1 源代码

1.1 designer/child_setting.py

```
# -*- coding: utf-8 -*-
   # Form implementation generated from reading ui file
      'child_setting.ui'
   # Created by: PyQt5 UI code generator 5.15.10
   # WARNING: Any manual changes made to this file will be lost

    when pyuic5 is

   # run again. Do not edit this file unless you know what you
    \hookrightarrow are doing.
9
   from PyQt5 import QtCore, QtGui, QtWidgets
12
   class Ui_MainWindow(object):
14
       def setupUi(self, MainWindow):
15
           MainWindow.setObjectName("MainWindow")
           MainWindow.resize(354, 366)
17
           self.centralwidget = QtWidgets.QWidget(MainWindow)
            self.centralwidget.setObjectName("centralwidget")
19
            self.tabWidget =
20

→ QtWidgets.QTabWidget(self.centralwidget)

           self.tabWidget.setGeometry(QtCore.QRect(10, 20, 321,
21

→ 251))

           self.tabWidget.setObjectName("tabWidget")
22
            self.tab = QtWidgets.QWidget()
            self.tab.setObjectName("tab")
           self.tab1_combobox = QtWidgets.QComboBox(self.tab)
25
           self.tab1_combobox.setGeometry(QtCore.QRect(70, 0,

→ 171, 22))

           self.tab1_combobox.setObjectName("tab1_combobox")
27
            self.tab1_label = QtWidgets.QLabel(self.tab)
```

```
self.tab1_label.setGeometry(QtCore.QRect(0, 30, 311,
            → 191))
           self.tab1_label.setObjectName("tab1_label")
30
           self.tabWidget.addTab(self.tab, "")
           self.tab_2 = QtWidgets.QWidget()
32
           self.tab_2.setObjectName("tab_2")
           self.tabWidget.addTab(self.tab_2, "")
           self.pushButton =
35

→ QtWidgets.QPushButton(self.centralwidget)

           self.pushButton.setGeometry(QtCore.QRect(230, 290, 75,
36
            self.pushButton.setObjectName("pushButton")
37
           MainWindow.setCentralWidget(self.centralwidget)
38
           self.menubar = QtWidgets.QMenuBar(MainWindow)
           self.menubar.setGeometry(QtCore.QRect(0, 0, 354, 23))
40
           self.menubar.setObjectName("menubar")
           MainWindow.setMenuBar(self.menubar)
           self.statusbar = QtWidgets.QStatusBar(MainWindow)
           self.statusbar.setObjectName("statusbar")
           MainWindow.setStatusBar(self.statusbar)
           self.retranslateUi(MainWindow)
           QtCore.QMetaObject.connectSlotsByName(MainWindow)
48
       def retranslateUi(self, MainWindow):
50
           _translate = QtCore.QCoreApplication.translate
51
           MainWindow.setWindowTitle(_translate("MainWindow",
            self.tab1_label.setText(_translate("MainWindow",
53
              "TextLabel"))
           self.tabWidget.setTabText(self.tabWidget.indexOf(self_
54
               .tab), _translate("MainWindow", "Tab
              1"))
           self.tabWidget.setTabText(self.tabWidget.indexOf(self_
55
               .tab_2), _translate("MainWindow", "Tab
               2"))
           self.pushButton.setText(_translate("MainWindow",
              "PushButton"))
57
```

```
if __name__ == "__main__":
    import sys
    app = QtWidgets.QApplication(sys.argv)
    MainWindow = QtWidgets.QMainWindow()
    ui = Ui_MainWindow()
    ui.setupUi(MainWindow)
    MainWindow.show()
    sys.exit(app.exec_())
```

1.2 designer/child_setting.ui

```
xml version="1.0" encoding="UTF-8"?>
   <ui version="4.0">
    <class>MainWindow</class>
    <widget class="QMainWindow" name="MainWindow">
     property name="geometry">
      <rect>
        < x > 0 < / x >
        <y>0</y>
        <width>354</width>
        <height>366</height>
10
      </rect>
11
     </property>
12
     property name="windowTitle">
      <string>MainWindow</string>
14
     </property>
15
     <widget class="QWidget" name="centralwidget">
      <widget class="QTabWidget" name="tabWidget">
17
        property name="geometry">
         <rect>
          < x > 10 < /x >
20
          <y>20</y>
          <width>321</width>
          <height>251</height>
23
         </rect>
        </property>
25
        <widget class="QWidget" name="tab">
```

```
<attribute name="title">
          <string>Tab 1</string>
28
         </attribute>
29
         <widget class="QComboBox" name="tab1_combobox">
          property name="geometry">
31
           <rect>
            < x > 70 < /x >
33
            <y>0</y>
34
            <width>171</width>
            <height>22</height>
36
           </rect>
37
          </property>
38
         </widget>
39
         <widget class="QLabel" name="tab1_label">
          property name="geometry">
41
           <rect>
            < x > 0 < / x >
43
            <y>30</y>
44
            <width>311</width>
            <height>191</height>
46
           </rect>
47
          </property>
          property name="text">
49
           <string>TextLabel</string>
          </property>
51
         </widget>
52
        </widget>
        <widget class="QWidget" name="tab_2">
54
         <attribute name="title">
          <string>Tab 2</string>
         </attribute>
57
        </widget>
       </widget>
59
       <widget class="QPushButton" name="pushButton">
60
        property name="geometry">
         <rect>
62
          < x > 230 < /x >
63
          <y>290</y>
          <width>75</width>
65
```

```
<height>23</height>
         </rect>
67
        </property>
68
        property name="text">
         <string>PushButton</string>
70
        </property>
71
      </widget>
     </widget>
73
     <widget class="QMenuBar" name="menubar">
       cproperty name="geometry">
75
       <rect>
76
        <x>0</x>
77
        <y>0</y>
78
        <width>354</width>
79
        <height>23</height>
80
        </rect>
      </property>
82
     </widget>
83
     <widget class="QStatusBar" name="statusbar"/>
    </widget>
85
    <resources/>
    <connections/>
   </ui>
```

1.3 designer/child_test.py

```
def setupUi(self, Form):
12
           Form.setObjectName("Form")
13
           Form.resize(400, 310)
           self.tabWidget = QtWidgets.QTabWidget(Form)
           self.tabWidget.setGeometry(QtCore.QRect(10, 10, 381,
16

→ 261))

           self.tabWidget.setObjectName("tabWidget")
17
           self.tab = QtWidgets.QWidget()
18
           self.tab.setObjectName("tab")
           self.layoutWidget = QtWidgets.QWidget(self.tab)
20
           self.layoutWidget.setGeometry(QtCore.QRect(0, 10, 371,
21

→ 211))

