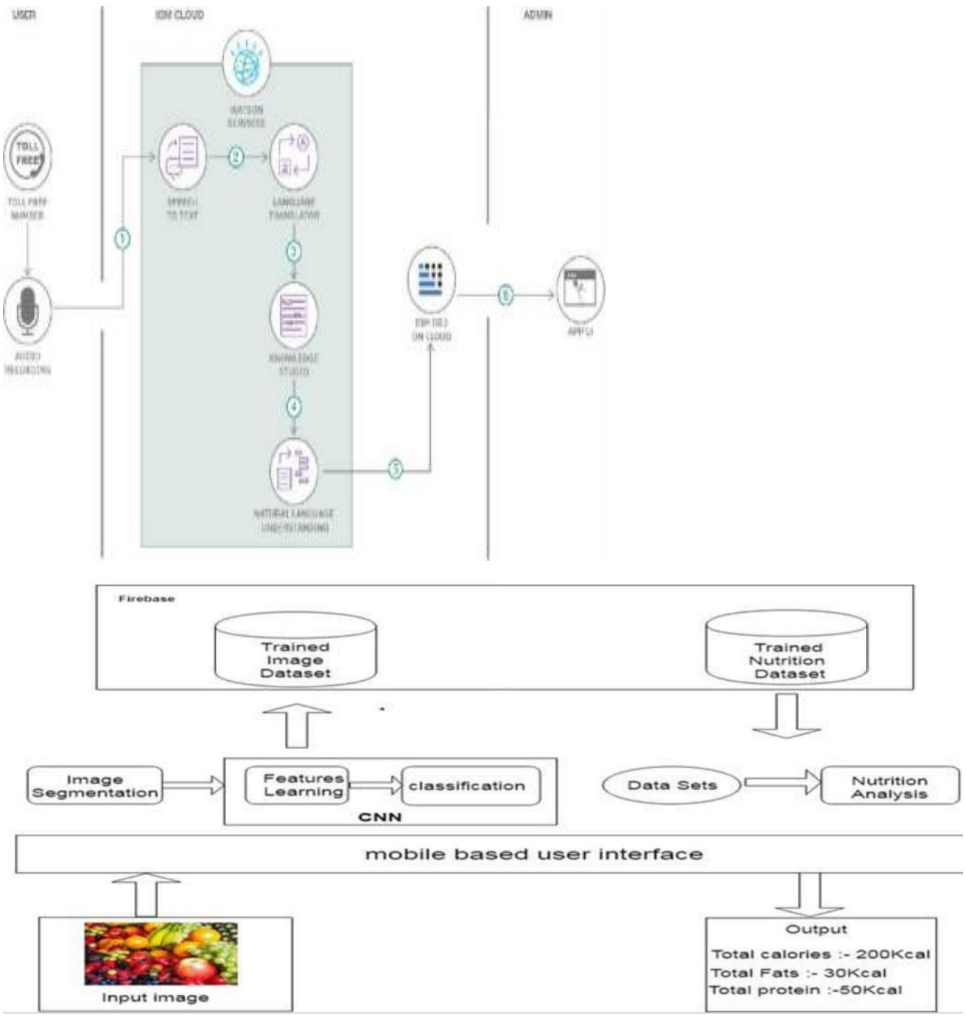
Project Design Phase-II

Technology Stack (Architecture & Stack)

Date	16 October 2022
Team ID	PNT2022TMID39453
Project Name	Project – AI POWERED NUTRTIONAN ALYSER FOR FITNESS ENTHUSISTICT
Maximum Marks	4 Marks

