



C O M F Y W E A R

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# PROJECT OVERVIEW

The screenshot shows a user interface for a project that analyzes clothing styles and comfort levels. At the top, there is a large image of a group of people standing outdoors, with green and yellow bounding boxes highlighting different parts of their clothing. Below the image is a button labeled "CLICK TO UPLOAD IMAGE".

**CLOTHING STYLE PREDICTION**

**Upper Part**

- long sleeve outwear (4)
- long sleeve top (1)

**Lower Part**

- trousers (3)
- shorts (1)

**YOUR CURRENT COMFORT**

Rate your current comfort level  SEND FEEDBACK

Advice to get more comfort  
Wear a short sleeve top and a shorts

View analytics details

Temperature	26°C
Humidity	83%

**PREDICTION**

Comfort Level 2 (5)  
Comfort Level 3 (4)

A project that detects clothing styles in images and predicts the comfort level (1-5) of people based on their clothes, local temperature, and local humidity.

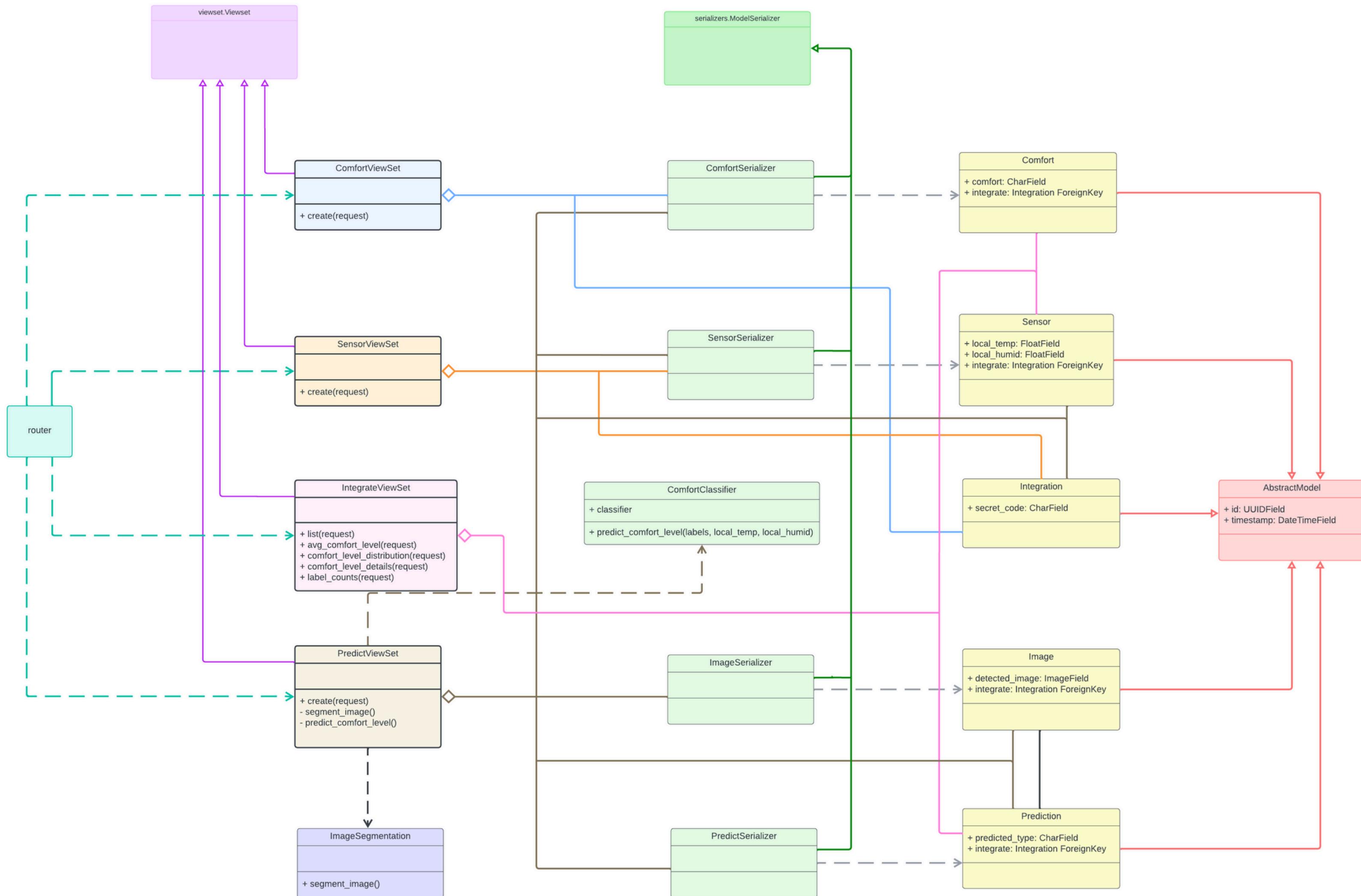


4

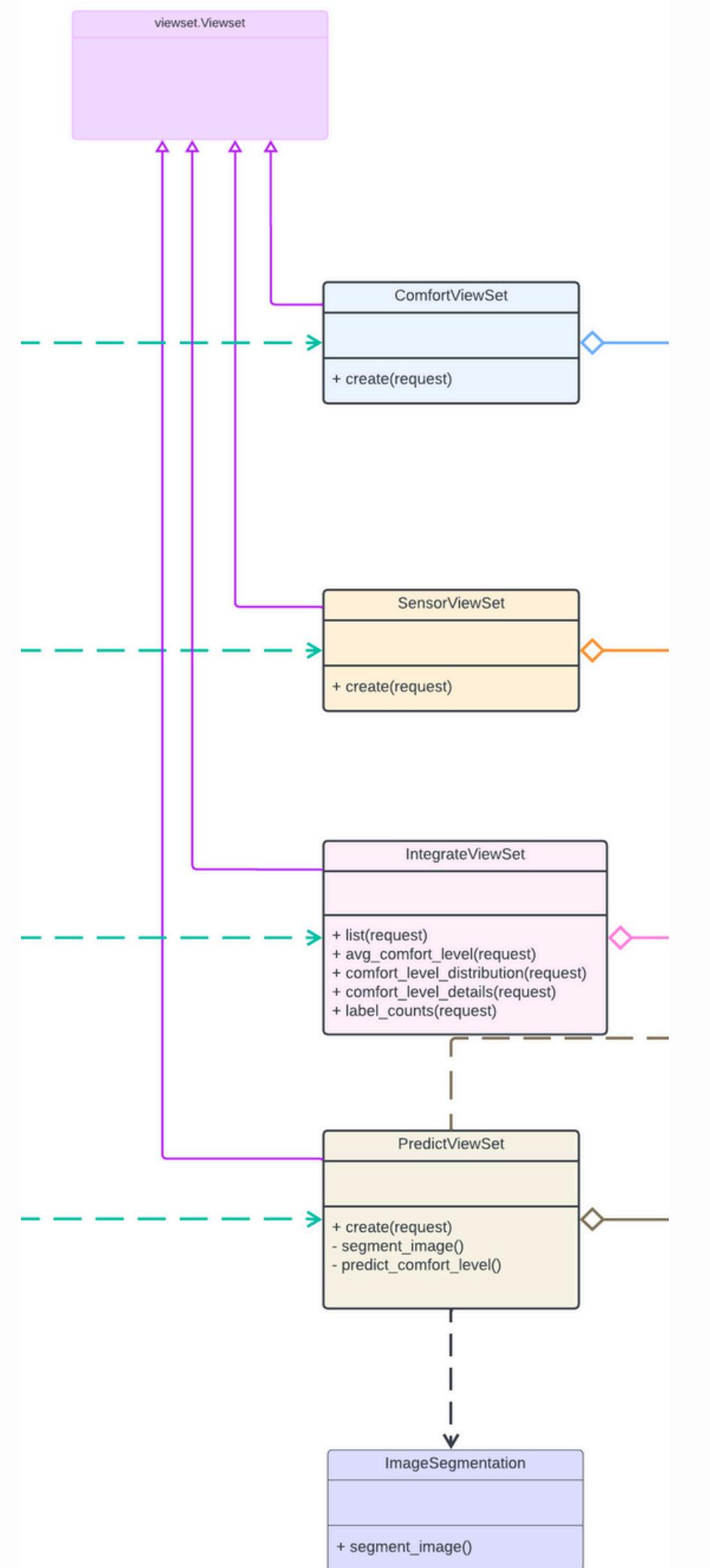
## KEY FEATURES

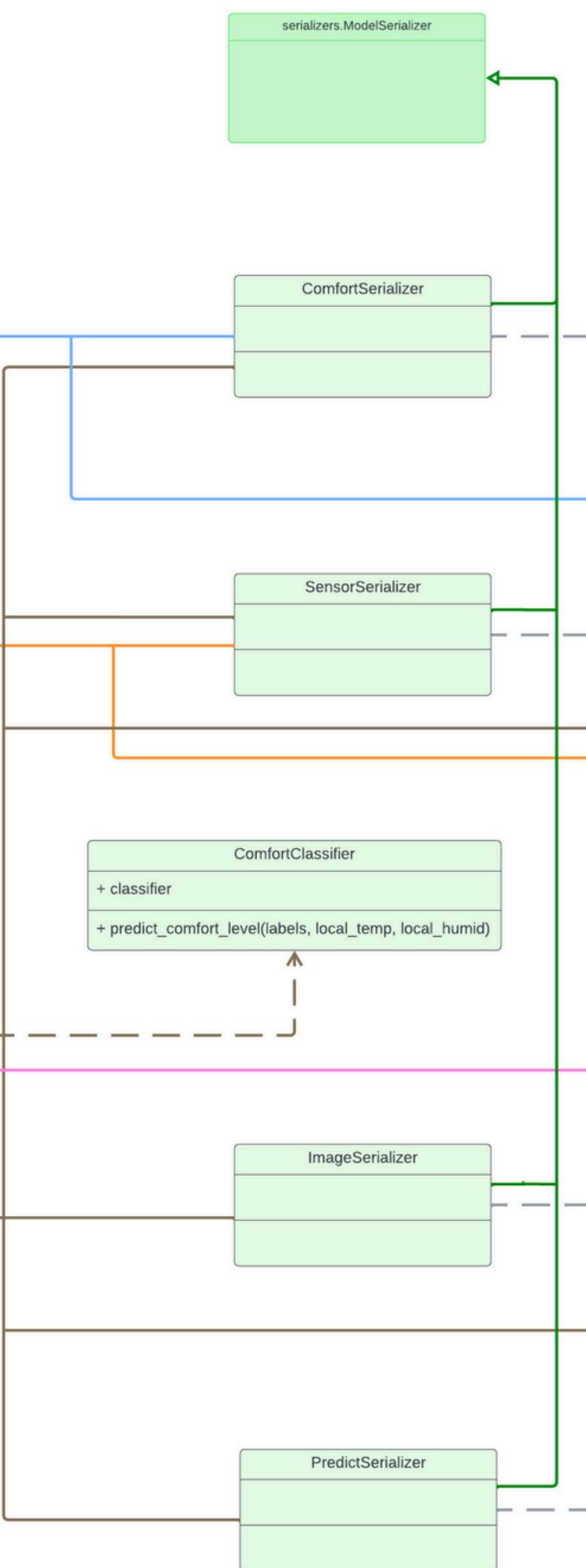
- Detects clothing styles from images
- Predicts the comfort level of people based on their clothes, local temperature, and local humidity.
- Provides data-driven advice to help people dress comfortably.
- Integrate the data from user feedback to enhance future predictions as well.

