

# **SPEECH BASED EMOTION PREDICTION**

## **TEAM MEMBERS**

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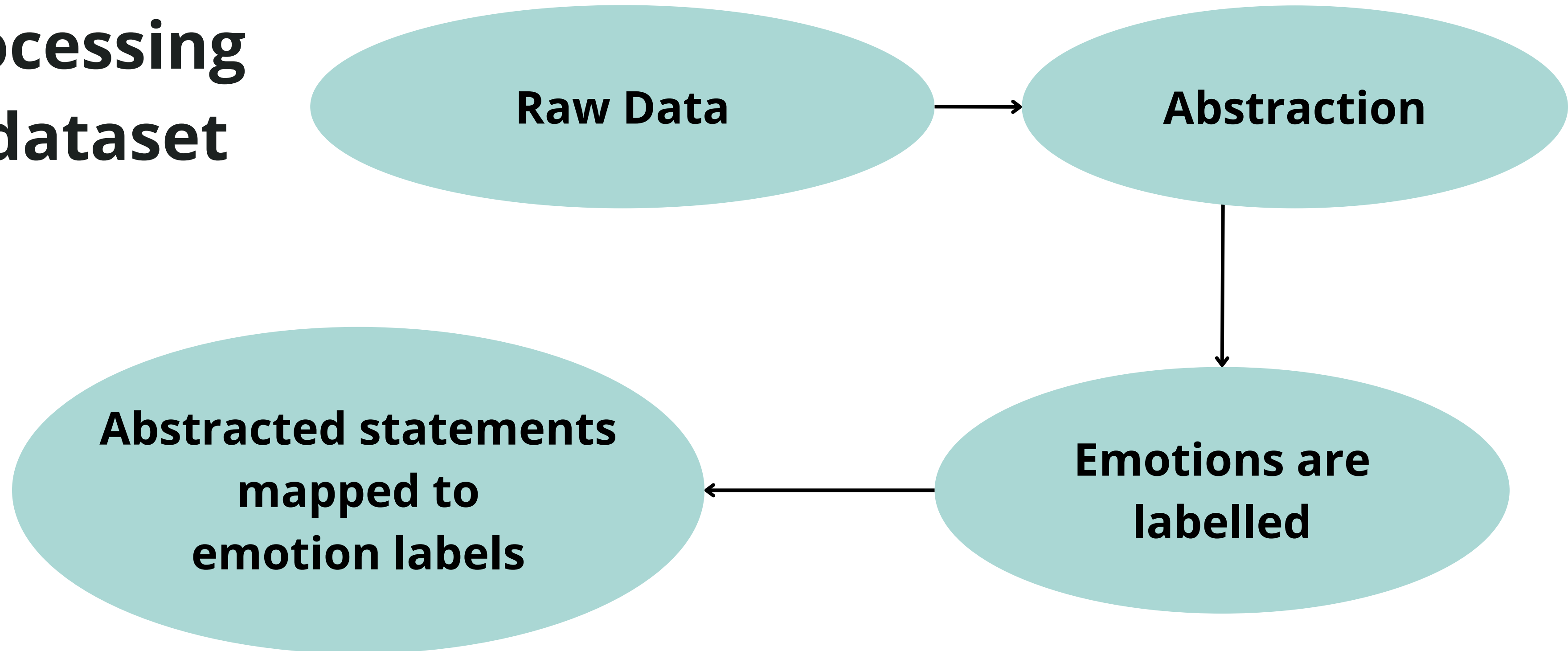
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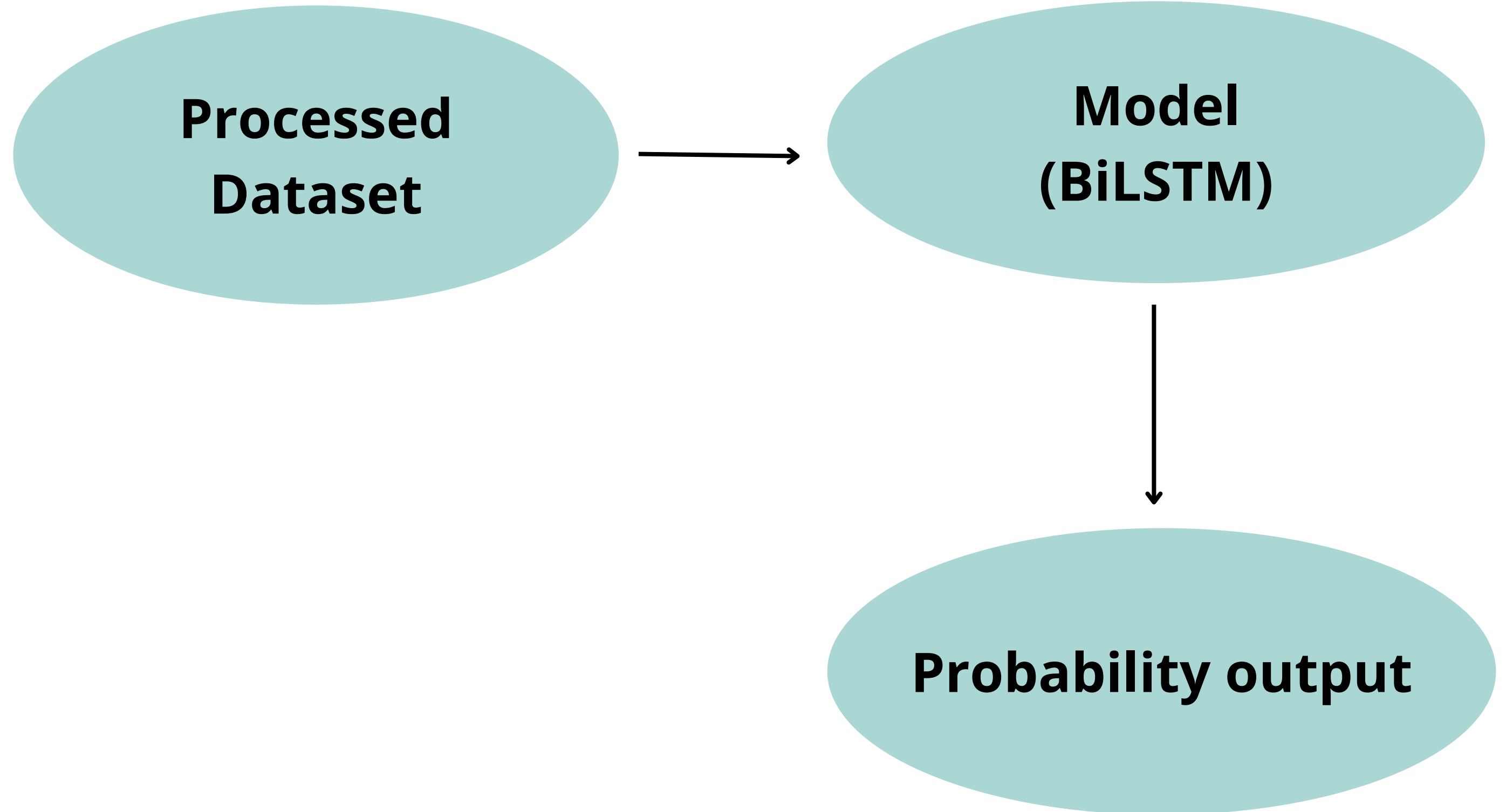
# Workflow for Text dataset

