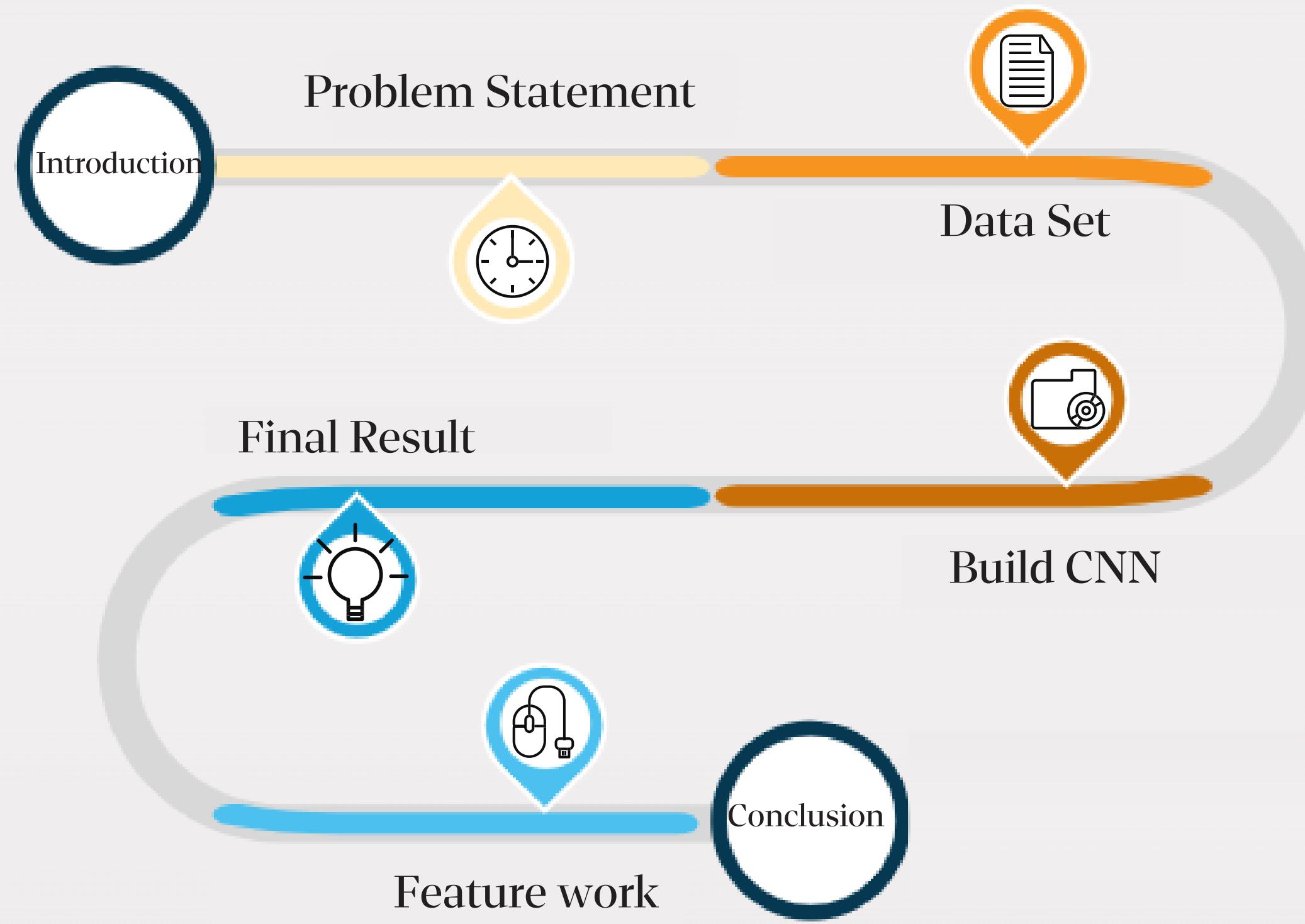


# **Customer Satisfaction Measurement**

Tamader AboAlhassan - Afrah Almoutiri - Moneera Alfulaij

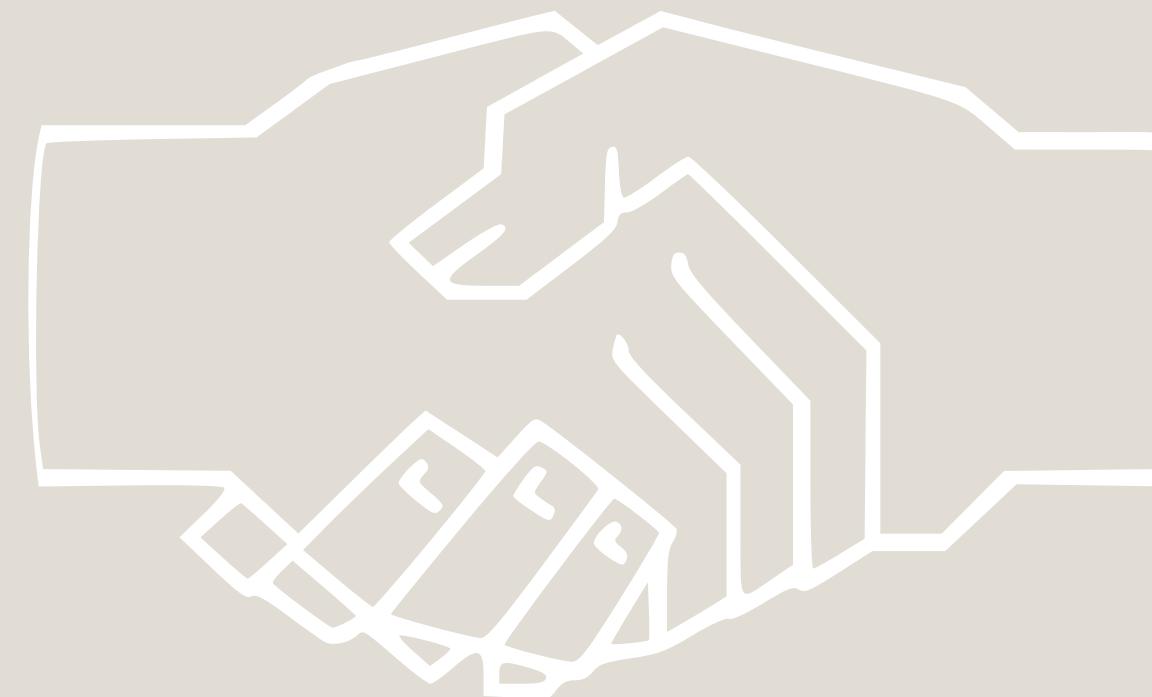
# Outline



# Introduction

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One of the many