           self.layoutWidget.setObjectName("layoutWidget")
22
           self.horizontalLayout_2 =

→ QtWidgets.QHBoxLayout(self.layoutWidget)

           self.horizontalLayout_2.setContentsMargins(0, 0, 0, 0)
24
           self.horizontalLayout_2.setObjectName("horizontalLayo
25

    ut 2")

           spacerItem = QtWidgets.QSpacerItem(40, 20,

→ QtWidgets.QSizePolicy.Expanding,

              QtWidgets.QSizePolicy.Minimum)
           self.horizontalLayout_2.addItem(spacerItem)
           self.verticalLayout_2 = QtWidgets.QVBoxLayout()
28
           self.verticalLayout_2.setObjectName("verticalLayout_2")
            self.verticalLayout = QtWidgets.QVBoxLayout()
30
           self.verticalLayout.setObjectName("verticalLayout")
           self.horizontalLayout = QtWidgets.QHBoxLayout()
32
           self.horizontalLayout.setObjectName("horizontalLayout
           spacerItem1 = QtWidgets.QSpacerItem(30, 20,
34
              QtWidgets.QSizePolicy.Maximum,
               QtWidgets.QSizePolicy.Minimum)
           self.horizontalLayout.addItem(spacerItem1)
35
           self.tab1_combobox =
              QtWidgets.QComboBox(self.layoutWidget)
           sizePolicy = QtWidgets.QSizePolicy(QtWidgets.QSizePol_
37
               icy.MinimumExpanding,
               QtWidgets.QSizePolicy.Fixed)
```

```
sizePolicy.setHorizontalStretch(0)
           sizePolicy.setVerticalStretch(0)
39
           sizePolicy.setHeightForWidth(self.tab1_combobox.sizeP_
40
              olicy().hasHeightForWidth())
           self.tab1 combobox.setSizePolicy(sizePolicy)
41
           self.tab1 combobox.setObjectName("tab1 combobox")
           self.horizontalLayout.addWidget(self.tab1_combobox)
43
           spacerItem2 = QtWidgets.QSpacerItem(30, 20,
44
            QtWidgets.QSizePolicy.Minimum)
           self.horizontalLayout.addItem(spacerItem2)
45
           self.verticalLayout.addLayout(self.horizontalLayout)
46
           spacerItem3 = QtWidgets.QSpacerItem(40, 20,
47

→ QtWidgets.QSizePolicy.Expanding,

               QtWidgets.QSizePolicy.Minimum)
           self.verticalLayout.addItem(spacerItem3)
48
           self.verticalLayout_2.addLayout(self.verticalLayout)
49
           self.tab1 label = QtWidgets.QLabel(self.layoutWidget)
50
           sizePolicy = QtWidgets.QSizePolicy(QtWidgets.QSizePol_
              icy.Ignored,
              QtWidgets.QSizePolicy.Fixed)
           sizePolicy.setHorizontalStretch(0)
           sizePolicy.setVerticalStretch(0)
53
           sizePolicy.setHeightForWidth(self.tab1_label.sizePoli_

    cy().hasHeightForWidth())

           self.tab1 label.setSizePolicy(sizePolicy)
55
           self.tab1_label.setMinimumSize(QtCore.QSize(256, 144))
           self.tab1_label.setMaximumSize(QtCore.QSize(256, 144))
57
           self.tab1_label.setAlignment(QtCore.Qt.AlignCenter)
           self.tab1 label.setObjectName("tab1 label")
           self.verticalLayout 2.addWidget(self.tab1 label)
60
           self.horizontalLayout_2.addLayout(self.verticalLayout_
           spacerItem4 = QtWidgets.QSpacerItem(40, 20,
62
               QtWidgets.QSizePolicy.Expanding,
               QtWidgets.QSizePolicy.Minimum)
           self.horizontalLayout_2.addItem(spacerItem4)
63
           self.tabWidget.addTab(self.tab, "")
           self.tab_2 = QtWidgets.QWidget()
65
```

```
self.tab_2.setObjectName("tab_2")
           self.layoutWidget_2 = QtWidgets.QWidget(self.tab_2)
67
           self.layoutWidget_2.setGeometry(QtCore.QRect(0, 10,

→ 371, 211))

           self.layoutWidget 2.setObjectName("layoutWidget 2")
69
           self.horizontalLayout 7 =
               QtWidgets.QHBoxLayout(self.layoutWidget_2)
           self.horizontalLayout 7.setContentsMargins(0, 0, 0, 0)
71
           self.horizontalLayout_7.setObjectName("horizontalLayo]
            \rightarrow ut 7")
           spacerItem5 = QtWidgets.QSpacerItem(40, 20,
73
               QtWidgets.QSizePolicy.Expanding,
               QtWidgets.QSizePolicy.Minimum)
           self.horizontalLayout_7.addItem(spacerItem5)
           self.verticalLayout_5 = QtWidgets.QVBoxLayout()
75
           self.verticalLayout_5.setObjectName("verticalLayout_5]
76
            self.verticalLayout 6 = QtWidgets.QVBoxLayout()
77
           self.verticalLayout_6.setObjectName("verticalLayout_6]
           self.horizontalLayout_8 = QtWidgets.QHBoxLayout()
79
           self.horizontalLayout_8.setObjectName("horizontalLayo

    ut_8")

           spacerItem6 = QtWidgets.QSpacerItem(30, 20,

→ QtWidgets.QSizePolicy.Maximum,

               QtWidgets.QSizePolicy.Minimum)
           self.horizontalLayout_8.addItem(spacerItem6)
           self.tab1_combobox_3 =
83
            → QtWidgets.QComboBox(self.layoutWidget_2)
           sizePolicy = QtWidgets.QSizePolicy(QtWidgets.QSizePol_
84

    icy.MinimumExpanding,
              QtWidgets.QSizePolicy.Fixed)
           sizePolicy.setHorizontalStretch(0)
85
           sizePolicy.setVerticalStretch(0)
86
           sizePolicy.setHeightForWidth(self.tab1_combobox_3.siz_
            ⇔ ePolicy().hasHeightForWidth())
           self.tab1 combobox 3.setSizePolicy(sizePolicy)
           self.tab1_combobox_3.setObjectName("tab1_combobox_3")
```

```
self.horizontalLayout_8.addWidget(self.tab1_combobox___
            spacerItem7 = QtWidgets.QSpacerItem(30, 20,
91
              QtWidgets.QSizePolicy.Maximum,
               QtWidgets.QSizePolicy.Minimum)
            self.horizontalLayout_8.addItem(spacerItem7)
92
            self.verticalLayout_6.addLayout(self.horizontalLayout
93
            ⇔ 8)
            spacerItem8 = QtWidgets.QSpacerItem(40, 20,
               QtWidgets.QSizePolicy.Expanding,
               QtWidgets.QSizePolicy.Minimum)
            self.verticalLayout_6.addItem(spacerItem8)
95
            self.verticalLayout 5.addLayout(self.verticalLayout 6)
96
            self.tab1_label_3 =

    QtWidgets.QLabel(self.layoutWidget_2)

            sizePolicy = QtWidgets.QSizePolicy(QtWidgets.QSizePol_
98

    icy.Ignored,

              QtWidgets.QSizePolicy.Fixed)
            sizePolicy.setHorizontalStretch(0)
99
            sizePolicy.setVerticalStretch(0)
100
            sizePolicy.setHeightForWidth(self.tab1_label_3.sizePo_
101

→ licy().hasHeightForWidth())
            self.tab1_label_3.setSizePolicy(sizePolicy)
102
            self.tab1_label_3.setMinimumSize(QtCore.QSize(256,