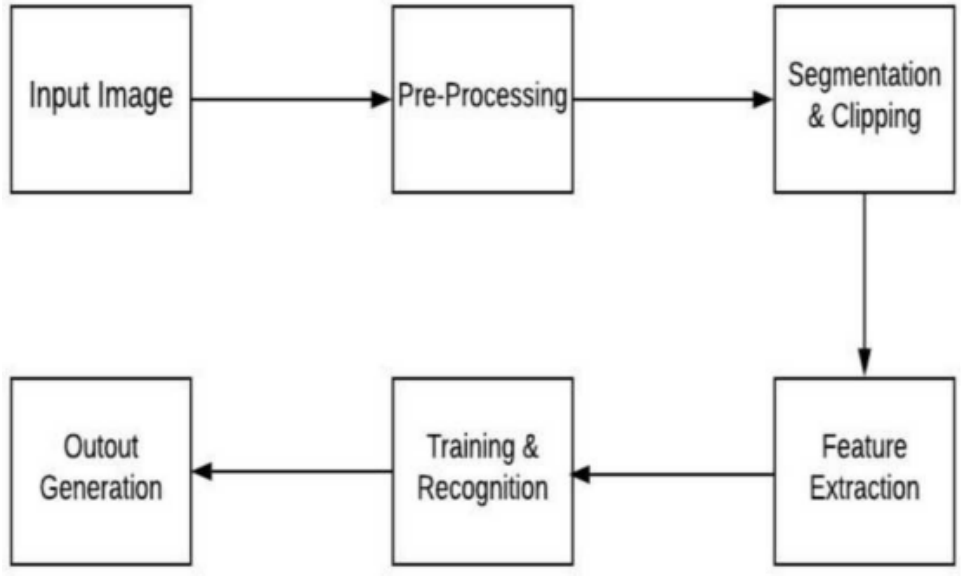
TECHINCAL ARCHITECTURE



INTRODUCTION

The food we eat delivers our body a nutrition that "information" and “materials” they have to accomplish correctly. Suppose our body will not get correct info and material our metabolic progressions

ache and our fitness decays and once we grow an extreme quantity of nutrition, or the food that offers our body the improper guidelines, and outcome will be weighty, malnourished, and in threat for the incident of illnesses and situations, like polygenic disorder, provocative illness and cardiopathy. In quick, our eating habits and food depends on completely to our health. Food acts as medication to forestall, maintain and treat malady. The nutrients in diet allows the cells in our body to achieve their required purposes. Nutrients part element the alimental constituents gift in nutrition that area unit crucial aimed at the growth, expansion and conservation of body functions. Important means that if a nutrient be situated ability, facets of achieve and so human fitness decays. Once nutrients consumption does not frequently encounter the nutrients needs determined by the cell motion, the metabolic.



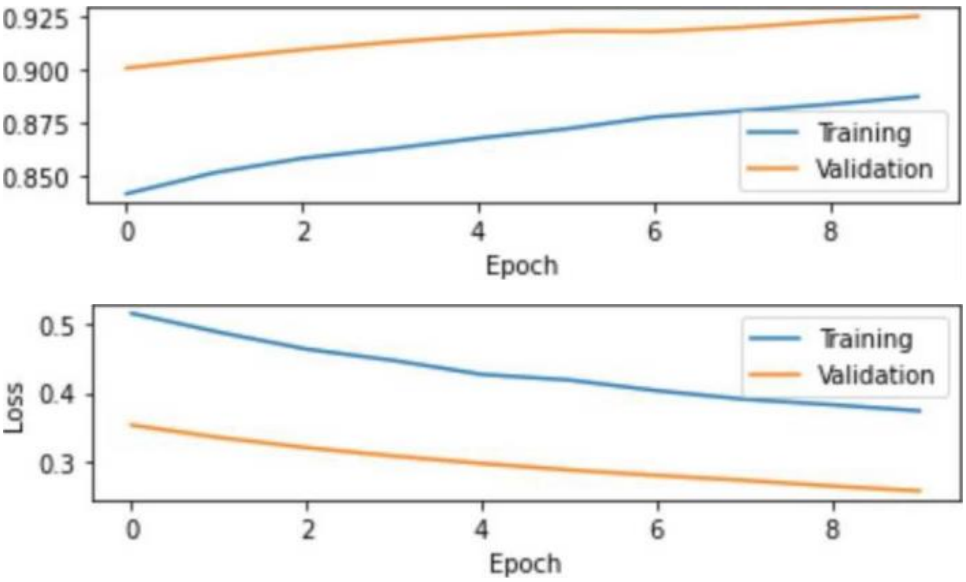
Model: "sequential"