possible indications of customer satisfaction is facial expressions, hence, Saudi Airlines decided to look for someone capable of capturing and processing their customers' facial expressions.

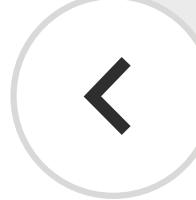
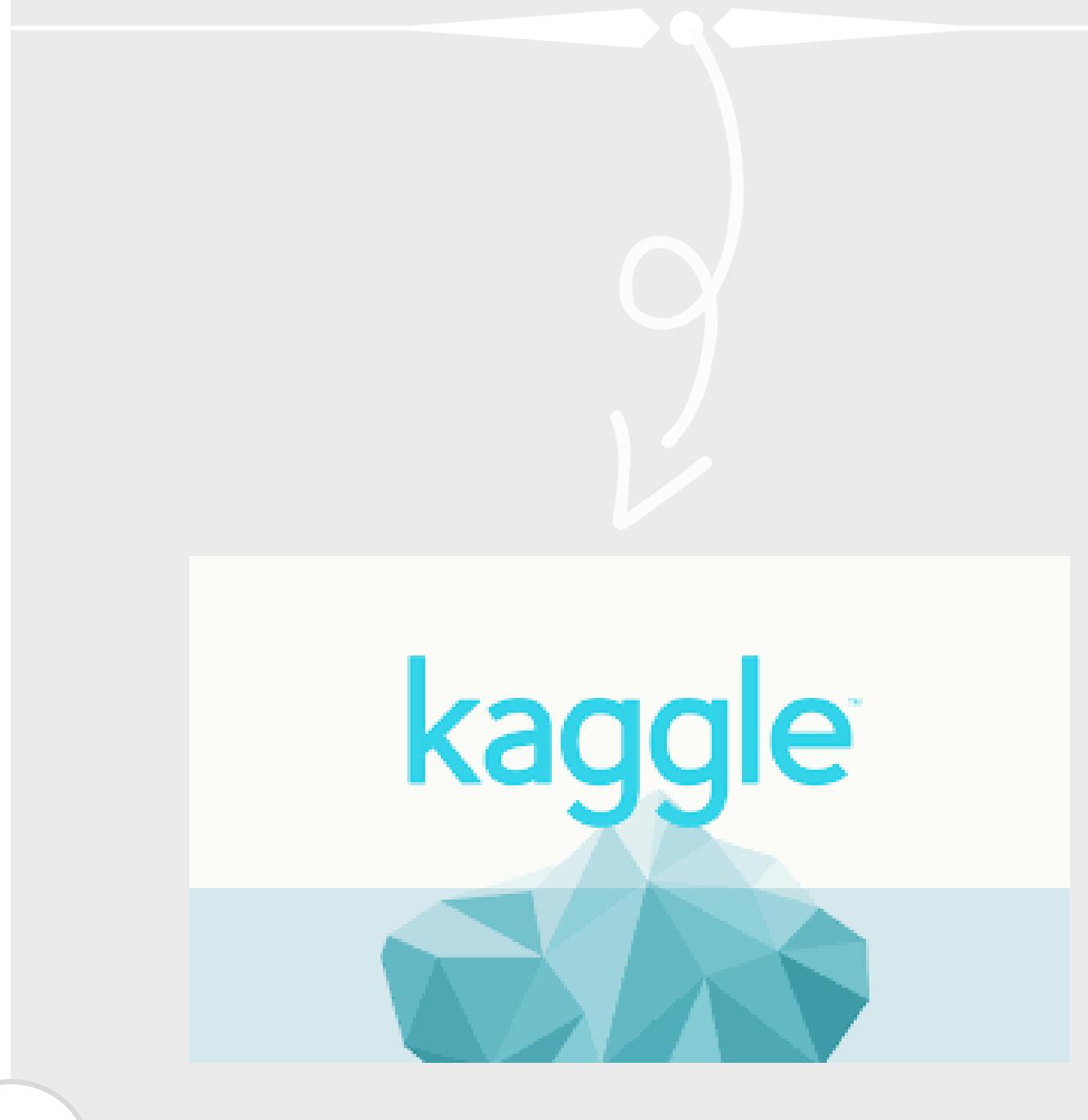