## Processing of dataset



# Workflow for text model

**Model**



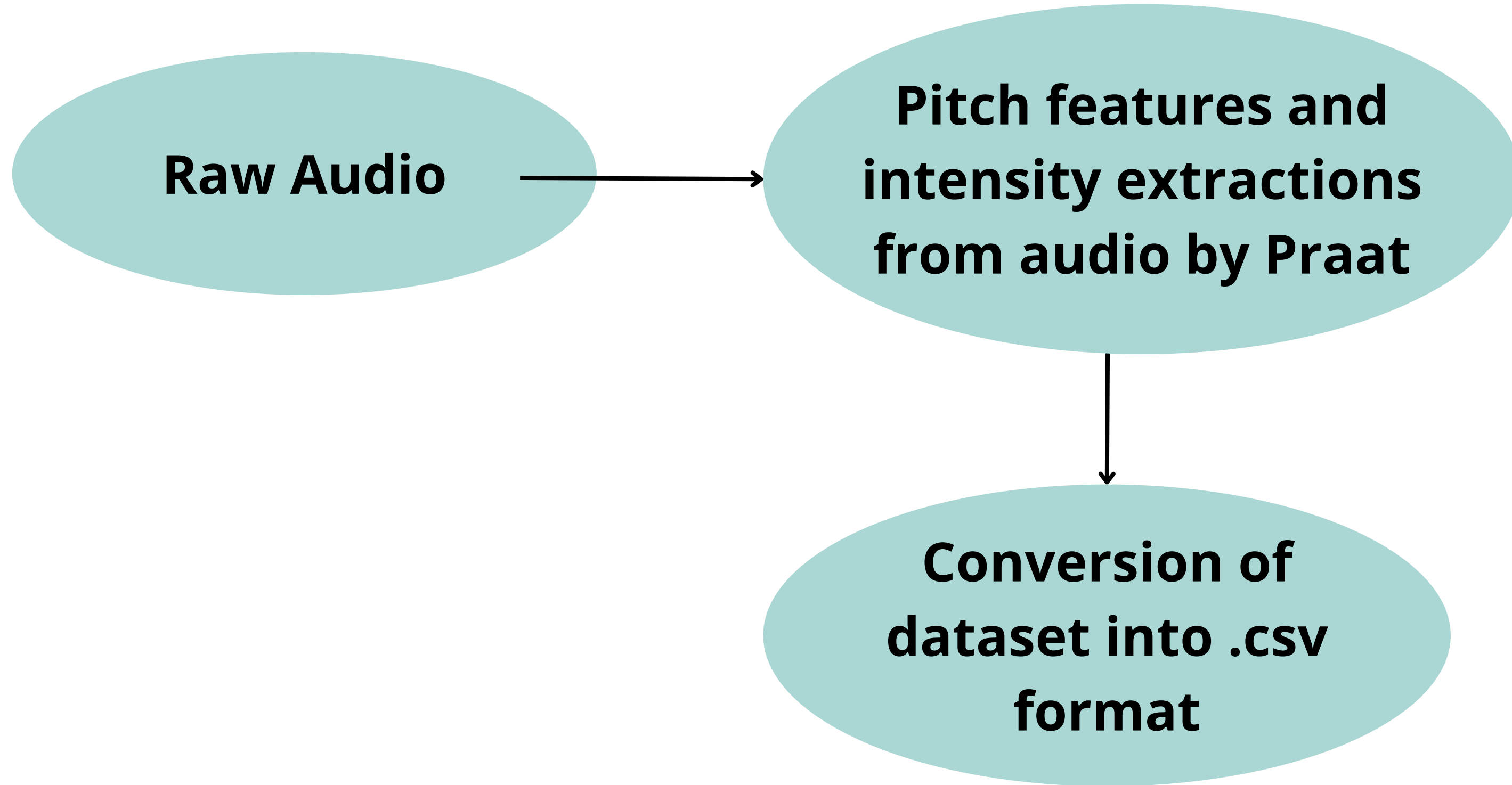
**Processed  
Dataset**

**Model  
(BiLSTM)**

