1 T:\PythonProjects\Image\_Prediction\_Project\.venv\ Scripts\python.exe T:\PythonProjects\ Image\_Prediction\_Project\src\age\_prediction\vgg16.py 2 Epoch 1/50 3 Train Loss: 2.1979, Train Acc: 28.49 4 Validation Loss: 1.8758, Validation Acc: 31.74 5 Epoch 2/50 6 Train Loss: 1.9103, Train Acc: 33.13 7 Validation Loss: 1.8497, Validation Acc: 34.87 8 Epoch 3/50 9 Train Loss: 1.7828, Train Acc: 35.65 10 Validation Loss: 1.8313, Validation Acc: 33.66 11 Epoch 4/50 12 Train Loss: 1.6934, Train Acc: 38.38 13 Validation Loss: 1.7709, Validation Acc: 35.10 14 Epoch 5/50 15 Train Loss: 1.5985, Train Acc: 41.03 16 Validation Loss: 1.7825, Validation Acc: 34.89 17 Epoch 6/50 18 Train Loss: 1.5273, Train Acc: 43.53 19 Validation Loss: 1.7945, Validation Acc: 35.86 20 Epoch 7/50 21 Train Loss: 1.4505, Train Acc: 46.14 22 Validation Loss: 1.8154, Validation Acc: 36.18 23 Epoch 8/50 24 Train Loss: 1.3723, Train Acc: 49.12 25 Validation Loss: 1.8332, Validation Acc: 34.97 26 Epoch 9/50 27 Train Loss: 1.3032, Train Acc: 52.05 28 Validation Loss: 1.8473, Validation Acc: 35.12 29 Epoch 10/50 30 Train Loss: 1.2314, Train Acc: 54.60 31 Validation Loss: 1.9235, Validation Acc: 35.61 32 Epoch 11/50 33 Train Loss: 1.1745, Train Acc: 57.56 34 Validation Loss: 1.8699, Validation Acc: 35.92 35 Epoch 12/50 36 Train Loss: 1.0963, Train Acc: 60.79 37 Validation Loss: 1.9349, Validation Acc: 35.27 38 Epoch 13/50

39 Train Loss: 1.0588, Train Acc: 62.35

```
File - vgg16
40 Validation Loss: 2.0096, Validation Acc: 34.40
41 Epoch 14/50
42 Train Loss: 1.0084, Train Acc: 64.64
43 Validation Loss: 1.9784, Validation Acc: 32.19
44 Epoch 15/50
45 Train Loss: 0.9389, Train Acc: 67.29
46 Validation Loss: 2.0544, Validation Acc: 34.42
47 Epoch 16/50
48 Train Loss: 0.9064, Train Acc: 68.82
49 Validation Loss: 2.1012, Validation Acc: 34.59
50 Epoch 17/50
51 Train Loss: 0.8895, Train Acc: 69.57
52 Validation Loss: 2.0941, Validation Acc: 33.56
53 Epoch 18/50
54 Train Loss: 0.8461, Train Acc: 71.48
55 Validation Loss: 2.1123, Validation Acc: 34.30
56 Epoch 19/50
57 Train Loss: 0.8047, Train Acc: 72.74
58 Validation Loss: 2.1852, Validation Acc: 35.95
59 Epoch 20/50
60 Train Loss: 0.7888, Train Acc: 73.96
61 Validation Loss: 2.1959, Validation Acc: 34.76
62 Epoch 21/50
63 Train Loss: 0.7546, Train Acc: 75.43
64 Validation Loss: 2.2697, Validation Acc: 34.93
65 Epoch 22/50
66 Train Loss: 0.7200, Train Acc: 76.36
67 Validation Loss: 2.4218, Validation Acc: 35.21
68 Epoch 23/50
69 Train Loss: 0.6900, Train Acc: 77.56
70 Validation Loss: 2.2863, Validation Acc: 33.50
71 Epoch 24/50
72 Train Loss: 0.6964, Train Acc: 77.60
73 Validation Loss: 2.3508, Validation Acc: 34.76
74 Epoch 25/50
75 Train Loss: 0.6698, Train Acc: 78.86
76 Validation Loss: 2.4050, Validation Acc: 35.16
77 Epoch 26/50
78 Train Loss: 0.6544, Train Acc: 79.11
