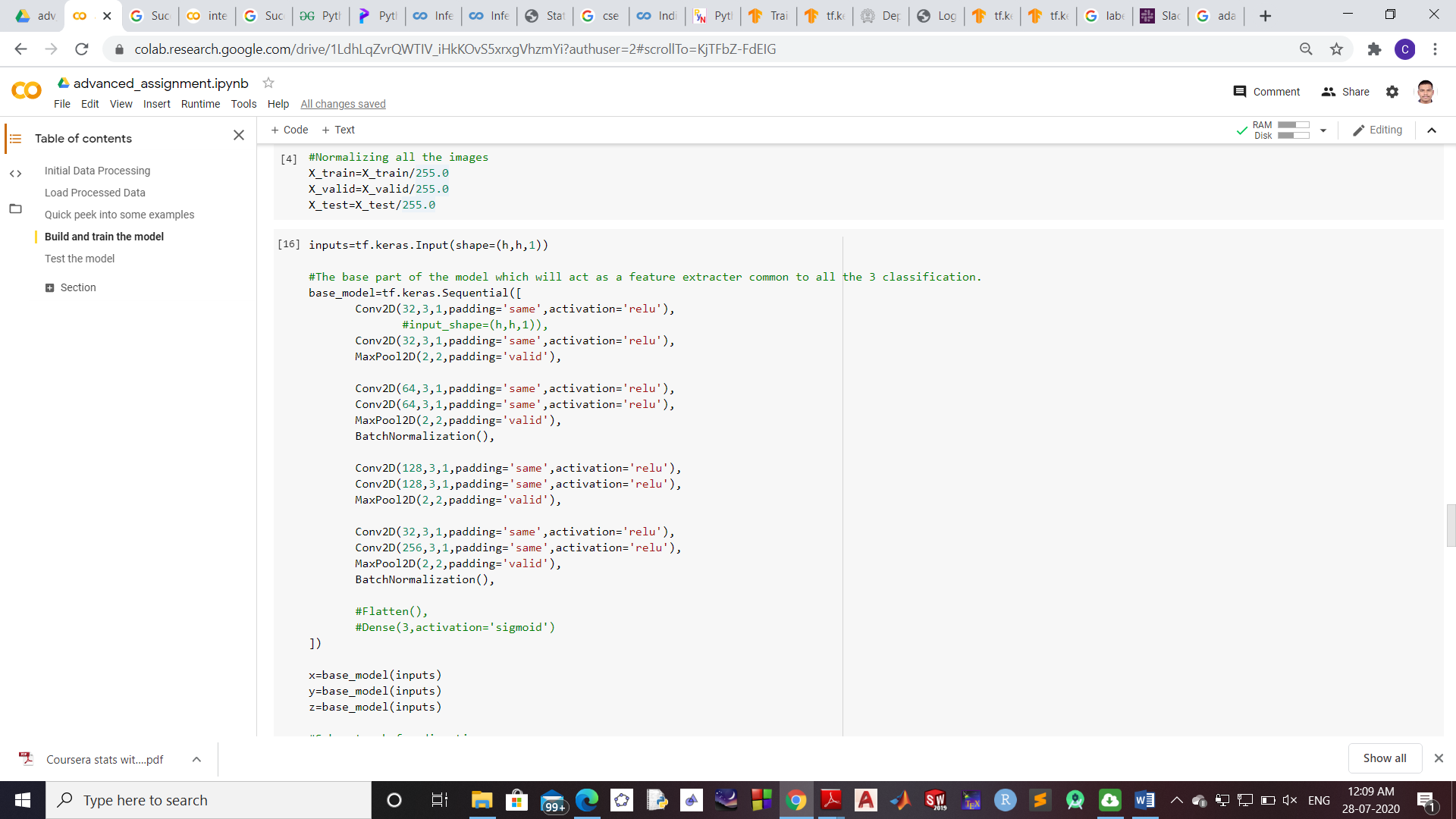
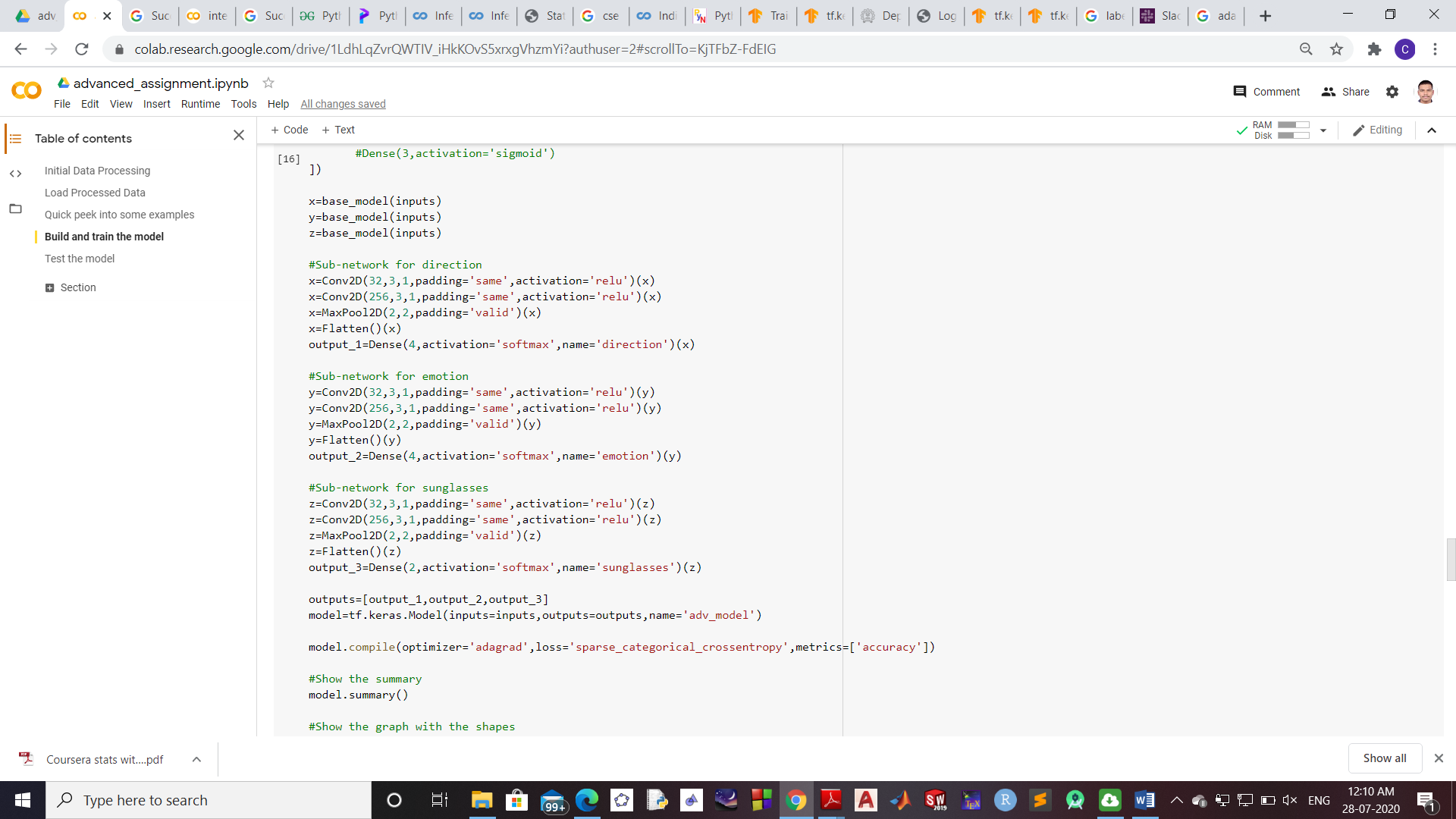
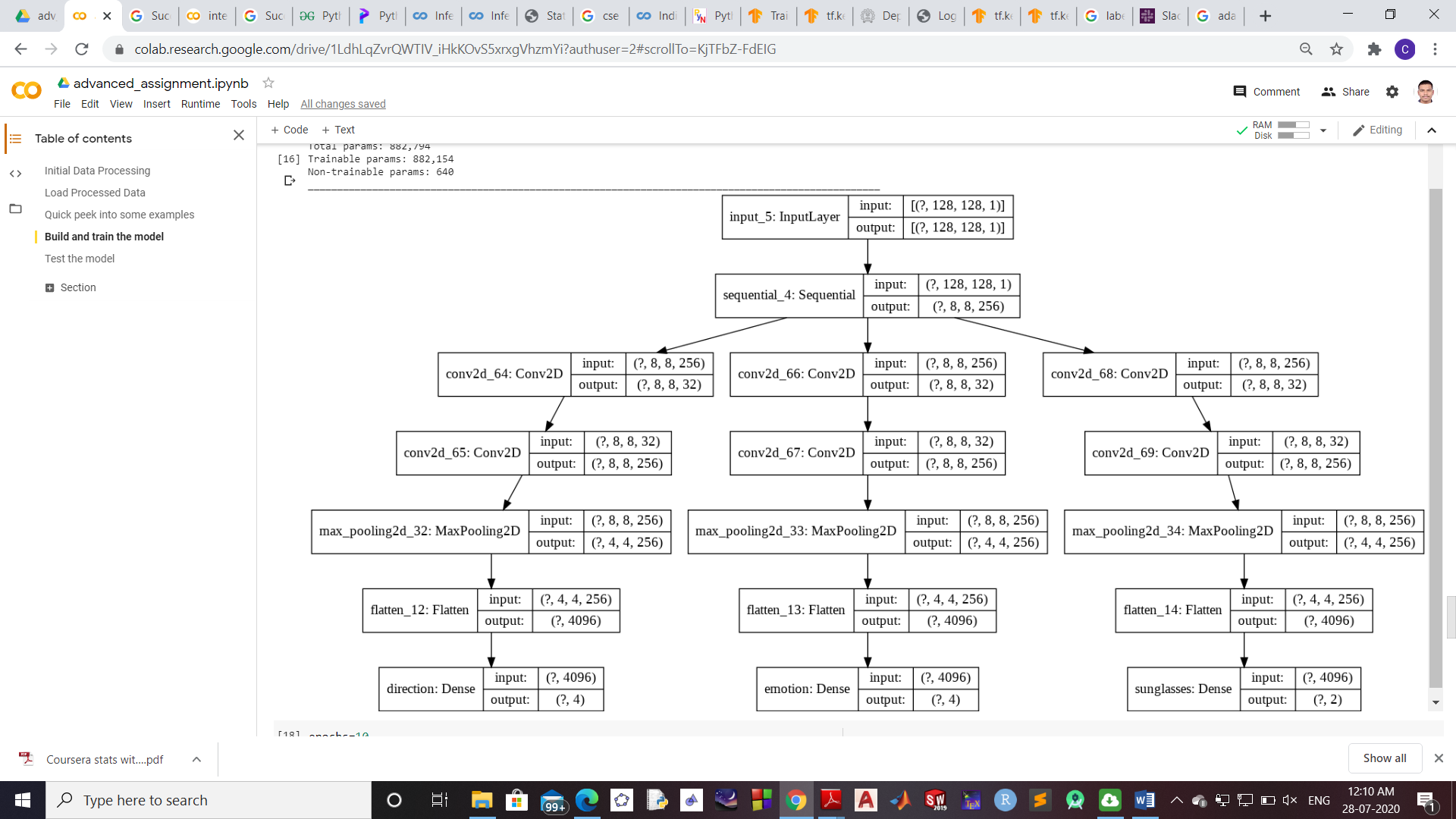
This is the base\_model architecture.



This is the top layer architecture



Graphical representation of the complete model



Results after total 20 epochs

Epoch 10/10

235/235 [==============================] - 65s 277ms/step - loss: 0.5920 - direction\_loss: 0.0025 - emotion\_loss: **0.5880** - sunglasses\_loss: 0.0015 - direction\_accuracy: 0.9999 - emotion\_accuracy: **0.8152** - sunglasses\_accuracy: 0.9999 - val\_loss: 2.8092 - val\_direction\_loss: 0.0725 - val\_emotion\_loss: 2.7347 - val\_sunglasses\_loss: 0.0020 - val\_direction\_accuracy: **0.9648** - val\_emotion\_accuracy: **0.1587** - val\_sunglasses\_accuracy: **0.9989**

The model performs decently on direction and sunglasses detection. However it just isn’t able to learn to recognize emotions.