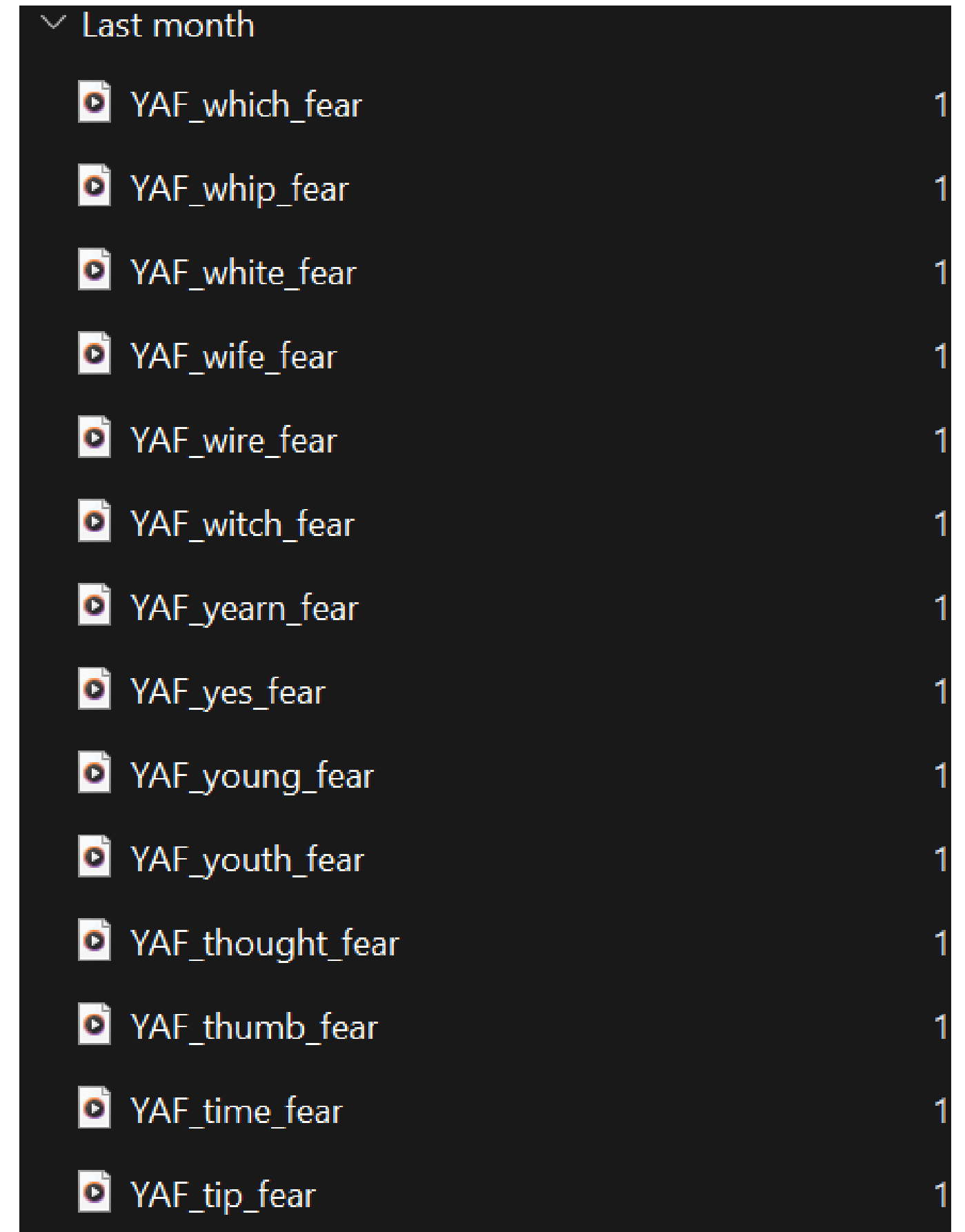
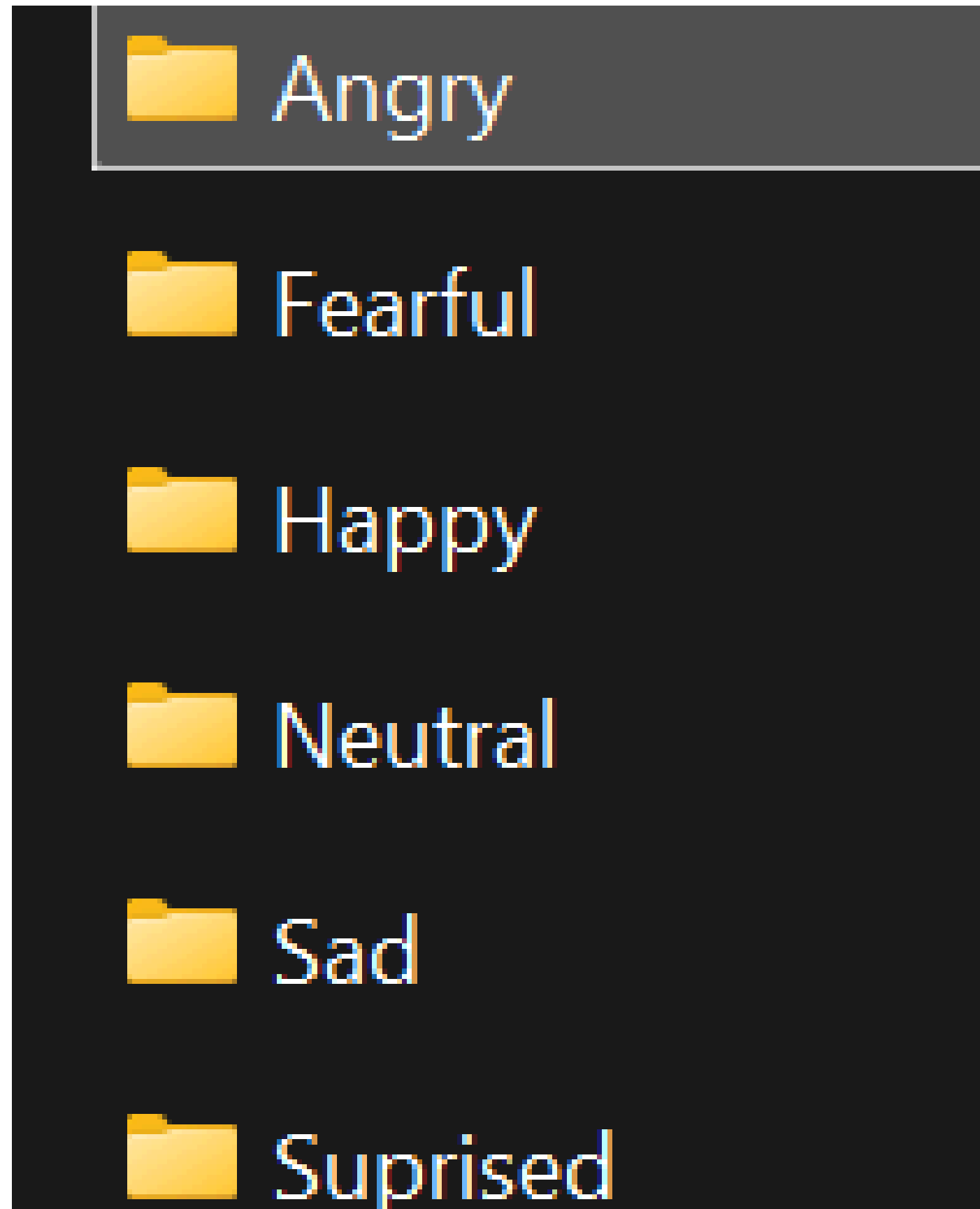
**Probability output**

