

Nidhi Arora  
Data Fellow  
Galvanize 2020



# FLAREDOWN

## Decoding Your Chronic Illness

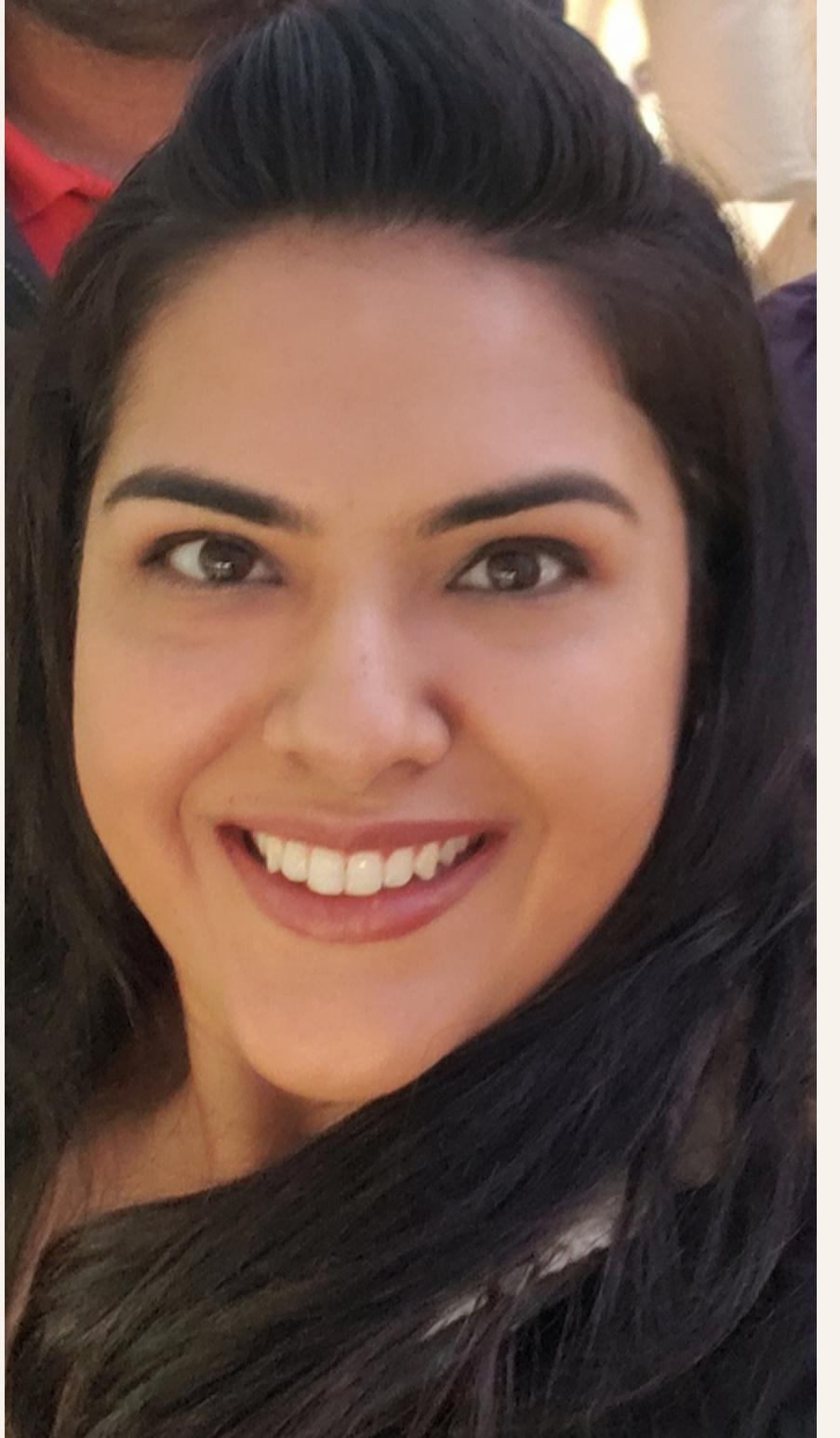
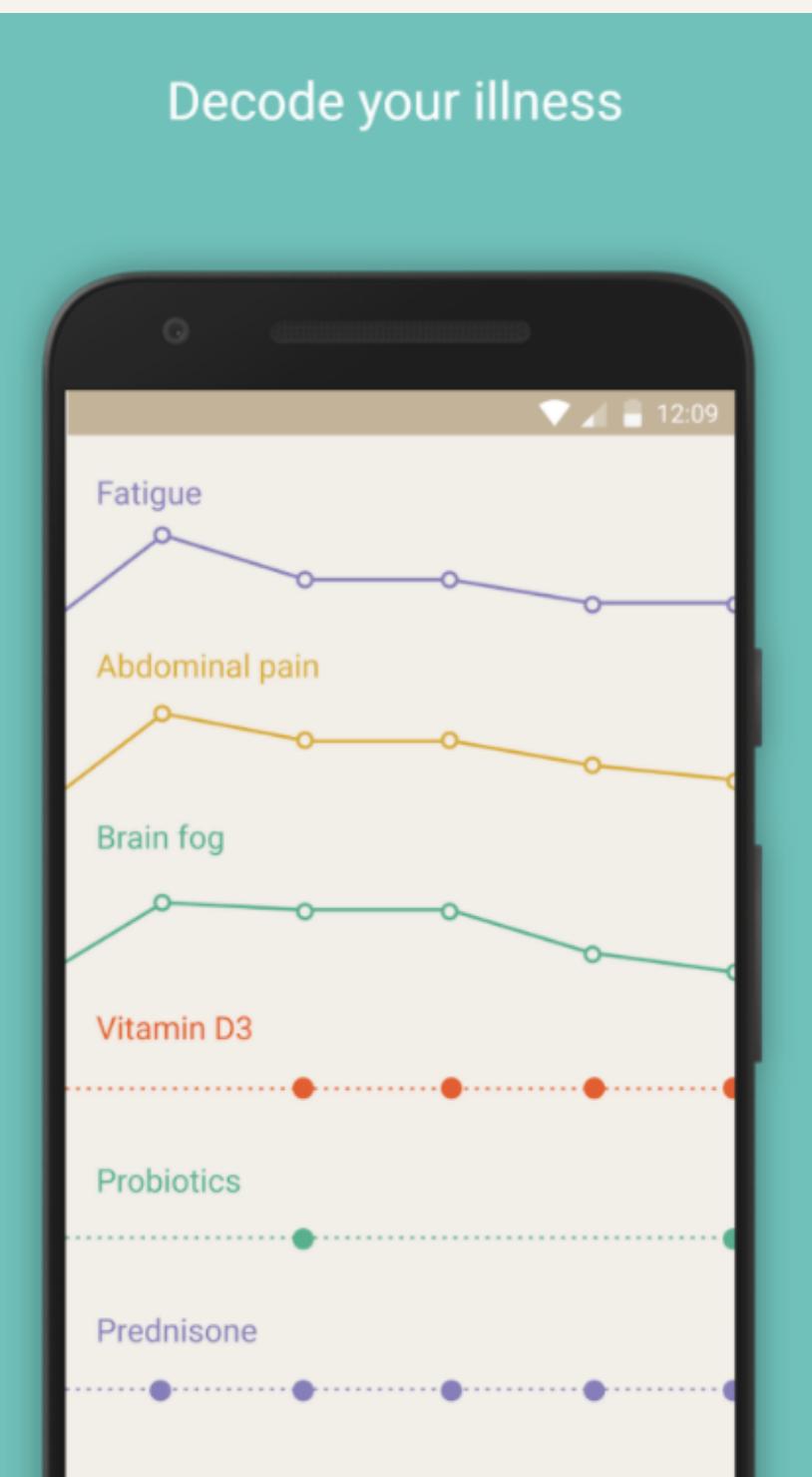
User-Generated Data Brought Full-Circle



