

LAB Logbook

Week 6

Model: "sequential_1"

Layer (type)	Output Shape	Param #
gru (GRU)	(None, 12, 150)	68,850
gru_1 (GRU)	(None, 100)	75,600
dense_1 (Dense)	(None, 1)	101

Total params: 144,551 (564.65 KB)


























Trainable params: 144,551 (564.65 KB)

Non-trainable params: 0 (0.00 B)

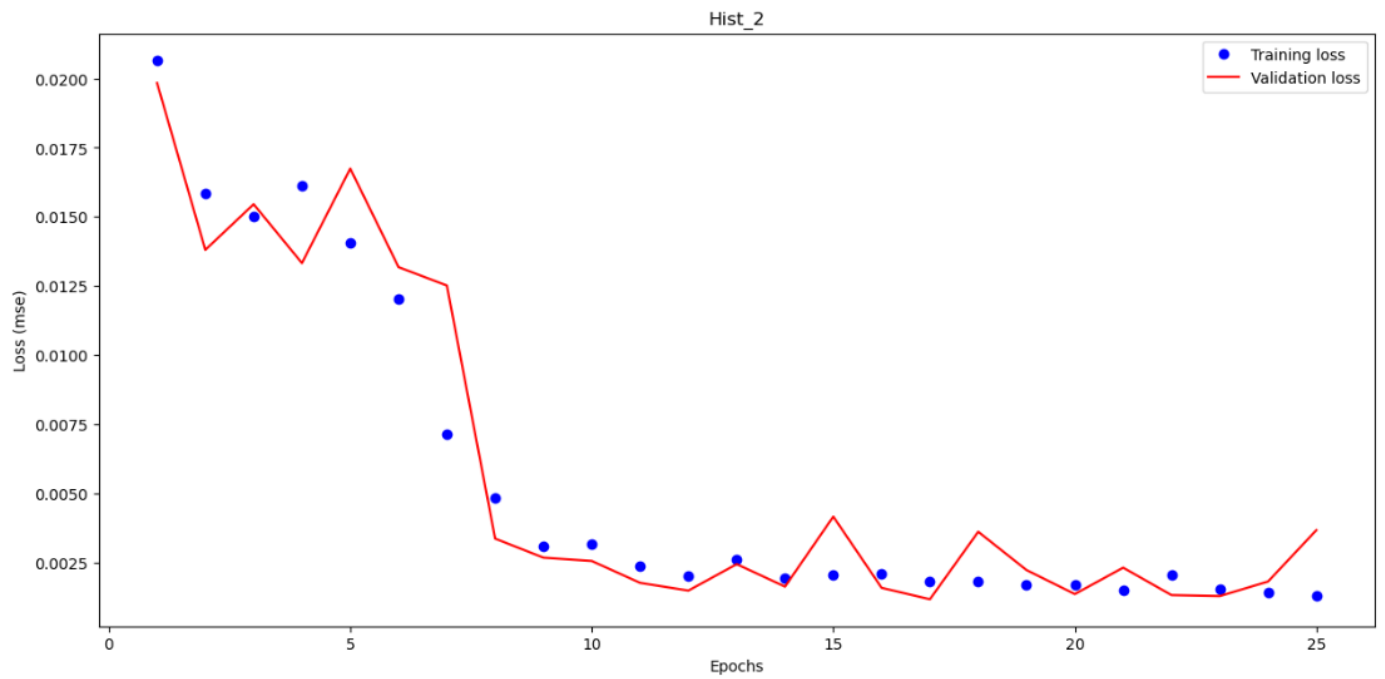
Early-stop code

```
early_stop = EarlyStopping(monitor='val_loss',patience=8)
```