103
            self.tab1 label 3.setMaximumSize(QtCore.QSize(256,
104
            self.tab1_label_3.setAlignment(QtCore.Qt.AlignCenter)
105
            self.tab1_label_3.setObjectName("tab1_label_3")
106
            self.verticalLayout_5.addWidget(self.tab1_label_3)
107
            self.horizontalLayout 7.addLayout(self.verticalLayout
108
            spacerItem9 = QtWidgets.QSpacerItem(40, 20,
109
            QtWidgets.QSizePolicy.Minimum)
            self.horizontalLayout 7.addItem(spacerItem9)
110
            self.tabWidget.addTab(self.tab 2, "")
111
            self.tab_3 = QtWidgets.QWidget()
112
            self.tab_3.setObjectName("tab_3")
113
```

```
self.layoutWidget_3 = QtWidgets.QWidget(self.tab_3)
114
            self.layoutWidget_3.setGeometry(QtCore.QRect(0, 10,
115

→ 371, 211))

            self.layoutWidget_3.setObjectName("layoutWidget_3")
116
            self.horizontalLayout 4 =
117
               QtWidgets.QHBoxLayout(self.layoutWidget 3)
            self.horizontalLayout_4.setContentsMargins(0, 0, 0, 0)
118
            self.horizontalLayout 4.setObjectName("horizontalLayou
119
             \hookrightarrow ut_4")
            spacerItem10 = QtWidgets.QSpacerItem(40, 20,
120
                QtWidgets.QSizePolicy.Expanding,
                QtWidgets.QSizePolicy.Minimum)
            self.horizontalLayout 4.addItem(spacerItem10)
121
            self.verticalLayout_7 = QtWidgets.QVBoxLayout()
122
            self.verticalLayout_7.setObjectName("verticalLayout_7]
123
            self.verticalLayout_8 = QtWidgets.QVBoxLayout()
124
            self.verticalLayout 8.setObjectName("verticalLayout 8.
125
                ")
             \hookrightarrow
            self.horizontalLayout_9 = QtWidgets.QHBoxLayout()
126
            self.horizontalLayout_9.setObjectName("horizontalLayo
127

    ut_9")

            spacerItem11 = QtWidgets.QSpacerItem(30, 20,
128
                QtWidgets.QSizePolicy.Maximum,
                QtWidgets.QSizePolicy.Minimum)
            self.horizontalLayout 9.addItem(spacerItem11)
129
            self.tab1_combobox_4 =
130
               QtWidgets.QComboBox(self.layoutWidget_3)
            sizePolicy = QtWidgets.QSizePolicy(QtWidgets.QSizePol_
131
                icy.MinimumExpanding,
                QtWidgets.QSizePolicy.Fixed)
            sizePolicy.setHorizontalStretch(0)
132
            sizePolicy.setVerticalStretch(0)
133
            sizePolicy.setHeightForWidth(self.tab1_combobox_4.siz_
134
               ePolicy().hasHeightForWidth())
            self.tab1 combobox 4.setSizePolicy(sizePolicy)
135
            self.tab1_combobox_4.setObjectName("tab1_combobox_4")
136
            self.horizontalLayout_9.addWidget(self.tab1_combobox___
137
                4)
```

```
spacerItem12 = QtWidgets.QSpacerItem(30, 20,
138
               QtWidgets.QSizePolicy.Maximum,
               QtWidgets.QSizePolicy.Minimum)
            self.horizontalLayout_9.addItem(spacerItem12)
139
            self.verticalLayout_8.addLayout(self.horizontalLayout_
140
            spacerItem13 = QtWidgets.QSpacerItem(40, 20,
141
            QtWidgets.QSizePolicy.Minimum)
            self.verticalLayout 8.addItem(spacerItem13)
142
            self.verticalLayout_7.addLayout(self.verticalLayout_8)
143
            self.tab1_label_4 =
144
              QtWidgets.QLabel(self.layoutWidget 3)
            sizePolicy = QtWidgets.QSizePolicy(QtWidgets.QSizePol_
145
              icy.Ignored,
              QtWidgets.QSizePolicy.Fixed)
            sizePolicy.setHorizontalStretch(0)
146
            sizePolicy.setVerticalStretch(0)
147
            sizePolicy.setHeightForWidth(self.tab1_label_4.sizePo_
            → licy().hasHeightForWidth())
            self.tab1_label_4.setSizePolicy(sizePolicy)
149
            self.tab1_label_4.setMinimumSize(QtCore.QSize(256,
150
            self.tab1_label_4.setMaximumSize(QtCore.QSize(256,
151
            self.tab1 label 4.setAlignment(QtCore.Qt.AlignCenter)
152
            self.tab1_label_4.setObjectName("tab1_label_4")
            self.verticalLayout_7.addWidget(self.tab1_label_4)
154
            self.horizontalLayout_4.addLayout(self.verticalLayout_
155
            spacerItem14 = QtWidgets.QSpacerItem(40, 20,
156

→ QtWidgets.QSizePolicy.Expanding,

               QtWidgets.QSizePolicy.Minimum)
            self.horizontalLayout_4.addItem(spacerItem14)
157
            self.tabWidget.addTab(self.tab_3, "")
158
            self.tab 4 = QtWidgets.QWidget()
159
            self.tab_4.setObjectName("tab_4")
160
            self.layoutWidget1 = QtWidgets.QWidget(self.tab_4)
161
```

```
self.layoutWidget1.setGeometry(QtCore.QRect(0, 10,
162

→ 371, 211))

            self.layoutWidget1.setObjectName("layoutWidget1")
163
            self.horizontalLayout_13 =
164
                QtWidgets.QHBoxLayout(self.layoutWidget1)
            self.horizontalLayout_13.setContentsMargins(0, 0, 0,
            self.horizontalLayout 13.setObjectName("horizontalLay
166

    out_13")

            spacerItem15 = QtWidgets.QSpacerItem(40, 40,
167
                QtWidgets.QSizePolicy.Expanding,
                QtWidgets.QSizePolicy.Minimum)
            self.horizontalLayout 13.addItem(spacerItem15)
168
            self.verticalLayout_13 = QtWidgets.QVBoxLayout()
169
            self.verticalLayout_13.setObjectName("verticalLayout_1
170
            self.verticalLayout_14 = QtWidgets.QVBoxLayout()
171
            self.verticalLayout 14.setObjectName("verticalLayout
172
            self.horizontalLayout_14 = QtWidgets.QHBoxLayout()
173
            self.horizontalLayout_14.setObjectName("horizontalLay_
174
            \hookrightarrow out_14")
            spacerItem16 = QtWidgets.QSpacerItem(31, 20,
175
                QtWidgets.QSizePolicy.Maximum,
                QtWidgets.QSizePolicy.Minimum)
            self.horizontalLayout 14.addItem(spacerItem16)
176
            self.tab1_combobox_7 =

→ QtWidgets.QComboBox(self.layoutWidget1)

            sizePolicy = QtWidgets.QSizePolicy(QtWidgets.QSizePol_
178
                icy.MinimumExpanding,
                QtWidgets.QSizePolicy.Fixed)
            sizePolicy.setHorizontalStretch(0)
179
            sizePolicy.setVerticalStretch(0)
180
            sizePolicy.setHeightForWidth(self.tab1_combobox_7.siz_
181
            → ePolicy().hasHeightForWidth())
            self.tab1 combobox 7.setSizePolicy(sizePolicy)