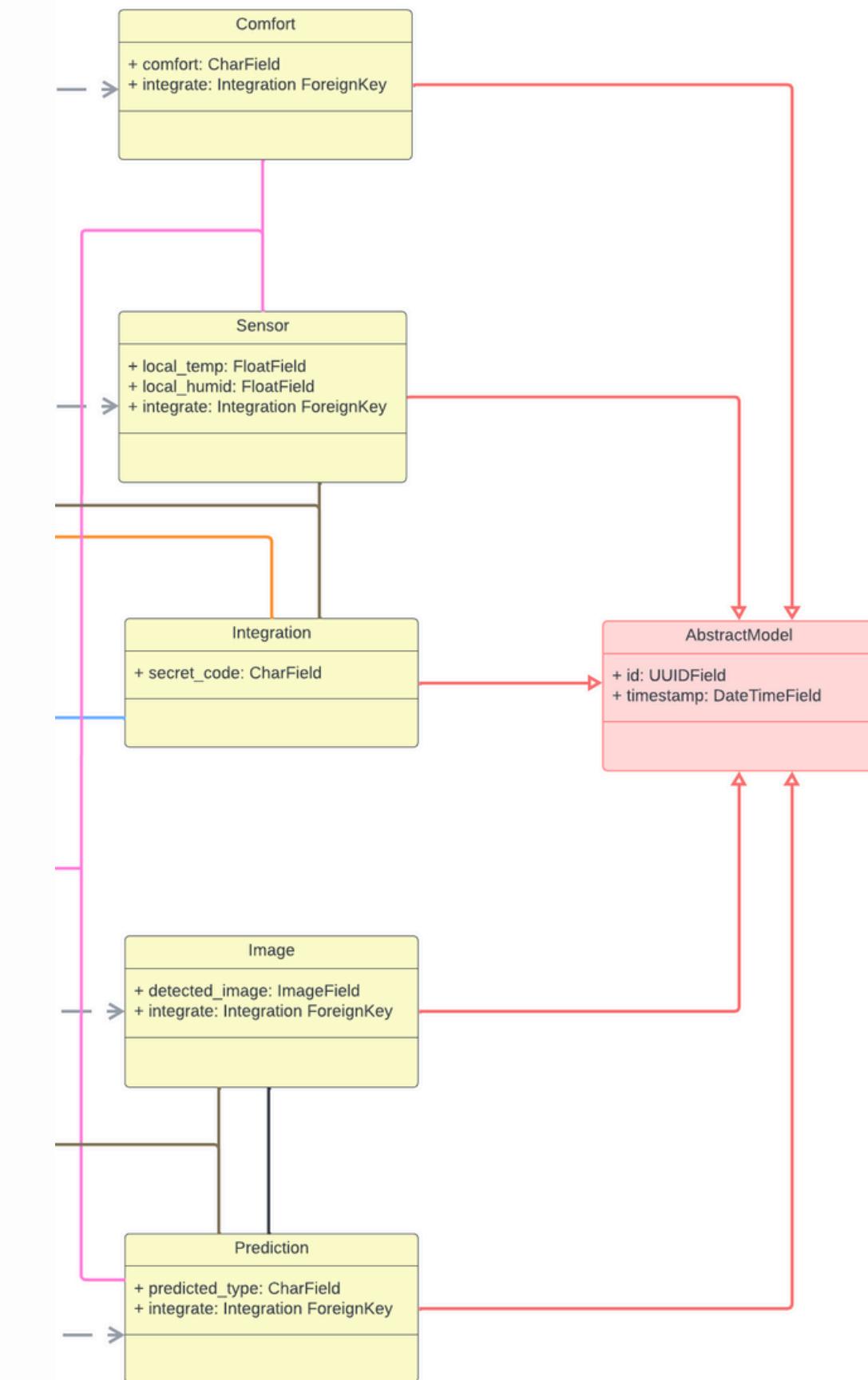
# OVERALL ARCHITECTURE











# DATA SOURCES

# DATA SOURCES

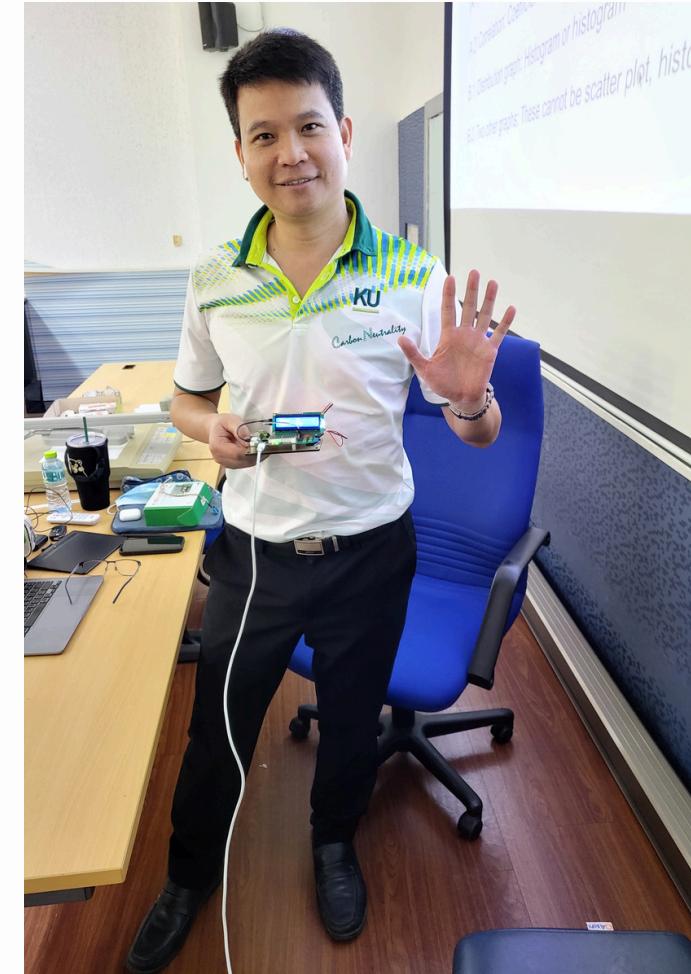
## 01 Primary Data:

- Image from User
- Local Temperature Data
- Local Humidity Data
- User Feedback on Actual Comfort