Training process

384/384  13s 18ms/step - accuracy: 0.0027 - loss: 0.0263 - val_accuracy: 0.0027 - val_loss: 0.0198
Epoch 2/30
384/384  7s 18ms/step - accuracy: 0.0015 - loss: 0.0164 - val_accuracy: 0.0055 - val_loss: 0.0138
Epoch 3/30
384/384  7s 19ms/step - accuracy: 0.0011 - loss: 0.0157 - val_accuracy: 0.0055 - val_loss: 0.0155
Epoch 4/30
384/384  7s 18ms/step - accuracy: 8.1666e-04 - loss: 0.0131 - val_accuracy: 0.0055 - val_loss: 0.0133
Epoch 5/30
384/384  7s 19ms/step - accuracy: 0.0035 - loss: 0.0146 - val_accuracy: 0.0027 - val_loss: 0.0167
Epoch 6/30
384/384  8s 21ms/step - accuracy: 1.4551e-04 - loss: 0.0135 - val_accuracy: 0.0027 - val_loss: 0.0132
Epoch 7/30
384/384  7s 18ms/step - accuracy: 0.0013 - loss: 0.0075 - val_accuracy: 0.0055 - val_loss: 0.0125
Epoch 8/30
384/384  9s 23ms/step - accuracy: 0.0018 - loss: 0.0044 - val_accuracy: 0.0055 - val_loss: 0.0034
Epoch 9/30
384/384  7s 17ms/step - accuracy: 0.0024 - loss: 0.0025 - val_accuracy: 0.0055 - val_loss: 0.0027
Epoch 10/30
384/384  7s 19ms/step - accuracy: 0.0031 - loss: 0.0022 - val_accuracy: 0.0055 - val_loss: 0.0026
Epoch 11/30
384/384  7s 17ms/step - accuracy: 0.0053 - loss: 0.0023 - val_accuracy: 0.0055 - val_loss: 0.0018
Epoch 12/30
384/384  8s 22ms/step - accuracy: 0.0027 - loss: 0.0016 - val_accuracy: 0.0055 - val_loss: 0.0015
Epoch 13/30
384/384  7s 17ms/step - accuracy: 0.0054 - loss: 0.0024 - val_accuracy: 0.0055 - val_loss: 0.0024
Epoch 14/30
384/384  8s 21ms/step - accuracy: 0.0021 - loss: 0.0022 - val_accuracy: 0.0055 - val_loss: 0.0016
Epoch 15/30
384/384  7s 19ms/step - accuracy: 0.0011 - loss: 0.0019 - val_accuracy: 0.0055 - val_loss: 0.0042
Epoch 16/30
384/384  7s 19ms/step - accuracy: 0.0117 - loss: 0.0025 - val_accuracy: 0.0055 - val_loss: 0.0016
Epoch 17/30
384/384  7s 19ms/step - accuracy: 0.0034 - loss: 0.0017 - val_accuracy: 0.0055 - val_loss: 0.0012
Epoch 18/30
384/384  8s 22ms/step - accuracy: 0.0069 - loss: 0.0014 - val_accuracy: 0.0055 - val_loss: 0.0036
Epoch 19/30
384/384  6s 16ms/step - accuracy: 6.1149e-04 - loss: 0.0014 - val_accuracy: 0.0055 - val_loss: 0.0022
Epoch 20/30
384/384  8s 20ms/step - accuracy: 0.0041 - loss: 0.0013 - val_accuracy: 0.0055 - val_loss: 0.0014
Epoch 21/30
384/384  7s 19ms/step - accuracy: 8.3247e-04 - loss: 9.7410e-04 - val_accuracy: 0.0055 - val_loss: 0.0023
Epoch 22/30
384/384  7s 19ms/step - accuracy: 0.0020 - loss: 0.0017 - val_accuracy: 0.0055 - val_loss: 0.0013
Epoch 23/30
384/384  7s 19ms/step - accuracy: 0.0021 - loss: 0.0022 - val_accuracy: 0.0055 - val_loss: 0.0013
Epoch 24/30
384/384  7s 17ms/step - accuracy: 0.0015 - loss: 0.0010 - val_accuracy: 0.0055 - val_loss: 0.0018
Epoch 25/30
384/384  8s 21ms/step - accuracy: 0.0079 - loss: 0.0013 - val_accuracy: 0.0055 - val_loss: 0.0037

3. Plot of Validation and test loss history.



Optimal Number of Epochs = 17