# About Me

Nidhi Arora

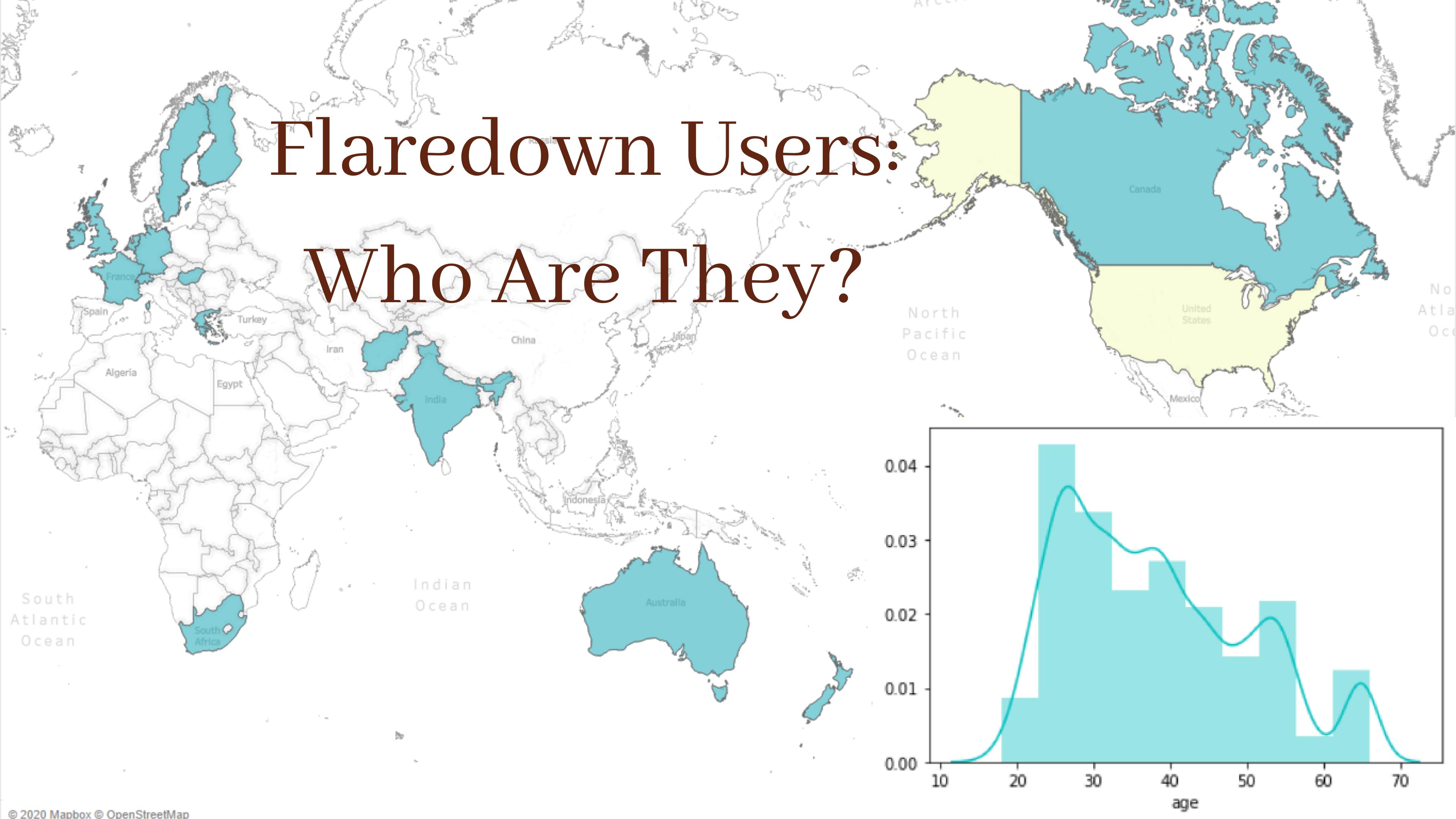
Data Analyst with a background in  
Environmental Science, Finance and HR



## About Flaredown

Created by Logan Merriam to provide people  
with a way to track their chronic illnesses