# Problem Statement



measure the satisfaction of customers so that it could use it as a performance indicator to assess the quality of its services

# Dataset



# Dataset categories

fear



sad



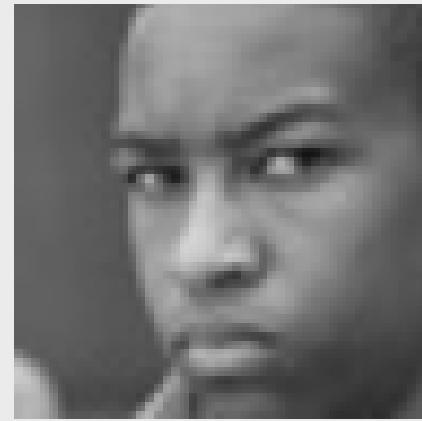
surprise



neutral



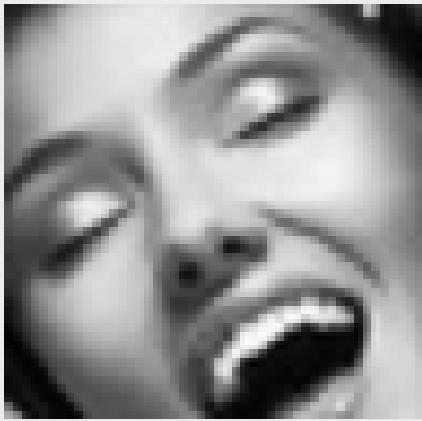
angry



disgust

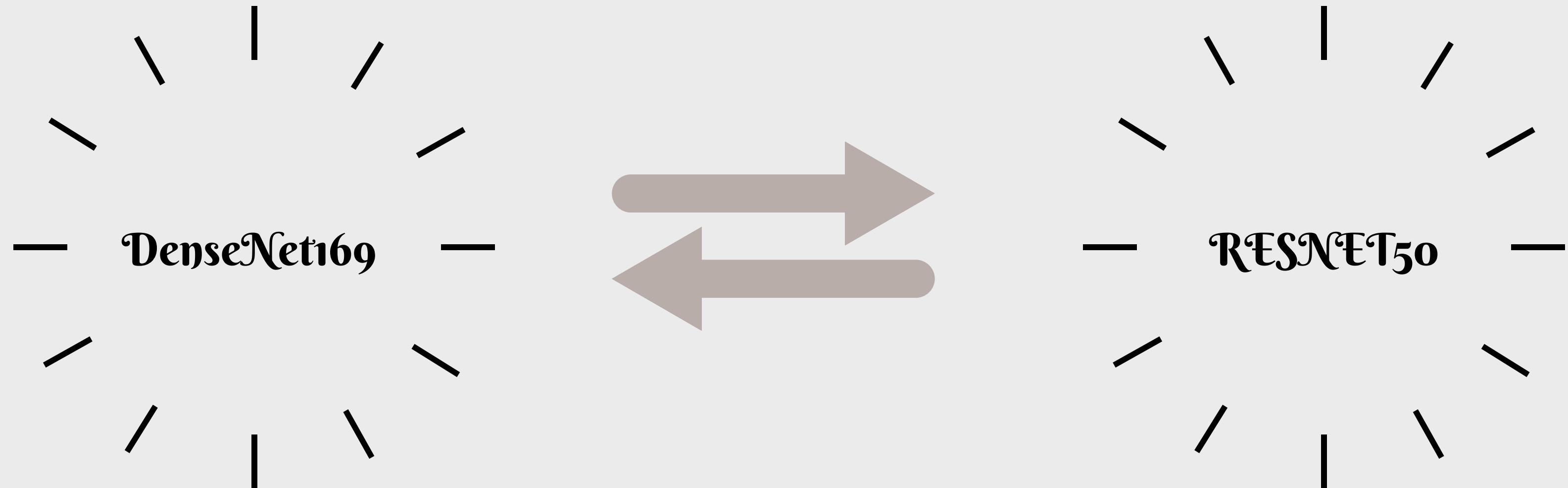


happy



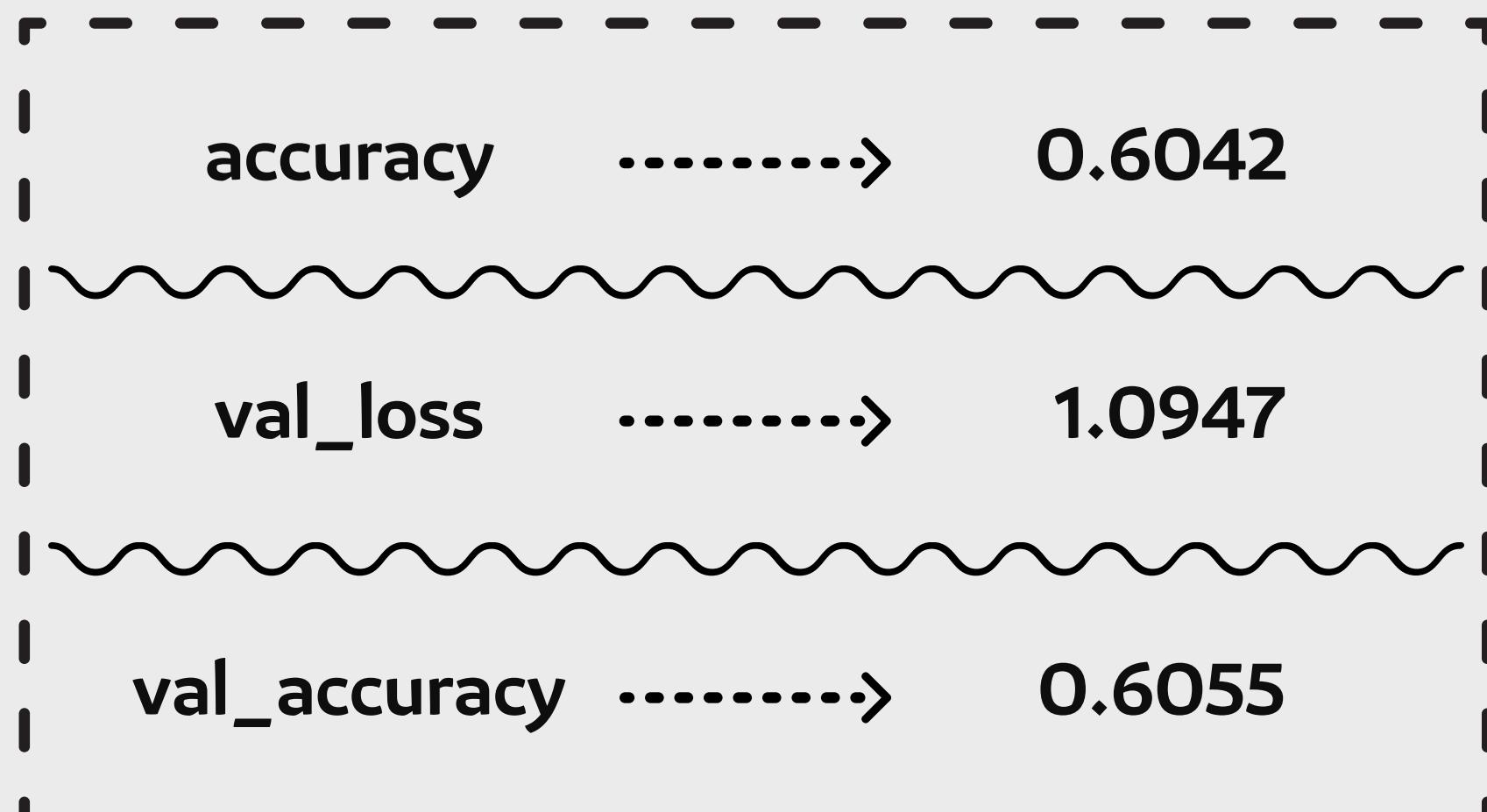
# Build The convolutional neural network CNN