# DATA SOURCES

## 01 Primary Data:

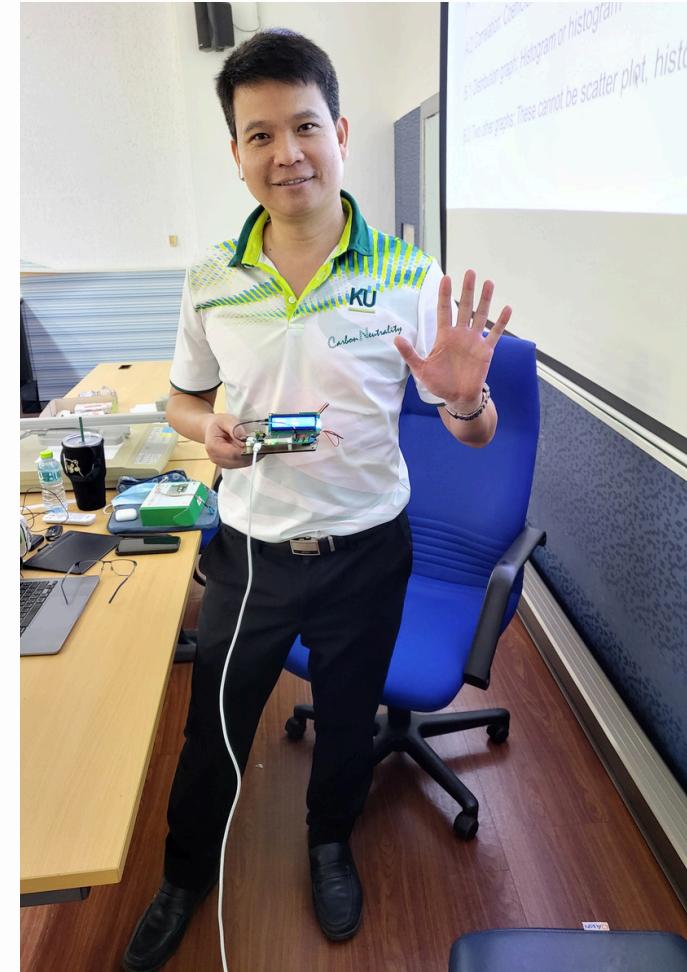
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# DATA SOURCES

## 01 Primary Data:

- Image from User
- Local Temperature Data
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- User Feedback on Actual Comfort