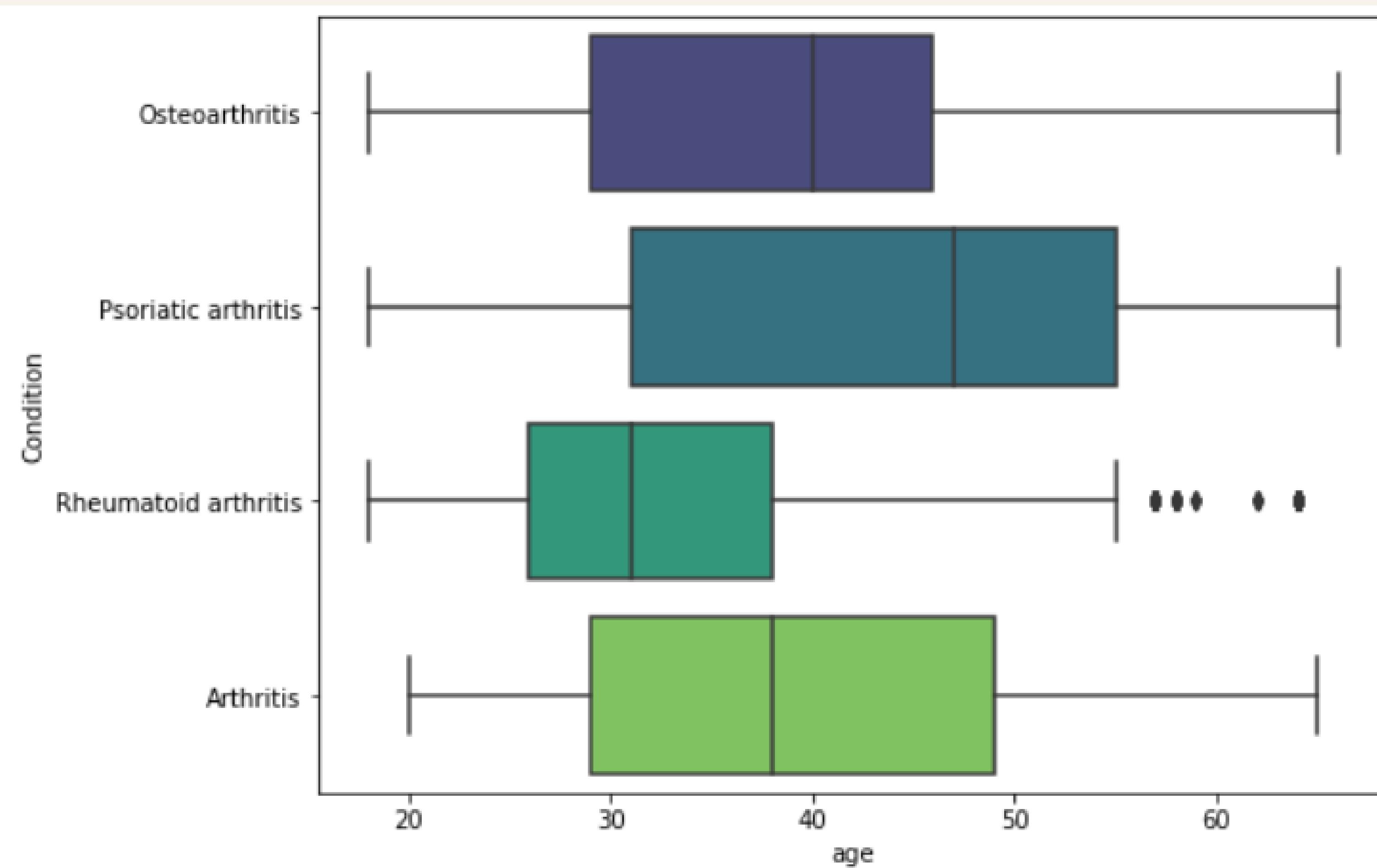
# Flaredown Users: Who Are They?