79 Validation Loss: 2.3075, Validation Acc: 34.83
80 Epoch 27/50
```

- 81 Train Loss: 0.6298, Train Acc: 80.33 82 Validation Loss: 2.4728, Validation Acc: 34.30 83 Epoch 28/50
- 84 Train Loss: 0.6380, Train Acc: 80.27
- 85 Validation Loss: 2.3479, Validation Acc: 34.61
- 86 Epoch 29/50
- 87 Train Loss: 0.6088, Train Acc: 81.08
- 88 Validation Loss: 2.4775, Validation Acc: 34.91
- 89 Epoch 30/50
- 90 Train Loss: 0.5949, Train Acc: 81.69
- 91 Validation Loss: 2.5350, Validation Acc: 33.81
- 92 Epoch 31/50
- 93 Train Loss: 0.5667, Train Acc: 82.67
- 94 Validation Loss: 2.4711, Validation Acc: 35.08
- 95 Epoch 32/50
- 96 Train Loss: 0.5687, Train Acc: 83.29
- 97 Validation Loss: 2.3834, Validation Acc: 34.49
- 98 Epoch 33/50
- 99 Train Loss: 0.5668, Train Acc: 82.41
- 100 Validation Loss: 2.5798, Validation Acc: 34.13
- 101 Epoch 34/50
- 102 Train Loss: 0.5328, Train Acc: 84.22
- 103 Validation Loss: 2.7150, Validation Acc: 34.85
- 104 Epoch 35/50
- 105 Train Loss: 0.5209, Train Acc: 84.32
- 106 Validation Loss: 2.4995, Validation Acc: 34.93
- 107 Epoch 36/50
- 108 Train Loss: 0.5372, Train Acc: 84.23
- 109 Validation Loss: 2.5088, Validation Acc: 35.04
- 110 Epoch 37/50
- 111 Train Loss: 0.5142, Train Acc: 84.62
- 112 Validation Loss: 2.6346, Validation Acc: 34.89
- 113 Epoch 38/50
- 114 Train Loss: 0.5117, Train Acc: 85.04
- 115 Validation Loss: 2.8821, Validation Acc: 35.21
- 116 Epoch 39/50
- 117 Train Loss: 0.4975, Train Acc: 85.42
- 118 Validation Loss: 2.6037, Validation Acc: 32.82
- 119 Epoch 40/50
- 120 Train Loss: 0.4928, Train Acc: 85.62
- 121 Validation Loss: 2.5211, Validation Acc: 34.38

```
122 Epoch 41/50
123 Train Loss: 0.4970, Train Acc: 85.59
124 Validation Loss: 2.8121, Validation Acc: 34.17
125 Epoch 42/50
126 Train Loss: 0.4800, Train Acc: 85.92
127 Validation Loss: 2.8597, Validation Acc: 35.21
128 Epoch 43/50
129 Train Loss: 0.4635, Train Acc: 86.58
130 Validation Loss: 2.8190, Validation Acc: 33.98
131 Epoch 44/50
132 Train Loss: 0.4614, Train Acc: 86.60
133 Validation Loss: 2.7246, Validation Acc: 34.38
134 Epoch 45/50
135 Train Loss: 0.4680, Train Acc: 86.73
136 Validation Loss: 2.8946, Validation Acc: 34.64
137 Epoch 46/50
138 Train Loss: 0.4617, Train Acc: 86.62
139 Validation Loss: 2.8978, Validation Acc: 33.92
140 Epoch 47/50
141 Train Loss: 0.4681, Train Acc: 86.78
142 Validation Loss: 2.8618, Validation Acc: 34.42
143 Epoch 48/50
144 Train Loss: 0.4647, Train Acc: 86.90
145 Validation Loss: 2.9154, Validation Acc: 34.99
146 Epoch 49/50
147 Train Loss: 0.4810, Train Acc: 86.64
148 Validation Loss: 2.7221, Validation Acc: 35.21
149 Epoch 50/50
150 Train Loss: 0.4213, Train Acc: 88.05
151 Validation Loss: 2.8169, Validation Acc: 34.02
152 Time: 140.87 minutes
153 Accuracy: 0.3402
154 Precision: 0.2469
155 Recall: 0.2808
156 F1 Score: 0.2395
157
158 Process finished with exit code 0
159
```