

Project development Phase – Sprint 3

Compile The Model

```
model.compile(loss='categorical_crossentropy', optimizer='adam', metrics=['accuracy'])
```

Fit And Save The Model

```
model.fit_generator(x_train, steps_per_epoch=24, epochs=10, validation_data=x_test,  
validation_steps=40)
```

```
model.save('aslpng1.h5')
```

Load The Test Image, Pre-Process It And Predict

```
from skimage.transform import resize  
def detect(frame):  
    img =resize(frame,(64,64,1))  
    img = np.expand_dims(img,axis=0)  
    if(np.max(img)>1):  
        img = img/255.0  
        prediction =model.predict(img)  
        print(prediction)  
        prediction = model.predict_classes(img)  
        print(prediction)  
frame=cv2.imread(r"D:\\Nivetha\\Smart Bridge\\My_project\\conversation engine for deaf  
and dumb\\Dataset\\test_set\\A\\2.png")
```