# 2,690 Unique Conditions Reported By Flaredown Users



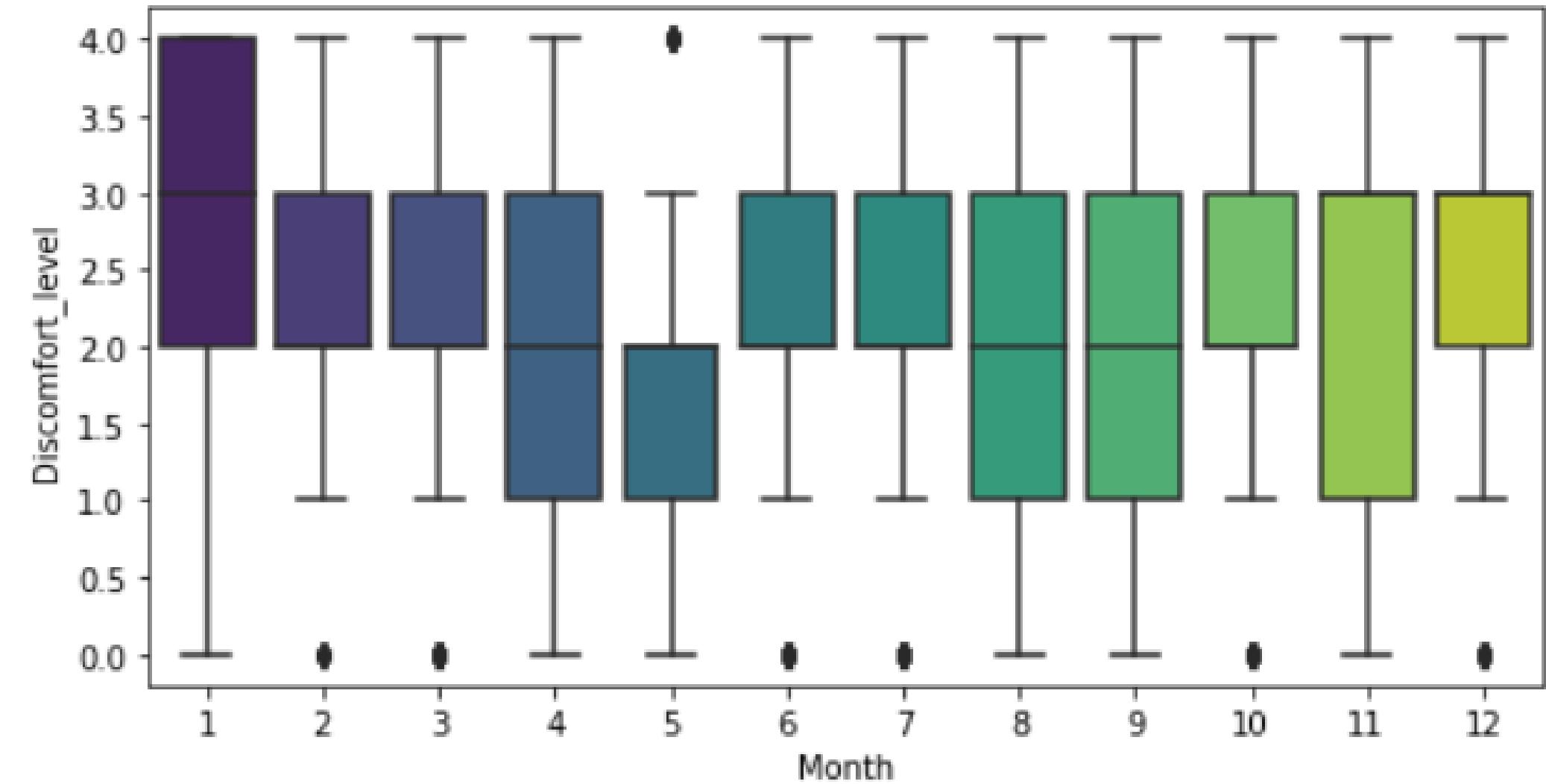