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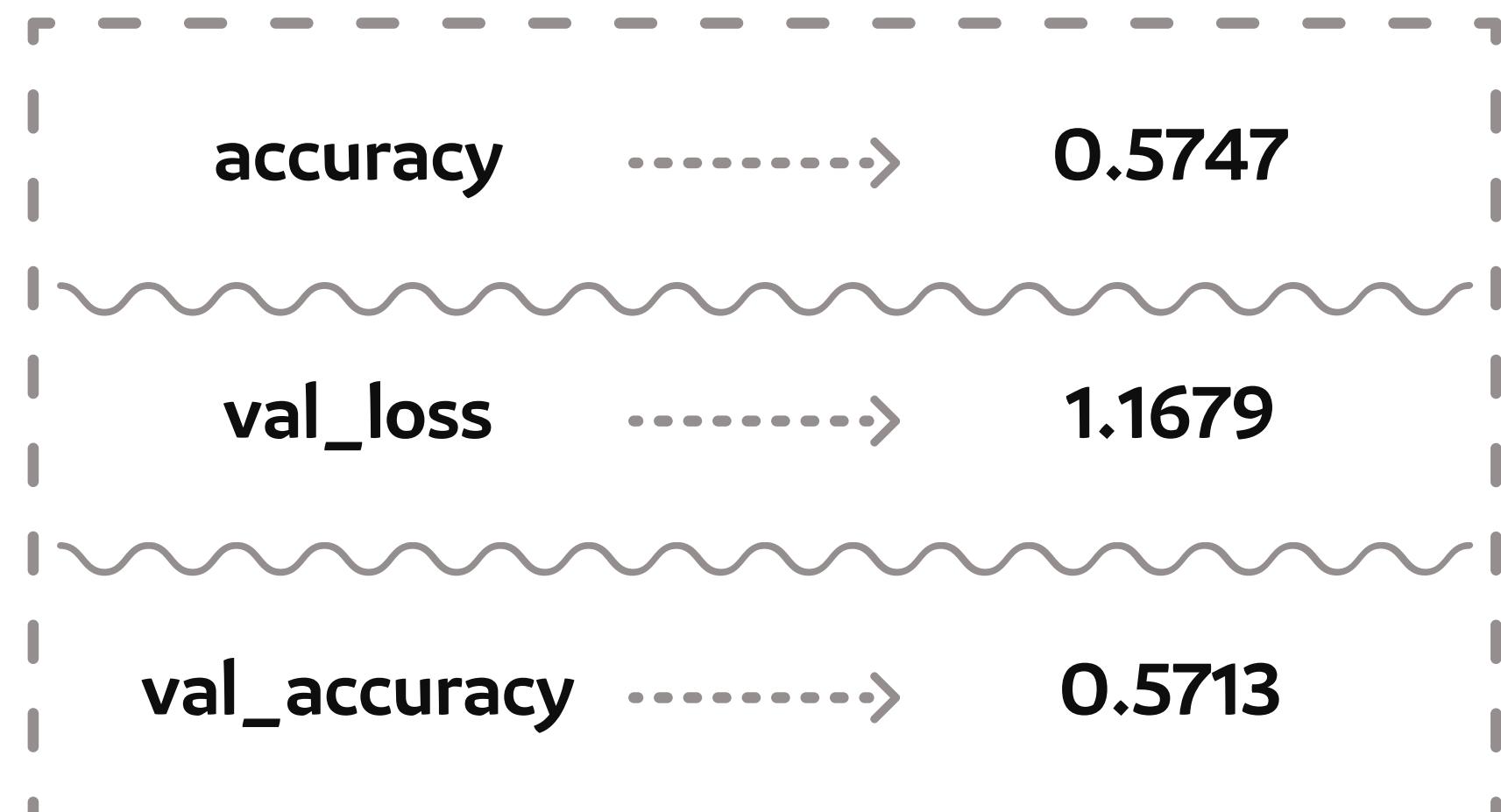


