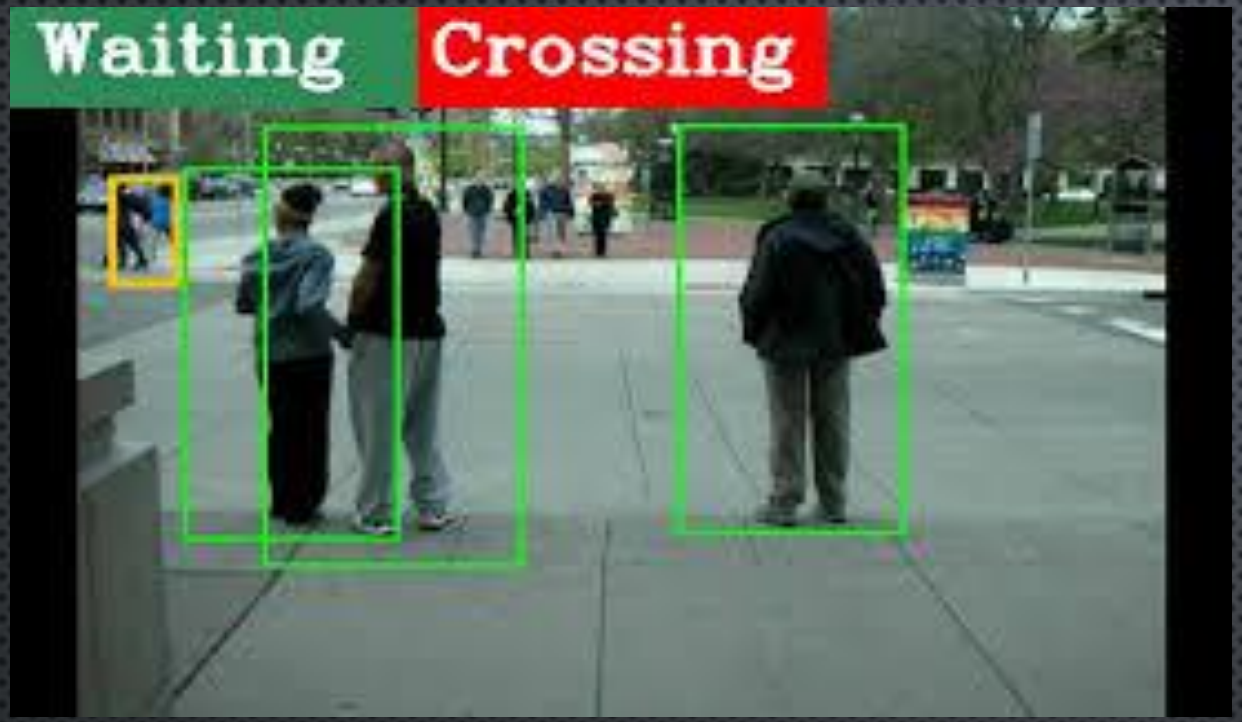
# BLIMEY

**AKSHAT TIWARI & YASH SAINI**





# VISION

- FORMULATING A MACHINE LEARNING MODEL ARCHITECTURE USING CNN FOR HUMAN ACTIVITY RECOGNITION
- MAKING THE MODEL USER FRIENDLY
- INCORPORATING IT WITH THE RESOURCES AVAILABLE FOR THE PHYSICALLY CHALLENGED