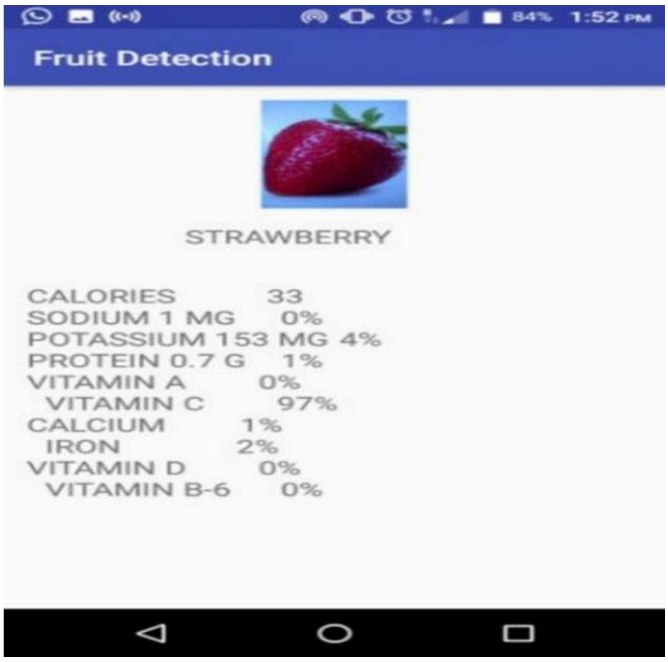
Layer (type)	Output Shape	Param #
conv2d (Conv2D)	(None, 26, 26, 32)	320
max_pooling2d (MaxPooling2D)	(None, 13, 13, 32)	0
conv2d_l (Conv2D)	(None, 11, 11, 64)	18496
conv2d_2 (Conv2D)	(None, 9, 9, 64)	36928

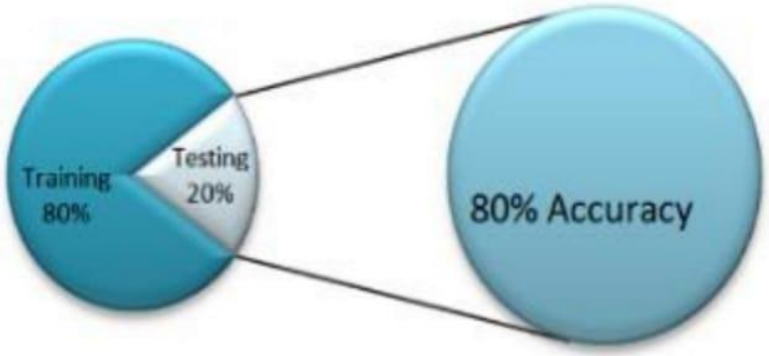
max_pooling2d_l (MaxPooling2	(None,	4, 4, 64)	0
flatten (Flatten)	(None,	1024)	0
dense (Dense)	(None,	i@e)	102500
dense_l (Dense)	(None,	10)	1010

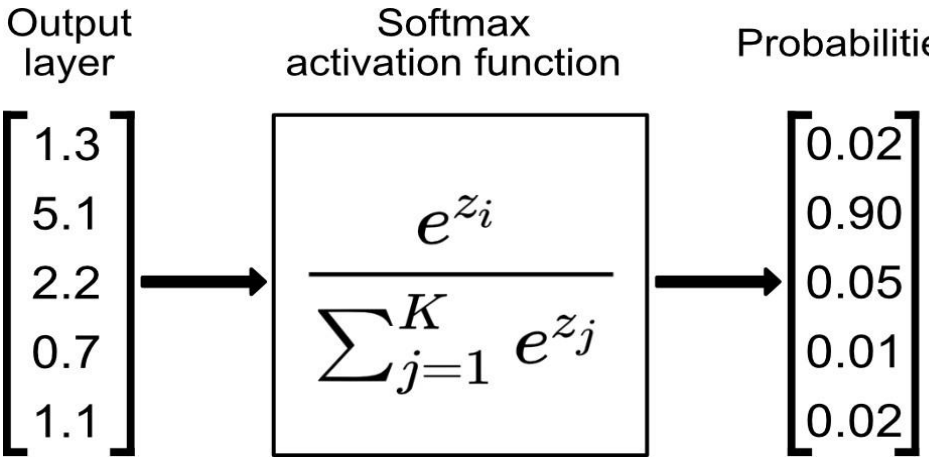
Trainable params: 159,254 Non-trainable params: 0

MODEL ACCURENCY




84% 1:52 PM
Fruit Detection
STRAWBERRY
CALORIES 33
SODIUM 1 MG 0%
POTASSIUM 153 MG 4%
PROTEIN 0.7 G 1%
VITAMIN A 0%
VITAMIN C 97%
CALCIUM 1%
IRON 2%
VITAMIN D 0%
VITAMIN B-6 0%


Training
80%
Testing
20%
80% Accuracy


Output layer
Softmax activation function
Probabilities
1.3
5.1
2.2
0.7
1.1
$\frac{e^{z_i}}{\sum_{j=1}^{K} e^{z_j}}$
0.02
0.90
0.05
0.01
0.02