182
            self.tab1_combobox_7.setMinimumSize(QtCore.QSize(160,
            → 0))
            self.tab1_combobox_7.setObjectName("tab1_combobox_7")
184
```

```
self.horizontalLayout_14.addWidget(self.tab1_combobox_
185
               7)
            spacerItem17 = QtWidgets.QSpacerItem(31, 20,
186
                QtWidgets.QSizePolicy.Maximum,
                QtWidgets.QSizePolicy.Minimum)
            self.horizontalLayout_14.addItem(spacerItem17)
187
            self.verticalLayout_14.addLayout(self.horizontalLayou
188
            \hookrightarrow t 14)
            spacerItem18 = QtWidgets.QSpacerItem(256, 55,
189
                QtWidgets.QSizePolicy.Minimum,
                QtWidgets.QSizePolicy.Minimum)
            self.verticalLayout_14.addItem(spacerItem18)
190
            self.verticalLayout 13.addLayout(self.verticalLayout
191
            self.progressBar =
192
            self.progressBar.setProperty("value", 0)
193
            self.progressBar.setTextVisible(False)
194
            self.progressBar.setObjectName("progressBar")
            self.verticalLayout_13.addWidget(self.progressBar)
196
            spacerItem19 = QtWidgets.QSpacerItem(40, 60,
197
               QtWidgets.QSizePolicy.Expanding,
                QtWidgets.QSizePolicy.Minimum)
            self.verticalLayout_13.addItem(spacerItem19)
198
            self.horizontalLayout_13.addLayout(self.verticalLayou
199
            \hookrightarrow t 13)
            spacerItem20 = QtWidgets.QSpacerItem(40, 20,
200
                QtWidgets.QSizePolicy.Expanding,
                QtWidgets.QSizePolicy.Minimum)
            self.horizontalLayout_13.addItem(spacerItem20)
201
            self.tabWidget.addTab(self.tab 4, "")
202
            self.OK = QtWidgets.QPushButton(Form)
203
            self.OK.setGeometry(QtCore.QRect(260, 280, 111, 23))
204
            self.OK.setObjectName("OK")
205
206
            self.retranslateUi(Form)
207
            self.tabWidget.setCurrentIndex(0)
            QtCore.QMetaObject.connectSlotsByName(Form)
209
210
```

```
def retranslateUi(self, Form):
211
            _translate = QtCore.QCoreApplication.translate
212
           Form.setWindowTitle(_translate("Form", "Form"))
213
            self.tab1_label.setText(_translate("Form",
214
            self.tabWidget.setTabText(self.tabWidget.indexOf(self]
215
               .tab), _translate("Form",
              "行为"))
            self.tab1_label_3.setText(_translate("Form",
216
            self.tabWidget.setTabText(self.tabWidget.indexOf(self_
217

    .tab_2), _translate("Form",
            → "面部"))
            self.tab1_label_4.setText(_translate("Form",
              "TextLabel"))
            self.tabWidget.setTabText(self.tabWidget.indexOf(self_
219
               .tab_3), _translate("Form",
              "眼睛"))
            self.tabWidget.setTabText(self.tabWidget.indexOf(self_
220

    .tab_4), _translate("Form",
            → "麦克风"))
            self.OK.setText(_translate("Form", " 确认"))
221
222
```

1.4 designer/child test.ui

```
property name="windowTitle">
13
      <string>Form</string>
14
     </property>
15
      <widget class="QTabWidget" name="tabWidget">
      property name="geometry">
17
       <rect>
        < x > 10 < /x >
        <y>10</y>
20
        <width>381</width>
        <height>261</height>
       </rect>
23
      </property>
      cproperty name="currentIndex">
25
       <number>0</number>
26
      </property>
27
      <widget class="QWidget" name="tab">
28
       <attribute name="title">
        <string>行为</string>
30
        </attribute>
31
        <widget class="QWidget" name="layoutWidget">
32
        property name="geometry">
33
         <rect>
           <x>0</x>
35
          <y>10</y>
           <width>371</width>
37
           <height>211</height>
38
         </rect>
         </property>
40
        <layout class="QHBoxLayout" name="horizontalLayout_2">
41
          <item>
           <spacer name="horizontalSpacer_10">
43
            property name="orientation">
             <enum>Qt::Horizontal
45
            </property>
46
            property name="sizeHint" stdset="0">
48
              <width>40</width>
              <height>20</height>
             </size>
```

```
</property>
52
           </spacer>
53
          </item>
54
          <item>
           <layout class="QVBoxLayout" name="verticalLayout_2">
56
            <item>
             <layout class="QVBoxLayout" name="verticalLayout">
59
               <layout class="QHBoxLayout"</pre>

    name="horizontalLayout">
                <item>
61
                 <spacer name="horizontalSpacer">
62
                  property name="orientation">
63
                    <enum>Qt::Horizontal
                  </property>
65
                  property name="sizeType">
66
                    <enum>QSizePolicy::Maximum</enum>
67
                  </property>
68
                  property name="sizeHint" stdset="0">
                   <size>
70
                     <width>30</width>
71
                     <height>20</height>
                    </size>
73
                  </property>
                 </spacer>
75
                </item>
76
                <item>
                 <widget class="QComboBox" name="tab1_combobox">
78
                  property name="sizePolicy">
79
                    <sizepolicy hsizetype="MinimumExpanding"</pre>
80

    vsizetype="Fixed">

                     <horstretch>0</horstretch>
                     <verstretch>0</verstretch>
82
                    </sizepolicy>
83
                  </property>
                 </widget>
85
                </item>
86
                <item>
                 <spacer name="horizontalSpacer_2">
88
```

```
property name="orientation">
                    <enum>Qt::Horizontal
90
                   </property>
91
                   property name="sizeType">
                    <enum>QSizePolicy::Maximum</enum>
93
                   </property>
                   property name="sizeHint" stdset="0">
95
96
                      <width>30</width>
                     <height>20</height>
98
                    </size>
99
                   </property>
100
                  </spacer>
101
                 </item>
102
                </layout>
103
               </item>
104
               <item>
105
                <spacer name="horizontalSpacer_9">