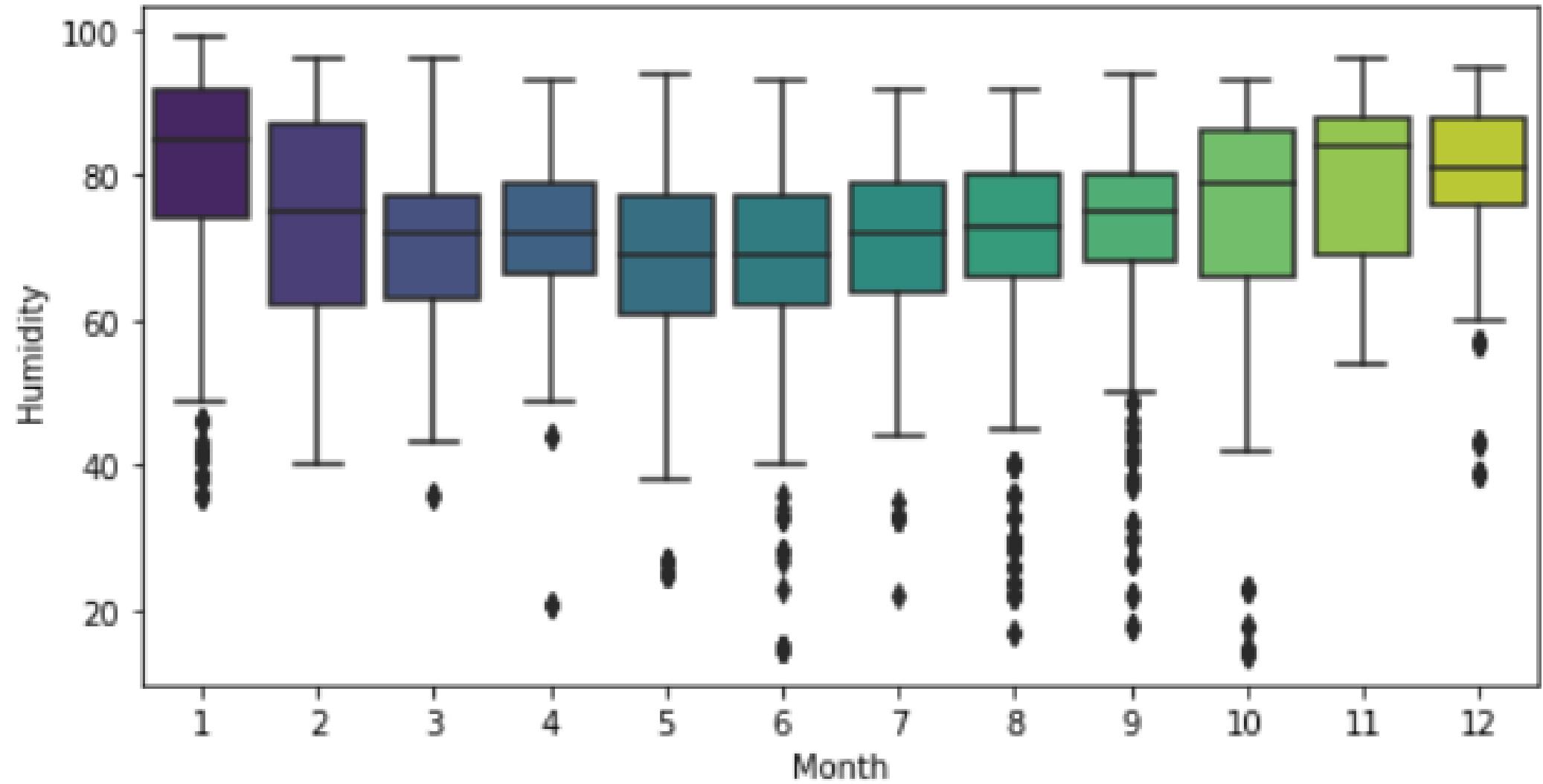
# Arthritis Types and Age