# DenseNet

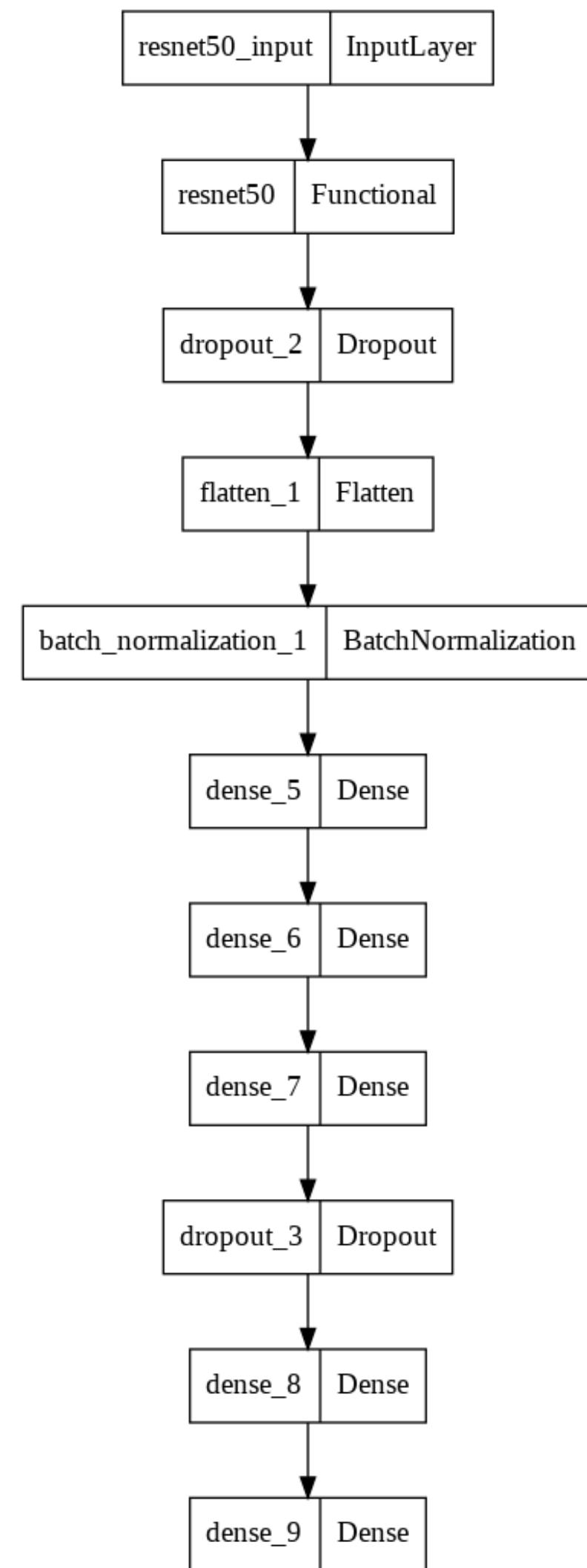
## DenseNet169 architecture