106
                 cproperty name="orientation">
107
                  <enum>Qt::Horizontal</enum>
108
                 </property>
109
                 property name="sizeHint" stdset="0">
110
                  <size>
111
                   <width>40</width>
112
                   <height>20</height>
113
                  </size>
114
                 </property>
                </spacer>
116
               </item>
117
              </layout>
118
             </item>
119
             <item>
120
              <widget class="QLabel" name="tab1_label">
121
               property name="sizePolicy">
122
                <sizepolicy hsizetype="Ignored" vsizetype="Fixed">
123
                 <horstretch>0</horstretch>
124
                 <verstretch>0</verstretch>
125
                </sizepolicy>
126
               </property>
127
```

```
property name="minimumSize">
128
                <size>
129
                  <width>256</width>
130
                 <height>144</height>
131
                </size>
132
               </property>
133
               property name="maximumSize">
134
135
                 <width>256</width>
136
                 <height>144</height>
137
                </size>
138
               </property>
139
               property name="text">
140
                <string>TextLabel</string>
141
               </property>
142
               property name="alignment">
143
                <set>Qt::AlignCenter</set>
144
               </property>
145
              </widget>
146
             </item>
147
            </layout>
148
           </item>
149
           <item>
150
            <spacer name="horizontalSpacer_11">
151
             property name="orientation">
152
              <enum>Qt::Horizontal
153
             </property>
154
             property name="sizeHint" stdset="0">
155
              <size>
156
               <width>40</width>
157
               <height>20</height>
158
              </size>
159
             </property>
160
            </spacer>
161
           </item>
162
          </layout>
163
        </widget>
164
165
       </widget>
       <widget class="QWidget" name="tab_2">
166
```

```
<attribute name="title">
167
          <string>面部</string>
168
         </attribute>
169
         <widget class="QWidget" name="layoutWidget_2">
170
          property name="geometry">
171
           <rect>
172
            < x > 0 < / x >
173
            <y>10</y>
174
            <width>371</width>
175
            <height>211</height>
176
           </rect>
177
          </property>
178
          <layout class="QHBoxLayout" name="horizontalLayout_7">
179
            <spacer name="horizontalSpacer_15">
181
             property name="orientation">
182
              <enum>Qt::Horizontal
183
             </property>
184
             property name="sizeHint" stdset="0">
185
              <size>
186
               <width>40</width>
187
               <height>20</height>
188
              </size>
189
             </property>
190
            </spacer>
191
           </item>
192
           <item>
193
            <layout class="QVBoxLayout" name="verticalLayout_5">
194
             <item>
195
              <layout class="QVBoxLayout" name="verticalLayout_6">
196
               <item>
197
                 <layout class="QHBoxLayout"</pre>
198

→ name="horizontalLayout_8">

                  <item>
199
                   <spacer name="horizontalSpacer_16">
200
                    property name="orientation">
201
                     <enum>Qt::Horizontal</enum>
202
                    </property>
203
                    property name="sizeType">
204
```

```
<enum>QSizePolicy::Maximum</enum>
205
                    </property>
206
                    property name="sizeHint" stdset="0">
207
                     <size>
208
                      <width>30</width>
209
                      <height>20</height>
210
                     </size>
211
                    </property>
212
                   </spacer>
213
                  </item>
214
                  <item>
215
                   <widget class="QComboBox" name="tab1_combobox_3">
216
                    property name="sizePolicy">
217
                     <sizepolicy hsizetype="MinimumExpanding"</pre>

    vsizetype="Fixed">

                      <horstretch>0</horstretch>
219
                      <verstretch>0</verstretch>
220
                     </sizepolicy>
221
                    </property>
222
                   </widget>
223
                  </item>
224
                  <item>
225
                   <spacer name="horizontalSpacer_17">
226
                    property name="orientation">
                     <enum>Qt::Horizontal</enum>
228
                    </property>
229
                    property name="sizeType">
230
                     <enum>QSizePolicy::Maximum</enum>
231
                    </property>
232
                    property name="sizeHint" stdset="0">
233
                     <size>
234
                      <width>30</width>
235
                      <height>20</height>
236
                     </size>
237
                    </property>
238
                   </spacer>
239
                  </item>
240
                 </layout>
241
                </item>
242
```

```
<item>
243
                <spacer name="horizontalSpacer_18">
244
                  cproperty name="orientation">
^{245}
                   <enum>Qt::Horizontal</enum>
246
                  </property>
247
                  property name="sizeHint" stdset="0">
                   <size>
249
                    <width>40</width>
250
                    <height>20</height>
251
                   </size>
252
                  </property>
253
                </spacer>
254
               </item>
255
              </layout>
             </item>
257
             <item>
258
              <widget class="QLabel" name="tab1_label_3">
259
               property name="sizePolicy">
260
                <sizepolicy hsizetype="Ignored" vsizetype="Fixed">
261
                  <horstretch>0</horstretch>
262
                  <verstretch>0</verstretch>
263
                </sizepolicy>
264
               </property>
265
               property name="minimumSize">
                <size>
267
                  <width>256</width>
268
                  <height>144</height>
