress:** A horizontal bar shows the steps: Build the first model, Upload, Label, Train, and Predict. The 'Train' step is currently active.
- Build Tab:** Shows 25 images. There are buttons for 'Images', 'Instances', 'Filter', and 'Sort'. A 'Train' button is also present.
- Ground Truth and Prediction:** Two checkboxes are visible: 'Ground truth' and 'Prediction: Model-05-07-2025_1(0.51)'. The 'Prediction' checkbox is selected.
- Image Grid:** A grid of 8 images showing various facial expressions. Each image has a bounding box around the face, indicating the model's detection. The bounding boxes are colored (yellow, purple, cyan) to represent different emotion classes.
- Model Performance Summary:** On the right, a sidebar shows the model details for 'Model-05-07-2025_1'. It indicates the model was trained 6 minutes ago. The performance metrics are: 100% Train set, 67% Dev set, and 0% Test set. The F1 score is 1.0. The confusion matrix shows: False Positive (1), False Negative (2), Misclassified (2), and Correct (22).
- Buttons:** There are buttons for 'View Confusion Matrix' and 'Try Model'.

LandingLens Home Projects Examples Community

Try this model



Confidence Threshold 0.51

Deploy

Prediction JSON output

Sad (1)

Model list

F1

1

2

2


22

Matrix

Settings

LandingLens Home Projects Examples Community

Try this model



Confidence Threshold 0.45

Deploy

Prediction JSON output

Laughing (1)

Model list

F1

1

2

2

22

Matrix

Feedback

Settings