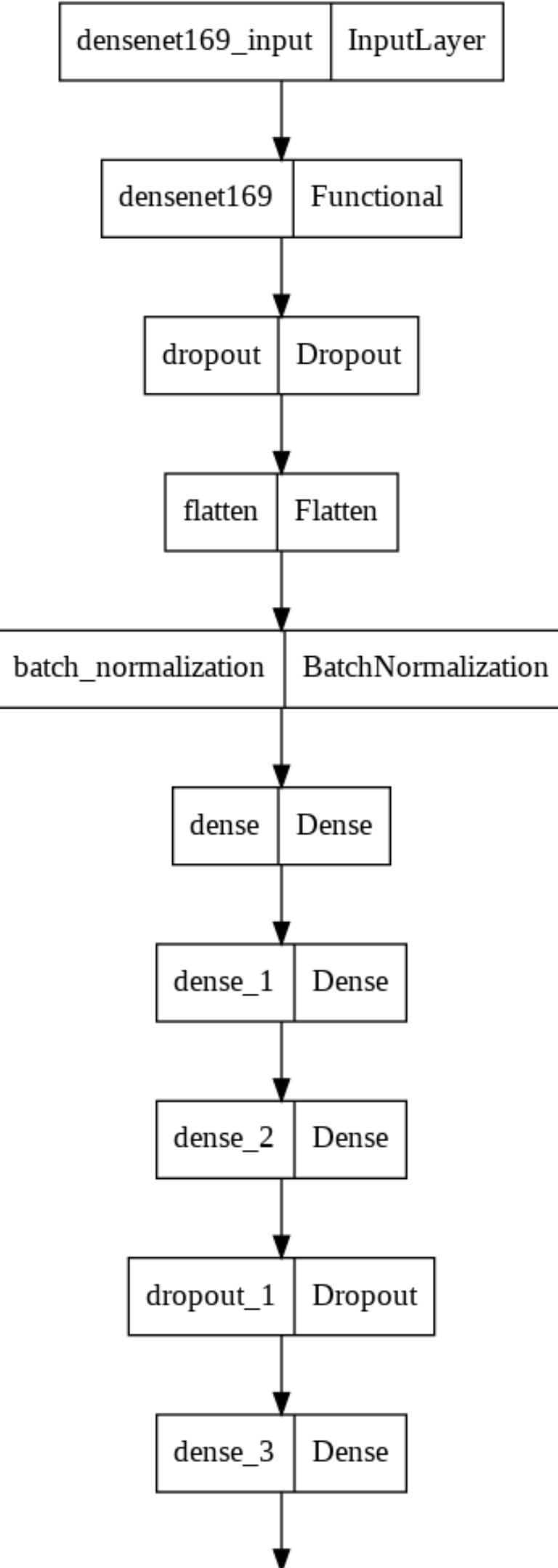
## RESNET50 architecture



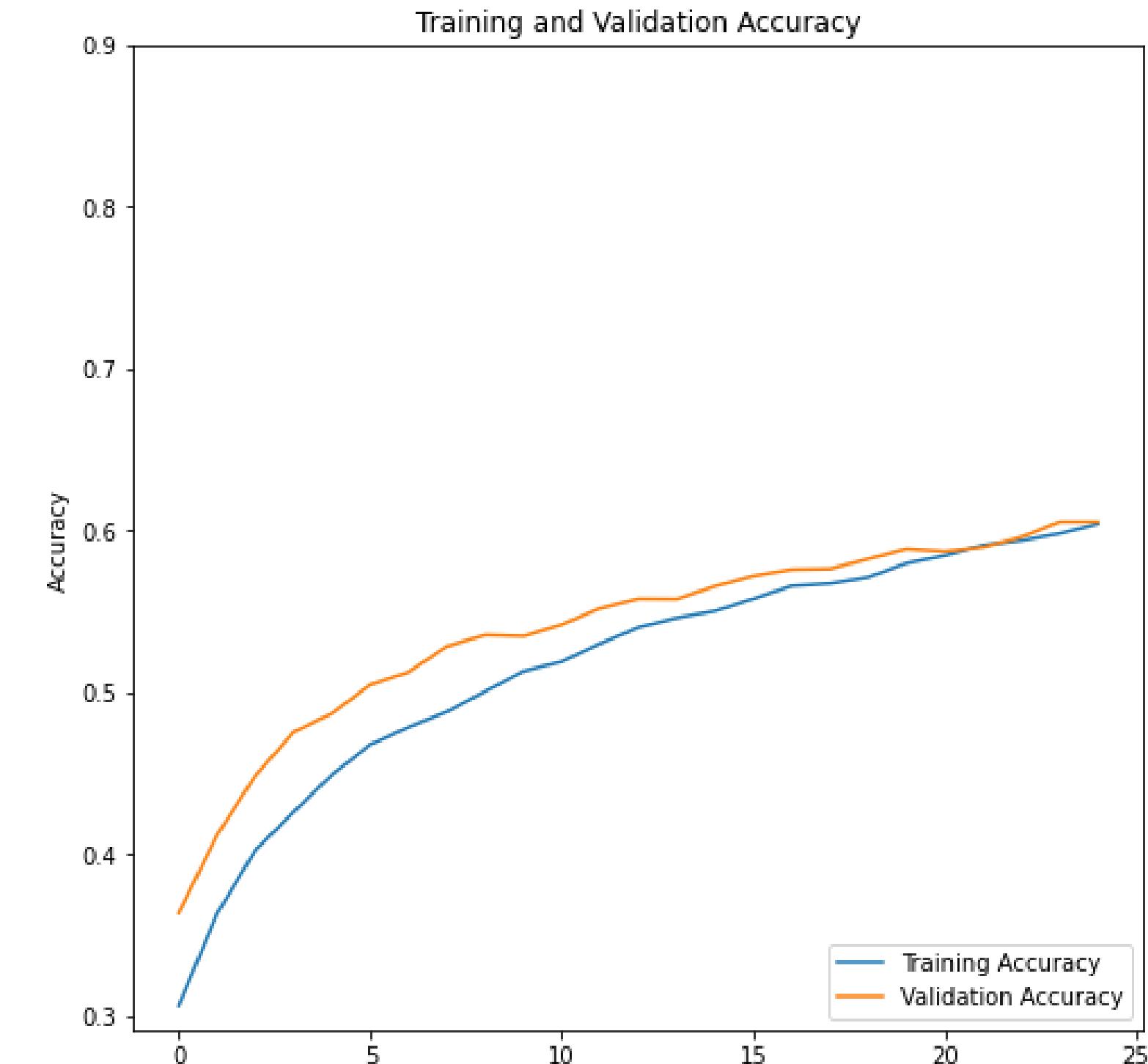