                </size>
270
               </property>
271
               property name="maximumSize">
272
                <size>
273
                  <width>256</width>
274
                  <height>144</height>
275
                </size>
276
               </property>
               property name="text">
278
                <string>TextLabel</string>
279
               </property>
280
               property name="alignment">
281
```

```
<set>Qt::AlignCenter</set>
               </property>
283
              </widget>
284
             </item>
285
            </layout>
286
           </item>
           <item>
288
            <spacer name="horizontalSpacer_19">
289
             property name="orientation">
290
              <enum>Qt::Horizontal
291
             </property>
292
             property name="sizeHint" stdset="0">
293
              <size>
294
               <width>40</width>
               <height>20</height>
296
              </size>
297
             </property>
298
            </spacer>
299
           </item>
300
          </layout>
301
         </widget>
302
        </widget>
303
        <widget class="QWidget" name="tab_3">
304
         <attribute name="title">
305
          <string>眼睛</string>
306
         </attribute>
307
         <widget class="QWidget" name="layoutWidget_3">
          property name="geometry">
309
           <rect>
310
            < x > 0 < / x >
311
            <y>10</y>
312
            <width>371</width>
313
            <height>211</height>
314
           </rect>
315
          </property>
316
          <layout class="QHBoxLayout" name="horizontalLayout_4">
317
           <item>
318
            <spacer name="horizontalSpacer_20">
319
             property name="orientation">
320
```

```
<enum>Qt::Horizontal
321
             </property>
322
             property name="sizeHint" stdset="0">
323
              <size>
324
               <width>40</width>
325
               <height>20</height>
326
              </size>
327
             </property>
328
            </spacer>
329
           </item>
330
           <item>
331
            <layout class="QVBoxLayout" name="verticalLayout_7">
332
333
              <layout class="QVBoxLayout" name="verticalLayout_8">
334
               <item>
335
                 <layout class="QHBoxLayout"</pre>
336

    name="horizontalLayout_9">

                  <item>
337
                   <spacer name="horizontalSpacer_5">
338
                    cproperty name="orientation">
339
                     <enum>Qt::Horizontal</enum>
340
                    </property>
341
                    property name="sizeType">
342
                     <enum>QSizePolicy::Maximum</enum>
                    </property>
344
                    property name="sizeHint" stdset="0">
345
                     <size>
346
                      <width>30</width>
347
                      <height>20</height>
348
                     </size>
349
                    </property>
350
                   </spacer>
351
                  </item>
352
                  <item>
353
                   <widget class="QComboBox" name="tab1_combobox_4">
354
                    property name="sizePolicy">
355
                     <sizepolicy hsizetype="MinimumExpanding"</pre>

    vsizetype="Fixed">

                      <horstretch>0</horstretch>
357
```

```
<verstretch>0</verstretch>
358
                     </sizepolicy>
359
                    </property>
360
                   </widget>
361
                  </item>
362
                  <item>
363
                   <spacer name="horizontalSpacer_6">
364
                    property name="orientation">
365
                     <enum>Qt::Horizontal
366
                    </property>
367
                    property name="sizeType">
368
                     <enum>QSizePolicy::Maximum</enum>
369
                    </property>
370
                    property name="sizeHint" stdset="0">
371
                     <size>
372
                      <width>30</width>
373
                      <height>20</height>
374
                     </size>
375
                    </property>
376
                   </spacer>
377
                  </item>
378
                 </layout>
379
               </item>
380
               <item>
                 <spacer name="horizontalSpacer_21">
382
                  cproperty name="orientation">
383
                   <enum>Qt::Horizontal</enum>
384
                  </property>
385
                  property name="sizeHint" stdset="0">
386
                   <size>
387
                    <width>40</width>
388
                    <height>20</height>
389
                   </size>
390
                  </property>
391
                 </spacer>
392
                </item>
393
              </layout>
394
             </item>
395
             <item>
396
```

```
<widget class="QLabel" name="tab1_label_4">
397
               property name="sizePolicy">
398
                <sizepolicy hsizetype="Ignored" vsizetype="Fixed">
399
                 <horstretch>0</horstretch>
400
                 <verstretch>0</verstretch>
401
                </sizepolicy>
402
               </property>
403
               property name="minimumSize">
404
                <size>
405
                 <width>256</width>
406
                 <height>144</height>
407
                </size>
408
               </property>
409
               property name="maximumSize">
410
                <size>
411
                 <width>256</width>
412
                 <height>144</height>
413
                </size>
414
               </property>
415
               property name="text">
416
                <string>TextLabel</string>
417
               </property>
418
               property name="alignment">
419
                <set>Qt::AlignCenter</set>
               </property>
421
              </widget>
422
             </item>
            </layout>
424
           </item>
425
           <item>
426
            <spacer name="horizontalSpacer_22">
427
             property name="orientation">
428
              <enum>Qt::Horizontal
429
             430
             cproperty name="sizeHint" stdset="0">
431
432
               <width>40</width>
433
               <height>20</height>
434
              </size>
435
```

```
</property>
436
            </spacer>
437
           </item>