# OBJECTIVES

**Focus**

Get Required Dataset

Write Model

Train Model

**Data Analysis**

Collect Data

Recognize Activity

Process it into speech

**Ensure**

Provide Voice Output

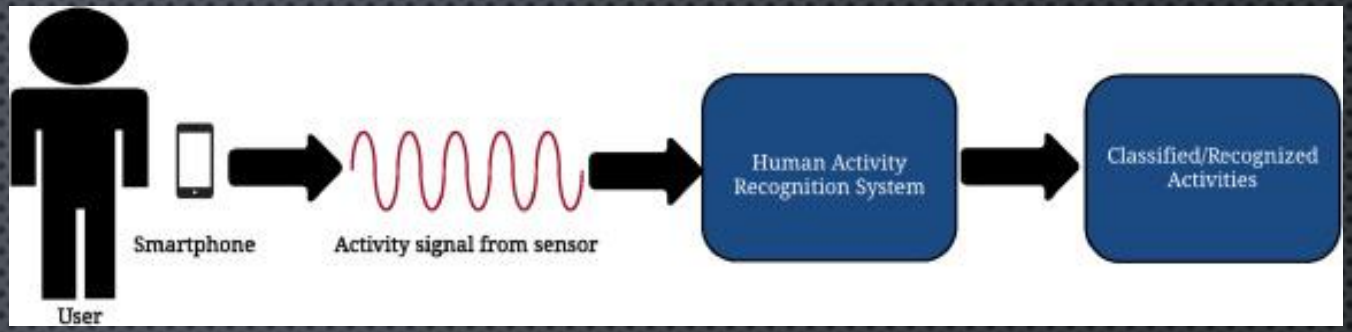
Maintain high accuracy

Real Time Updates

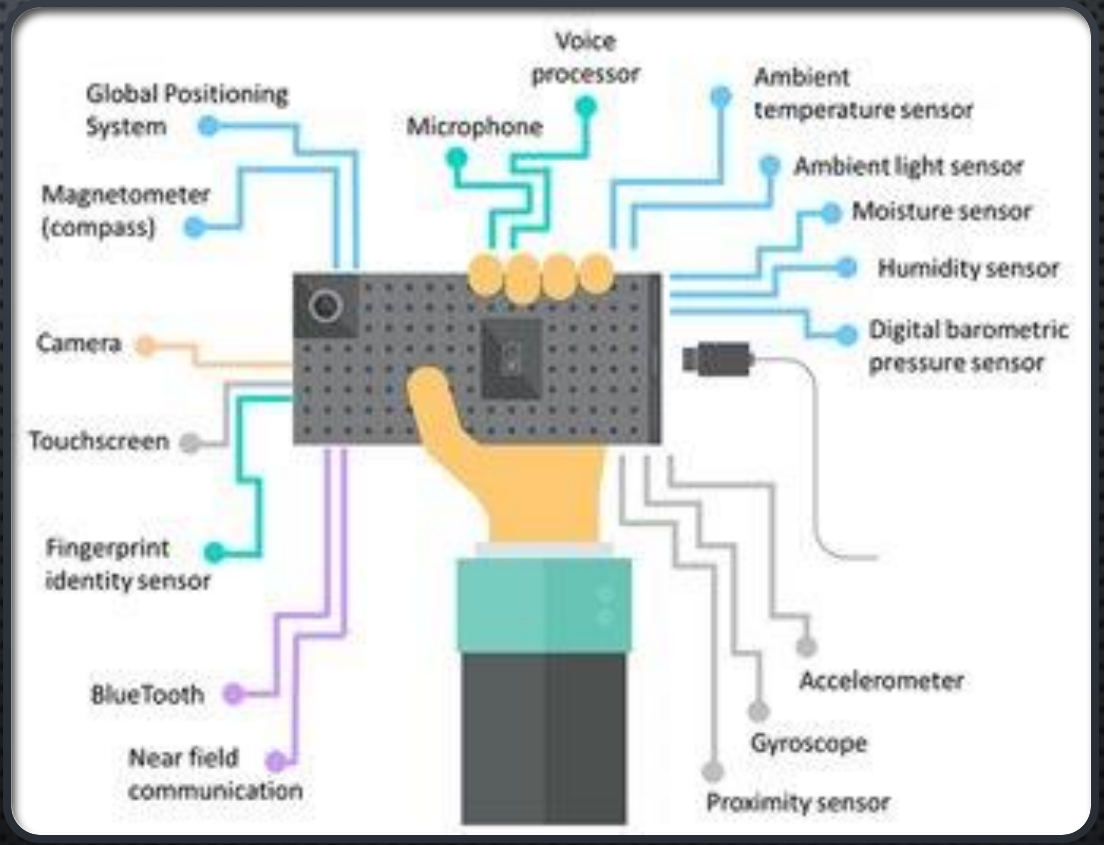
# INNOVATIVE APPROACH

DEVISING THE MODEL TO BE FEASIBLE FOR THE PHYSICALLY CHALLENGED AND TRACK DAY TO DAY HUMAN ACTIVITIES IN A STRUCTURED APPROACH