# Workflow for Audio Dataset

**Creation of  
dataset**



# RAW FORM



# PROCESSED FORM

	A	B	C	D	E	F	G	H	I
1	Mean Pitch	Median Pitch	Min Pitch	Max Pitch	Pitch Range	Variance	Slope	Intensity	Emotion
2	162.668574	151.9171479	114.3465	265.0279	150.68141	1645.125	-0.56927	14.12653	1
3	253.932128	260.2239812	101.5345	460.3678	358.83329	4624.478	-1.75576	-22.7632	1
4	114.550788	101.0155734	82.16788	550.9076	468.73969	4774.557	-0.56606	27.19691	1
5	272.327763	264.544137	102.7405	376.3553	273.61486	3550.782	-1.15316	-20.8078	1
6	208.088551	173.3325905	114.5805	535.5296	420.94902	8103.378	0.321407	31.10632	1

# Workflow for Audio Input

**Model**

**Created Dataset**



**Classification  
model (XGBoost)**



**Probability of  
output**

Enter the following numerical feature values:

Mean Pitch: 315

Median Pitch: 250

Min Pitch: 179

Max Pitch: 592

Pitch Range: 410

Variance: 13567

Slope: -1.1

Intensity: 58.4

Predicted Emotion Probabilities:

Emotion 0: 0.0005

Emotion 1: 0.0047

Emotion 2: 0.0006

Emotion 3: 0.9998

Emotion 4: 0.0010

Emotion 5: 0.0033



## FUTURE WORK:

- **Creating a model to assign the weights for prediction of emotion from text and audio**