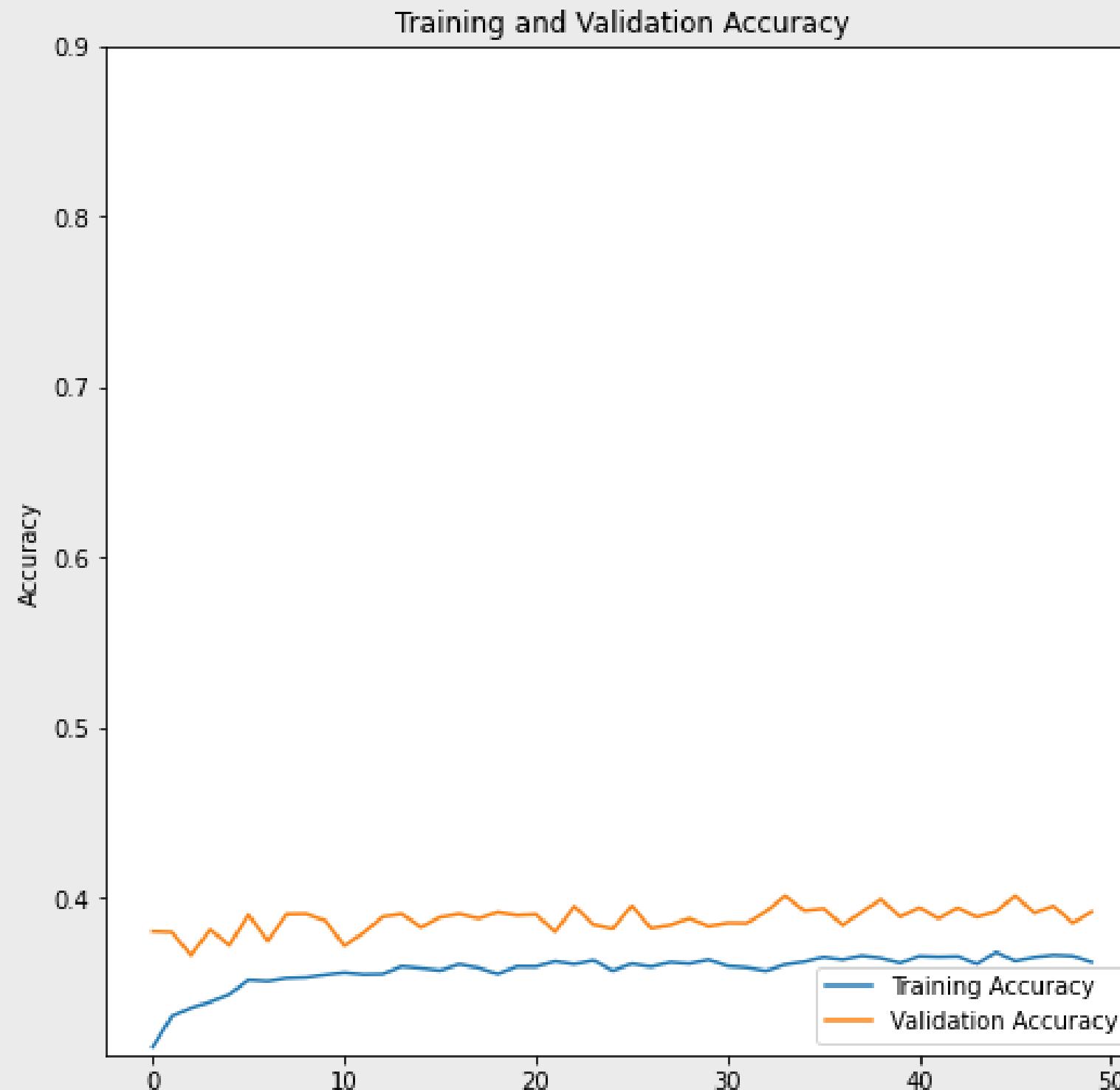
# RESNET50 architecture



