The below data is gathered for different model for 15 epocs due to memory constraint and the accuracy can be increased by running the model for more number of epocs.

|  |  |  |  |
| --- | --- | --- | --- |
| **Experiment Number** | **Model** | **Result** | **Decision + Explanation** |
| **1** | **Conv3D** | **Accuracy is 0.29** | **Tried to overfit the data without data augmentation** |
| **1.a** | **Conv3D** | **Accuracy is 0.30** | **Generate more data by rotating image by 10 degree.** |
| **2** | **Conv3D + BatchNormalization layer** | **Accuracy is 0.31** | **Creating model with BatchNormalization layer after each maxpooling layer to standardize the input to each layer.** |
| **3** | **Conv3D (without BatchNormalization and dropout layer)** | **Accuracy is 0.26** | **Creating model without batch normalization layer and dropout layer** |
| **4** | **Conv3d (VGG16) + RNN (LSTM)** | **Accuracy is 0.50** | **Creating model with transfer learning using the existing developed model VGG16 with RNN (LSTM)** |
| **5** | **Conv3d (VGG16) + RNN (GRU)** | **Accuracy is 0.60** | **Creating model with transfer learning using the existing developed model VGG16 with RNN (GRU)** |
| **6** | **Conv3D (MobileNetV2) + RNN (GRU)** | **Accuracy is 0.38** | **Creating model with transfer learning using the existing developed model MobileNetV2 with RNN (GRU)** |