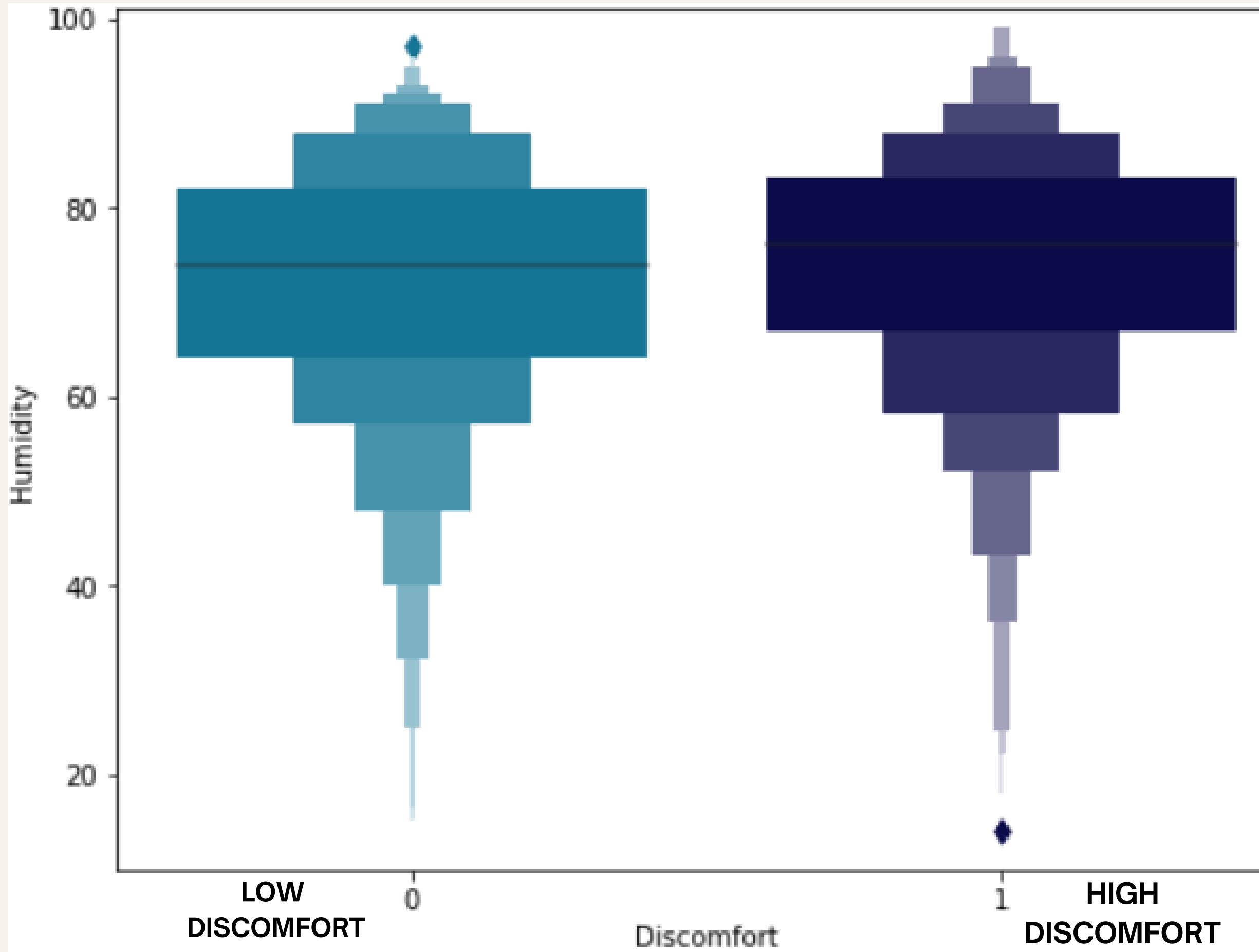
# Does Humidity Trigger Arthritis?