# DenseNet169 architecture



# Model Accuracy



# Final Result

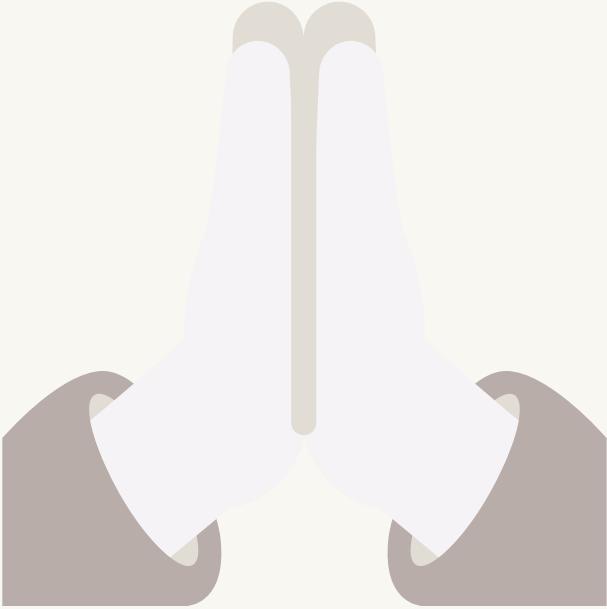


# Future work

- Use more Algorithm to INCREASe Accuracy such as (VGG19 , VGG19 and Inception V3)
- Add video emotion capturing alongside images to be more interactive
- Expand work by capturing body language and recognizing Emotion through it



# Thank you for listening



Prepared by: Tamader AboAlhassan , Afrah Almoutiri and Moneera Alfulaij