

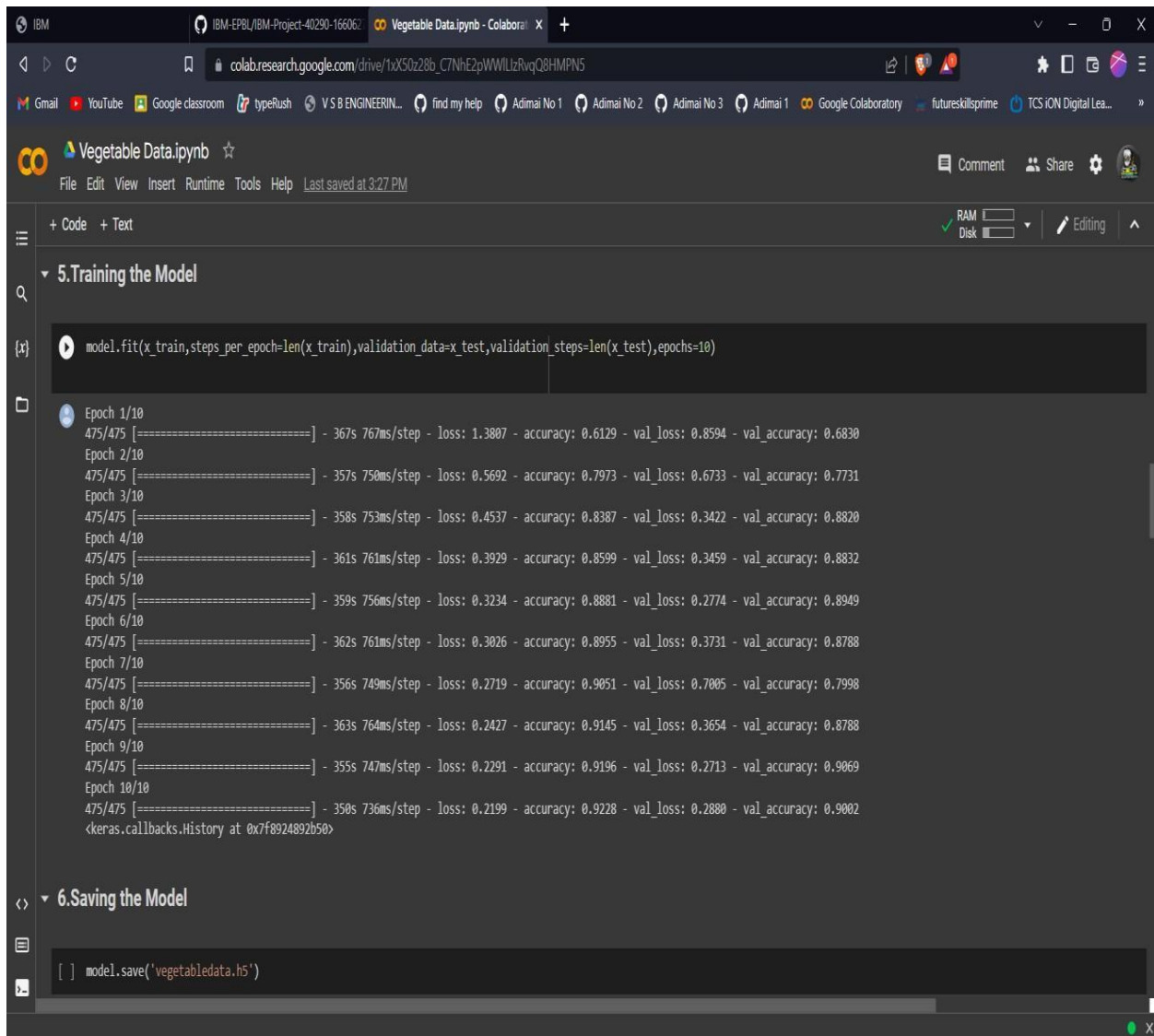
**V.S.B. ENGINEERING COLLEGE, KARUR**  
**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**  
**IBM NALAIYA THIRAN**  
**TRAIN THE MODEL ON IBM**

Date	18 November 2022
Team ID	PNT2022TMID33395
Project Name	Fertilizers Recommendation System for Disease Prediction

**TRAIN THE MODEL ON BM:**

**TRAINING FRUIT DATA:**

## TRAINING VEGETABLE DATA:



```
model.fit(x_train, steps_per_epoch=len(x_train), validation_data=x_test, validation_steps=len(x_test), epochs=10)
```

Epoch 1/10  
475/475 [=====] - 367s 767ms/step - loss: 1.3807 - accuracy: 0.6129 - val\_loss: 0.8594 - val\_accuracy: 0.6830  
Epoch 2/10  
475/475 [=====] - 357s 750ms/step - loss: 0.5692 - accuracy: 0.7973 - val\_loss: 0.6733 - val\_accuracy: 0.7731  
Epoch 3/10  
475/475 [=====] - 358s 753ms/step - loss: 0.4537 - accuracy: 0.8387 - val\_loss: 0.3422 - val\_accuracy: 0.8820  
Epoch 4/10  
475/475 [=====] - 361s 761ms/step - loss: 0.3929 - accuracy: 0.8599 - val\_loss: 0.3459 - val\_accuracy: 0.8832  
Epoch 5/10  
475/475 [=====] - 359s 756ms/step - loss: 0.3234 - accuracy: 0.8881 - val\_loss: 0.2774 - val\_accuracy: 0.8949  
Epoch 6/10  
475/475 [=====] - 362s 761ms/step - loss: 0.3026 - accuracy: 0.8955 - val\_loss: 0.3731 - val\_accuracy: 0.8788  
Epoch 7/10  
475/475 [=====] - 356s 749ms/step - loss: 0.2719 - accuracy: 0.9051 - val\_loss: 0.7005 - val\_accuracy: 0.7998  
Epoch 8/10  
475/475 [=====] - 363s 764ms/step - loss: 0.2427 - accuracy: 0.9145 - val\_loss: 0.3654 - val\_accuracy: 0.8788  
Epoch 9/10  
475/475 [=====] - 355s 747ms/step - loss: 0.2291 - accuracy: 0.9196 - val\_loss: 0.2713 - val\_accuracy: 0.9069  
Epoch 10/10  
475/475 [=====] - 350s 736ms/step - loss: 0.2199 - accuracy: 0.9228 - val\_loss: 0.2880 - val\_accuracy: 0.9002  
<keras.callbacks.History at 0x7f8924892b50>

```
model.save('vegetabledata.h5')
```