January stands out

Weather data is generated by the Flaredown app, based on user location. The higher humidity levels coincide with the highest levels of discomfort being reported by users.



# Can We Predict When Discomfort Will be High?

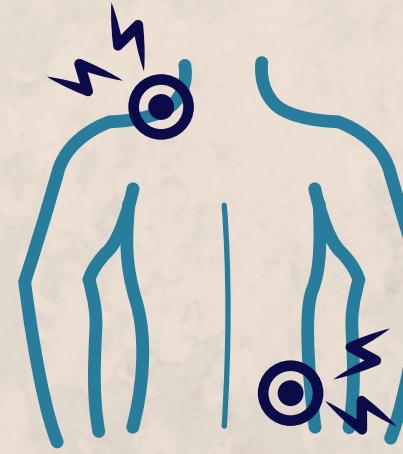


# Moving Forward With Logistic Regression: Building a Logit Model To Make Predictions

TEST 1



+



60%  
Accuracy

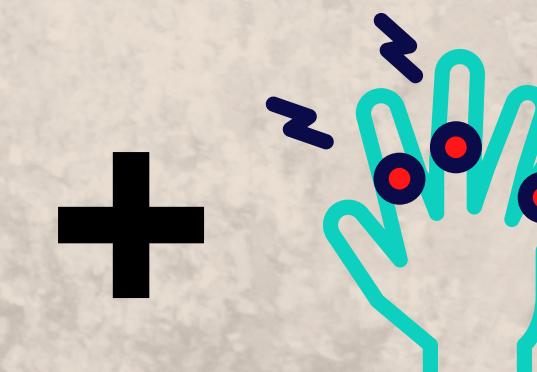
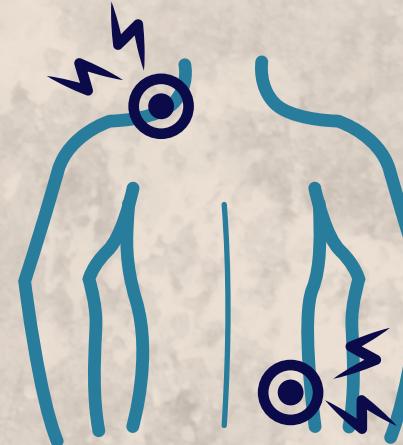
Humidity

