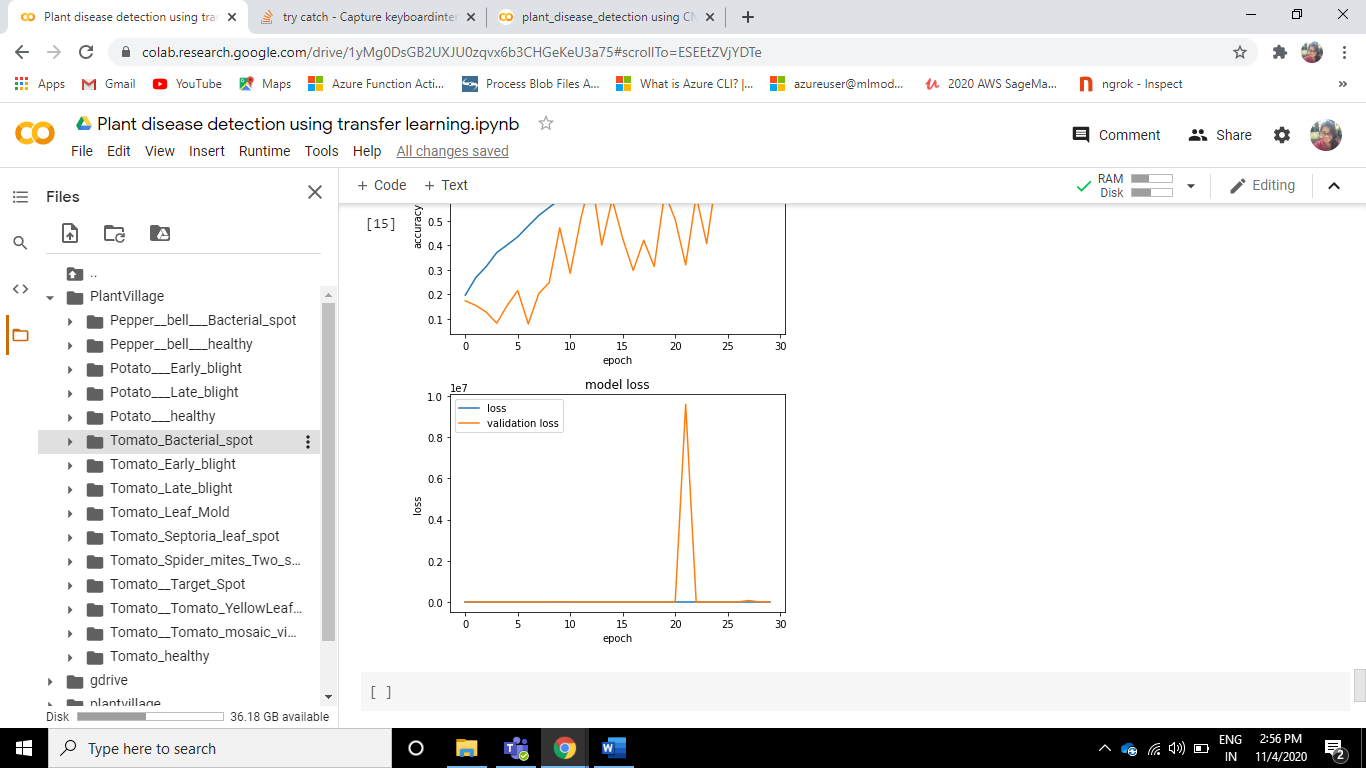
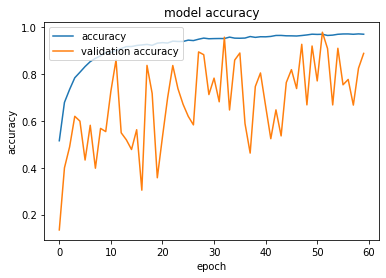
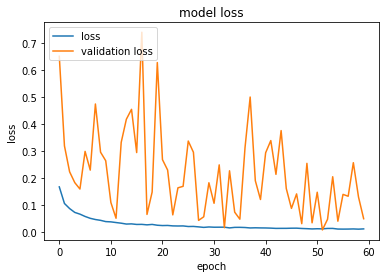
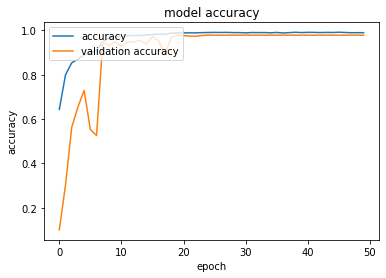
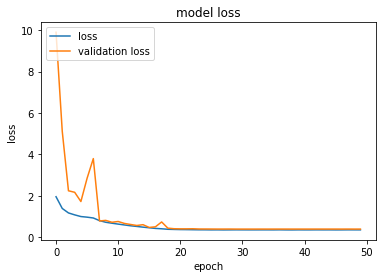
Dataset Structure



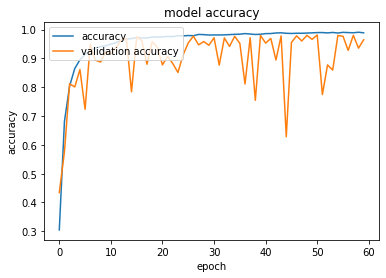
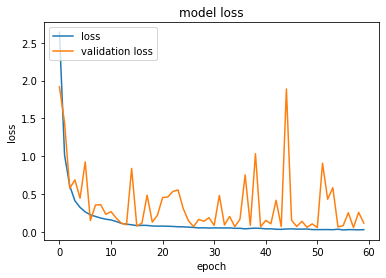
|  |  |  |
| --- | --- | --- |
| **Algorithm** | **Accuracy** | **Validation\_ accuracy** |
| CNN custom | 0.9894 | 0.9789 |
| DenseNet | 0.9889 | 0.9646 |
| MobileNet | 0.8230 | 0.8052 |
| VGG 16 | 0.7025 | 0.6770 |
| VGG 19 | 0.7738 | 0.7724 |
| ResNet | .7364 | 0.6638 |