438
          </layout>
         </widget>
440
       </widget>
441
       <widget class="QWidget" name="tab_4">
442
         <attribute name="title">
443
          <string>麦克风</string>
444
         </attribute>
445
         <widget class="QWidget" name="layoutWidget">
446
          property name="geometry">
447
           <rect>
448
            < x > 0 < / x >
449
            <y>10</y>
450
            <width>371</width>
451
            <height>211</height>
           </rect>
453
          </property>
454
          <layout class="QHBoxLayout" name="horizontalLayout_13">
455
           <item>
456
            <spacer name="horizontalSpacer_31">
457
             cproperty name="orientation">
458
              <enum>Qt::Horizontal</enum>
             460
             cproperty name="sizeHint" stdset="0">
461
              <size>
               <width>40</width>
463
               <height>40</height>
464
              </size>
465
             </property>
466
            </spacer>
467
           </item>
468
           <item>
469
            <layout class="QVBoxLayout" name="verticalLayout_13">
470
471
              <layout class="QVBoxLayout" name="verticalLayout_14">
472
473
               <item>
```

```
<layout class="QHBoxLayout"</pre>
474

    name="horizontalLayout_14">

                  <item>
475
                   <spacer name="horizontalSpacer_32">
476
                    cproperty name="orientation">
477
                     <enum>Qt::Horizontal</enum>
478
                    </property>
479
                    property name="sizeType">
480
                     <enum>QSizePolicy::Maximum</enum>
481
                    </property>
482
                    property name="sizeHint" stdset="0">
483
                     <size>
484
                      <width>31</width>
485
                      <height>20</height>
                     </size>
487
                    </property>
488
                   </spacer>
489
                  </item>
490
                  <item>
491
                   <widget class="QComboBox" name="tab1_combobox_7">
492
                    property name="sizePolicy">
493
                     <sizepolicy hsizetype="MinimumExpanding"</pre>
494

    vsizetype="Fixed">

                      <horstretch>0</horstretch>
495
                      <verstretch>0</verstretch>
496
                     </sizepolicy>
497
                    </property>
498
                    property name="minimumSize">
499
                     <size>
500
                      <width>160</width>
501
                      <height>0</height>
502
                     </size>
503
                    </property>
504
                   </widget>
505
                  </item>
506
                  <item>
507
                   <spacer name="horizontalSpacer_33">
                    property name="orientation">
509
                     <enum>Qt::Horizontal</enum>
510
```

```
</property>
511
                    property name="sizeType">
512
                     <enum>QSizePolicy::Maximum</enum>
513
                    </property>
514
                    property name="sizeHint" stdset="0">
515
                     <size>
                      <width>31</width>
517
                      <height>20</height>
518
                     </size>
519
                    </property>
520
                  </spacer>
521
                 </item>
522
                </layout>
523
               </item>
524
               <item>
525
                <spacer name="horizontalSpacer_34">
526
                 cproperty name="orientation">
527
                  <enum>Qt::Horizontal
528
                 </property>
529
                 property name="sizeType">
530
                  <enum>QSizePolicy::Minimum</enum>
531
                 </property>
532
                 cproperty name="sizeHint" stdset="0">
533
                  <size>
                    <width>256</width>
535
                    <height>55</height>
536
                  </size>
537
                 </property>
538
                </spacer>
539
               </item>
540
              </layout>
541
             </item>
542
             <item>
543
              <widget class="QProgressBar" name="progressBar">
544
               property name="value">
545
                <number>0</number>
546
               </property>
547
               property name="textVisible">
548
                <bool>false
549
```

```
</property>
550
              </widget>
551
             </item>
552
             <item>
553
              <spacer name="horizontalSpacer_36">
554
                property name="orientation">
                 <enum>Qt::Horizontal</enum>
556
               </property>
557
                property name="sizeHint" stdset="0">
558
                 <size>
559
                  <width>40</width>
560
                  <height>60</height>
561
                 </size>
562
               </property>
              </spacer>
564
             </item>
565
            </layout>
566
           </item>
567
           <item>
568
            <spacer name="horizontalSpacer_35">
569
             cproperty name="orientation">
570
              <enum>Qt::Horizontal
571
             </property>
572
             property name="sizeHint" stdset="0">
              <size>
574
                <width>40</width>
575
               <height>20</height>
              </size>
577
             </property>
578
            </spacer>
579
           </item>
580
          </layout>
581
         </widget>
582
       </widget>
583
       </widget>
584
       <widget class="QPushButton" name="OK">
585
        property name="geometry">
586
587
         <rect>
          < x > 260 < /x >
588
```

```
<y>280</y>
          <width>111</width>
590
          <height>23</height>
591
         </rect>
        </property>
593
        property name="text">
594
         <string>确认</string>
595
        </property>
596
      </widget>
597
      </widget>
598
     <resources/>
599
     <connections/>
600
    </ui>
601
```

1.5 designer/gui.py

```
# -*- coding: utf-8 -*-
   # Form implementation generated from reading ui file 'gui.ui'
   # Created by: PyQt5 UI code generator 5.15.10
   # WARNING: Any manual changes made to this file will be lost

    when pyuic5 is

   # run again. Do not edit this file unless you know what you
    \hookrightarrow are doing.