Discomfort

TEST 2



+



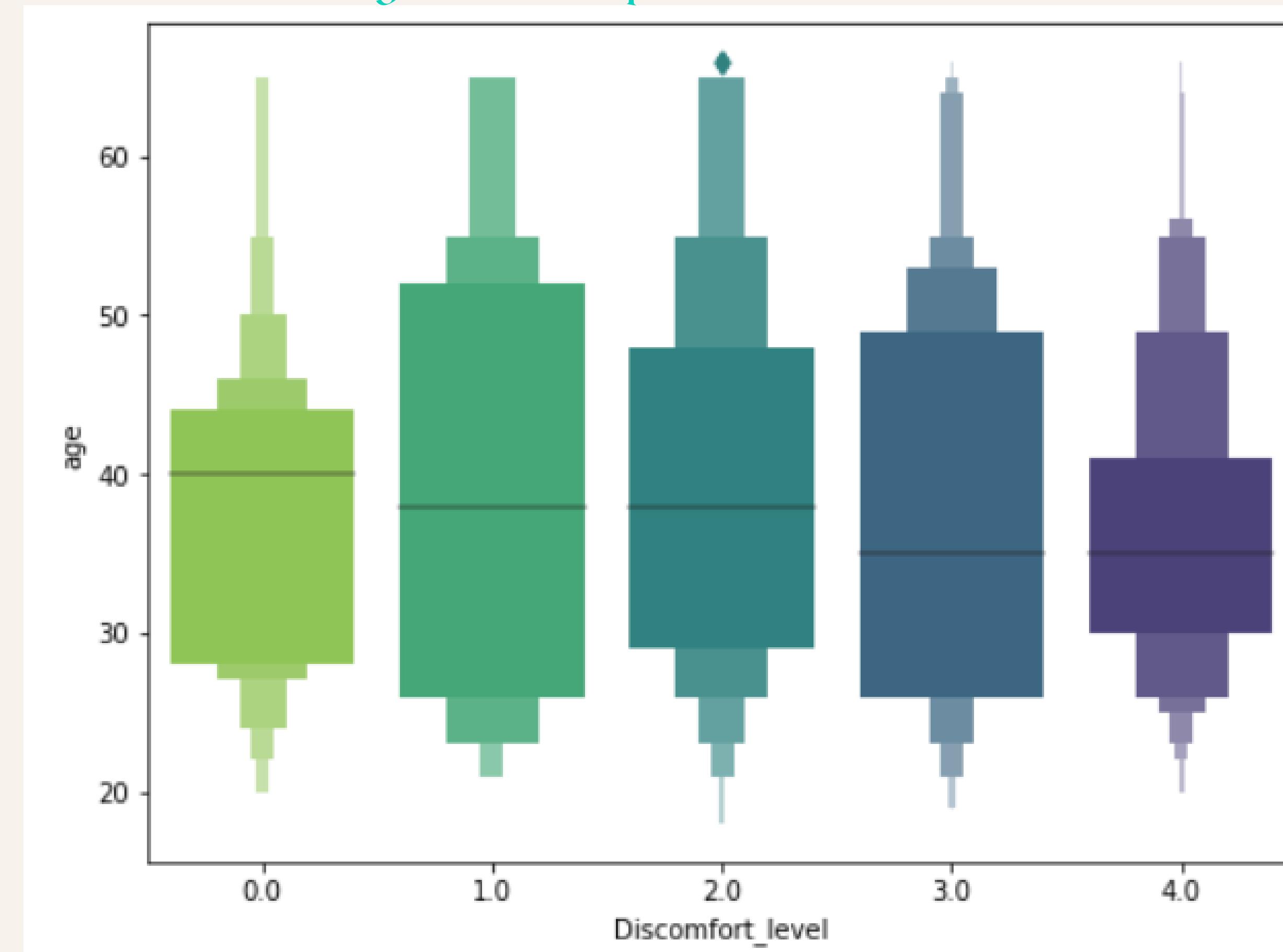
=

55%  
Accuracy

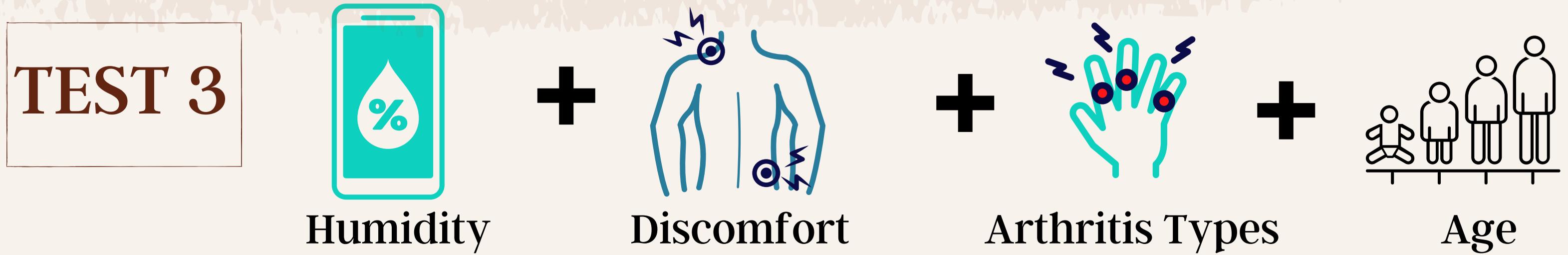
Arthritis Types

# Age is Just a Number...or is it?

Younger users report more discomfort



# Age Is The Golden Variable



58% Accuracy

# Conclusions and Next Steps

## What Does This Dataset Tell Us?

- Our data indicates that humidity may trigger arthritis, but age, and the type of arthritis someone has are also factors.
- The data seems skewed toward younger users in the Southern Hemisphere, judging by the demographic breakdowns of this dataset.
- January has the highest values for humidity levels and discomfort

## What Are Our Next Steps?

- Reach out to brands that sell arthritis relief products during times of high discomfort.
- Start including content, based on data findings on the Flaredown app to keep users more engaged.
- Use updated data for further analysis
- Use barometric pressure to increase model accuracy

# Let's Talk!

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