## 02 Secondary data:

- DeepFashion2 Dataset

# DATA SOURCES

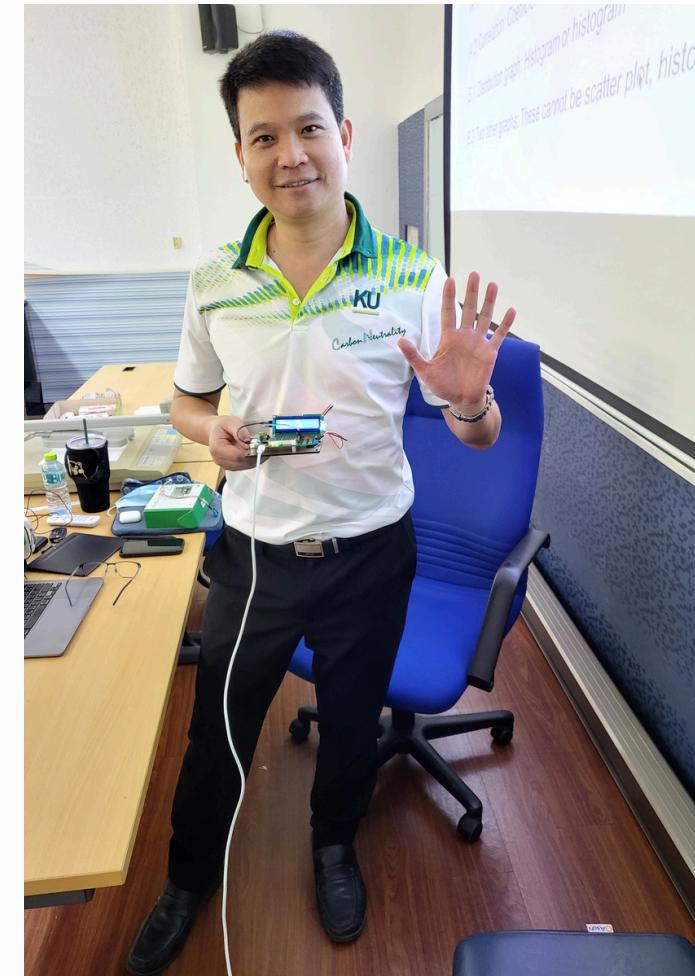


## 02 Secondary data:

- DeepFashion2 Dataset

## 01 Primary Data:

- Image from User
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- User Feedback on Actual Comfort