# MOTIVATION




- MOST OF THE SMARTWATCHES / FITNESS BANDS ONLY HAVE A 3 AXIS ACCELEROMETER TO DETECT HUMAN ACTIVITY, WHICH DOES NOT REVEAL ACCURATE RESULTS.
- IN THIS PROJECT WE ARE USING DATA FROM 4 DIFFERENT SENSORS. TO PREDICT THE ACTIVITY MORE ACCURATELY.
  - 3 AXIS ACCELEROMETER
  - LINEAR ACCELEROMETER
  - GYROSCOPE
  - MAGNETOMETER
- APPROVING THE DEVICE TO BE USER FRIENDLY.

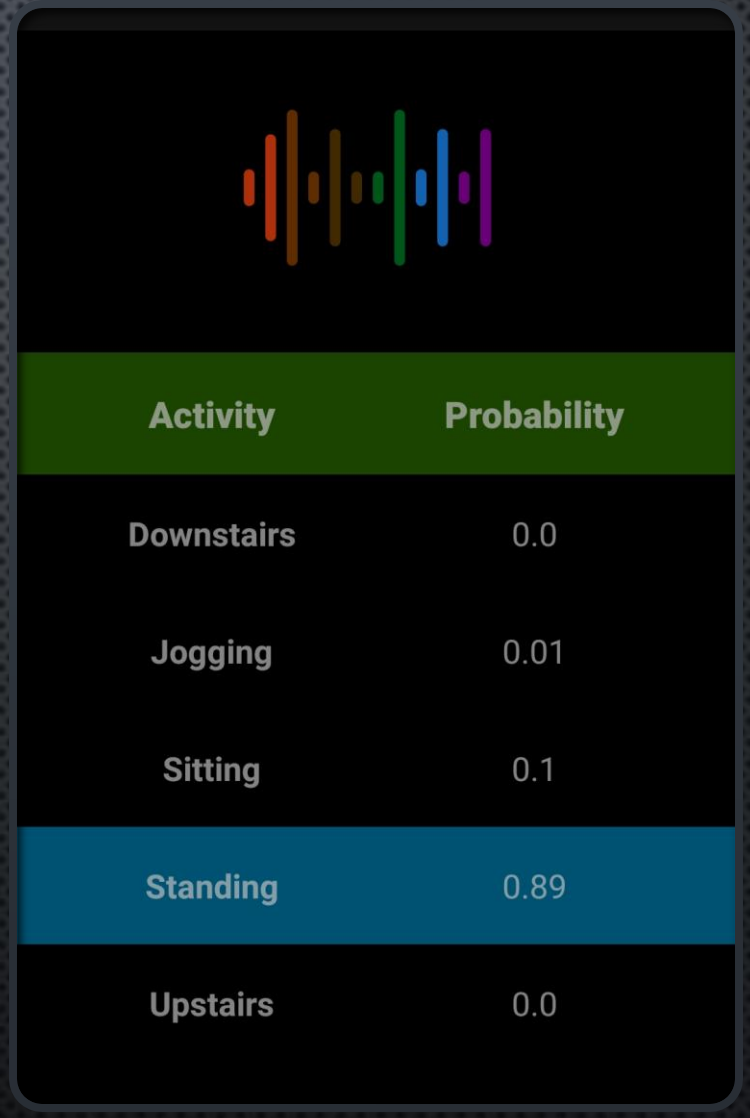


# KNOWLEDGE BASE USED

- Google Colaboratory
- Android Studio
- TensorFlow library
- Play store
- Mobile Sensors
- Database structuring

# BLIMEY APPLICATION (LIVE PROJECT)

- Recognize 7 Human Activities
  - ✓ Biking
  - ✓ Downstairs
  - ✓ Jogging
  - ✓ Sitting
  - ✓ Standing
  - ✓ Upstairs
  - ✓ Walking



# CONCLUSION

- We learned how we could use our knowledge and resources in developing something that could be useful for extracting data to analyze human behavior and provide its relevant access to all types of users in a comforting manner
- Research paper referred by sir - Fast Collective Activity Recognition Under Weak Supervision
- GitHub Project Link
- Android App Link


# THANKS

*MANAGED & DESIGNED BY :*

**AKSHAT TIWARI**

**YASH SAINI**