**CNN Model:**

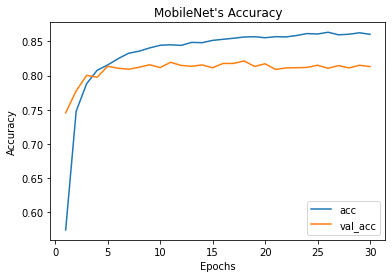
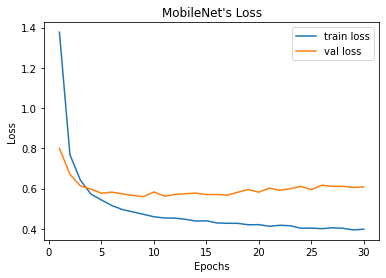
**  and reguta**

** acc: 98.94 val acc: 97.80**

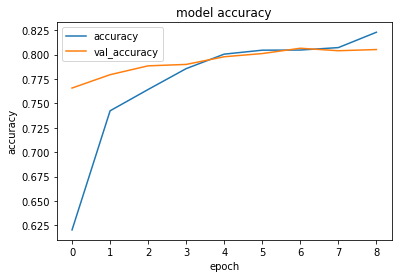
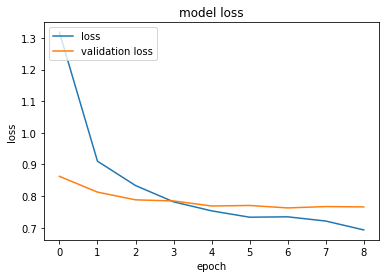
**DenseNet**

  **overfitting**

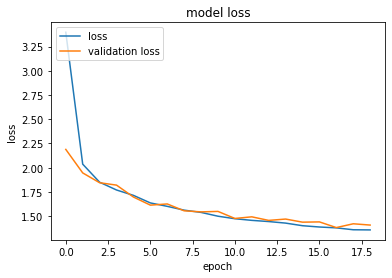
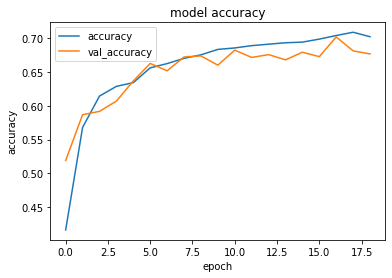
**MobileNet** :

  overfitting and high variance(apply regularization )

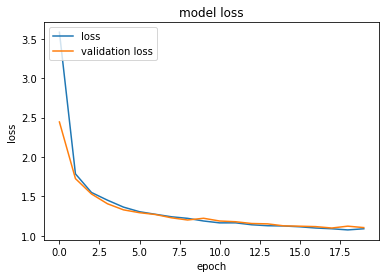
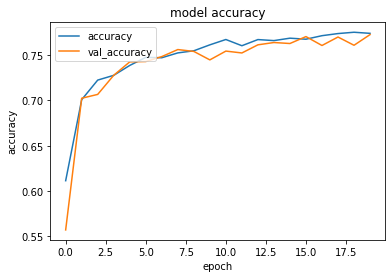
**After applying regularization**

**VGG16:**

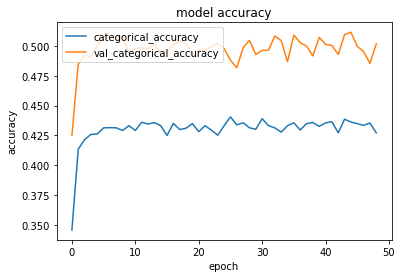
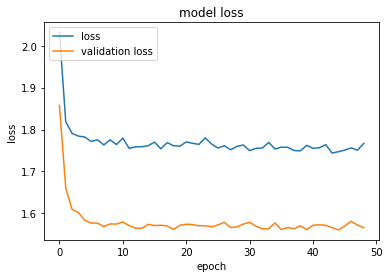


**VGG19:**

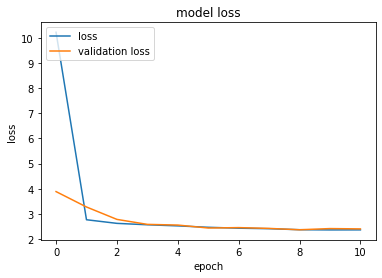
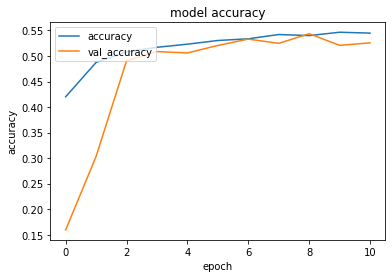


**RenNet 50:**

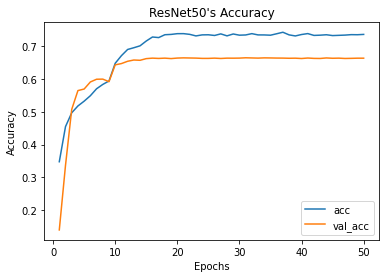
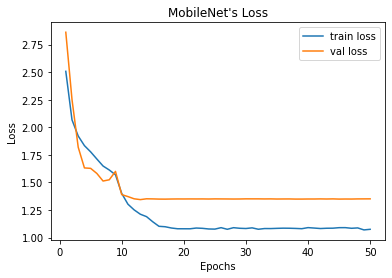
**Without regularizer**

** **

**Early stopping**

****

**Without Early stopping**

** **