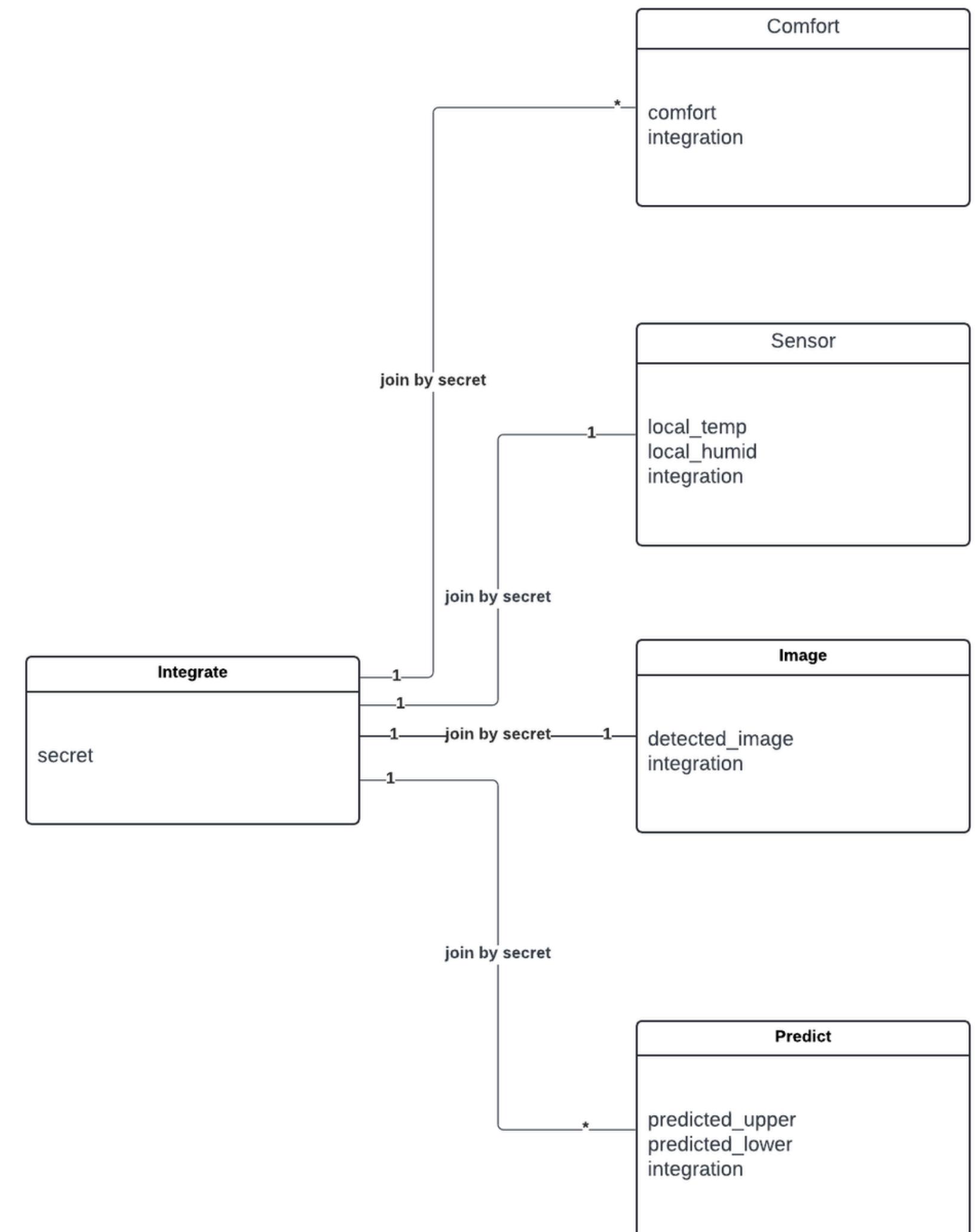
# DATABASE SCHEMA

## For Storing Data

- Comfort
- Sensor
- Image
- Predict

## For Joining Data

- Integrate



## DATA SHARING API

- Predict
- Sensor
- Comfort
- Integrate

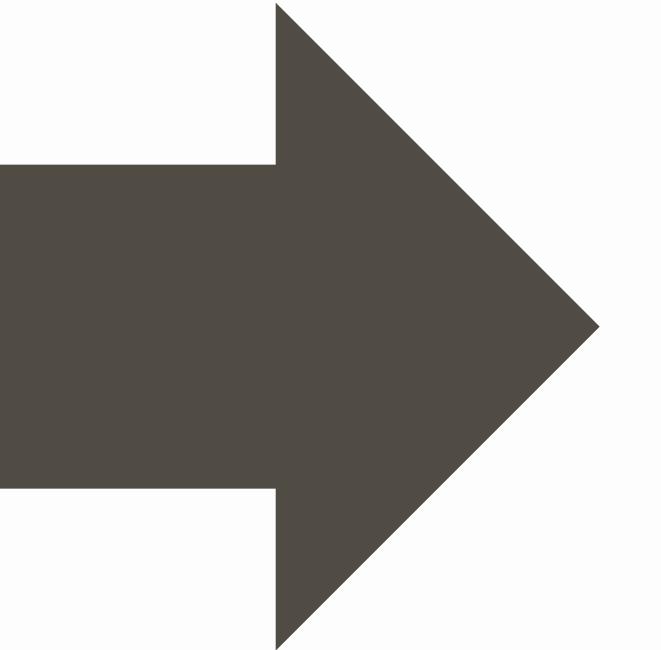


# DATA SHARING API

- Predict
- Sensor
- Comfort
- Integrate
- avg-comfort-level
- all-comfort-level-distribution
- one-comfort-level-distribution
- all-comfort-level-details
- one-comfort-level-details
- all-label-counts
- one-label-counts



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    "data": {
        "avg_comfort_level": 5.25,
        "comfort_level_distribution": [
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                "comfort": "4",
                "count": 7
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            {
                "comfort": "5",
                "count": 7
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            {
                "comfort": "6",
                "count": 2
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            "4": {
                "count": 7,
                "avg_temp": 252.0,
                "upper_labels": {
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                    "avg_temp": 72.0,
                    "avg_humid": 385.0,
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                    "lower_labels": {
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                        "null": 2
                    }
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                "lower_labels": {
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                }
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            "short sleeve outwear": 3,
            "vest": 3,
            "short sleeve dress": 3,
            "short sleeve top": 3,
            "trousers": 21,
            "shorts": 3
        }
    }
}
```



# DEMONSTRATION

# MEMBERS

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