   from PyQt5 import QtCore, QtGui, QtWidgets
11
12
13
   class Ui_MainWindow(object):
14
       def setupUi(self, MainWindow):
            MainWindow.setObjectName("MainWindow")
16
           MainWindow.resize(1048, 1025)
17
            icon = QtGui.QIcon()
            icon.addPixmap(QtGui.QPixmap("../icon.ico"),
            → QtGui.QIcon.Normal, QtGui.QIcon.Off)
```

```
print("Saved")
525
        def updatemessage(self):
526
           # 只有在点击开始录制时才会显示该消息,
527
            → 点击进程结束时停止显示。
           with open("config/db.json", "r", encoding='UTF-8') as
528
            \hookrightarrow dbfile_r:
               jsonfile = json.load(dbfile_r)
529
           self.save_path = jsonfile['save_path']
530
           self.time_end = time.time()
531
           m, s = divmod(int(self.time end-self.time start), 60)
532
           h, m = divmod(m, 60)
533
           self.recording_time =
534
            → str(h)+'时'+str(m)+'分'+str(s)+'秒'
           self.statusbar.showMessage('当前样本编号: ' +
535

    self.lineEdit.text() + '

                                        保存位置: '+
              self.save_path + '
                                   录制时间: +
              self.recording_time)
           if self._start_running == True:
536
               self.qttimer.stop()
537
        def startRe(self):
538
           print(self.voice_index)
539
           if self._start_running:
540
               self._start_running =False
541
               self._begin = True
               with open("config/db.json", "r", encoding='UTF-8')
543
                \hookrightarrow as dbfile r:
                   jsonfile = json.load(dbfile_r)
544
               self.voice_format = jsonfile["voice_format"]
545
               self.video_format = jsonfile["video_format"]
546
               #需要显示的有: 病人ID, 当前保存路径,
547
                → 已经录制多长时间,在加一个录制中。
               #已录制多长时间需要动态显示,每秒更新一次状态栏,
548
                → 只在录制视频的时候显示。
               #什么情况下会录制视频? begin == True,上面写了,
549
                → 不等于-1就能录制视频。
```

```
if self.voice_index != -1 or self.eye_camera != -1
                   or self.hd_camera != -1 or self.face_camera !=
                  -1: #self. voice_index! =-1, 则一定会录制音频。
                  如果有其他设备不为-1则会录制视频,
                  只要有录制情况就显示该消息
                   self.time_start = time.time()
551
                   self.record_judge = True #表示是否在录制中。
552
                   → 该变量只与qtimer有关,
                      该变量为True则一定有QTimer()
                      ,当然线程终止也会赋值为False,
                      表示结束录制了。
                   self.qttimer = QTimer()
553
                   self.qttimer.start(200)
554
                   self.qttimer.timeout.connect(self.updatemessa_
               threading._start_new_thread(self.save_hd_video,
556
               threading._start_new_thread(self.save_face_video,
557
               ())
               threading._start_new_thread(self.save_eye_video,
558
               if self.voice_index != -1:
559
                   threading._start_new_thread(self.win_4, ())
560
           else:
               pass
562
       def endRe(self):
563
           if self._start_running==False:
               if self.record_judge == True:# 只有点击
565
                   self.qttimer.stop()
566
                   self.record_judge = False
567
                   self.statusbar.showMessage('录制结束,
568
                      文件已保存至: ' + self.save_path + '
                      录制时长: ' + self.recording_time)
               self._start_running=True
569
               self._begin =False
570
               if self.voice index != -1:
571
                   self._voice_get = False
572
573
                   self.voice_save()
```

```
self.statusbar.showMessage('录制结束,
574
                      文件已保存至: '+self.save_path+' 录制时长:
                      '+self.recording_time)
575
           else:
              pass
576
       def closeEvent(self,event):
577
           # 关闭所有线程, 防止不能退出
578
           # 如果没有运行进程终止,则不能退出
579
           if self._init_running == False:
580
              QMessageBox.information(self,'警告','进程未中止,
581
               → 请中止进程再关闭窗口!!)
              event.ignore()
582
          print('closeevent')
583
       def stop(self):
584
           if self.record_judge == True:
585
              QMessageBox.information(self,'警告','正在录制中,
586
                  请结束录制后再点击停用视频设备!!)
           else:
587
              self._win1_running = False
              self._win2_running = False
589
              self._win3_running = False
590
              self._init_running = True
591
              print('stop','所有通道均已断开')
592
              self.voice_image.updateImage(img_no_voice)
593
              self.statusbar.showMessage('所有通道均已断开')
594
       def f p(self):
595
           #点进程终止的时候录音进程可能不会终止, 而视频录制会结束,
              必须再点结束录制才能结束----先不管它,
              假设先用不到它。-----还是先解决它吧。
           #进程中止前判断是否在录制中, 若在录制中, 需要点击录制结束
597
           if self.record judge == True:
598
              QMessageBox.information(self,'警告','正在录制中,
599
                 请结束录制后再点击进程中止!!)
           else:
600
              self._win1_running = False
601
              self. win2 running = False
602
              self._win3_running = False
603
              self._init_running = True
604
              if self.record_judge == True:
605
```

```
self._begin = False
                    self._start_running = True
607
                    self._voice_get = False
608
                    self.voice_save()
609
                    self.qttimer.stop()
610
                    self.record_judge = False
                self._voice_get = True
612
                self. begin = False
613
                print('stop','所有进程均已中止')
614
                self.statusbar.showMessage('所有进程均已中止')
615
                self.voice_image.updateImage(img_no_voice)
616
        def about(self):
617
            QMessageBox.about(self, " 面部表型特征提取系统",
618
                              " 山东省精神卫生中心 ")
        def updateImages(self):
620
            self.calculateProcessed()
621
            self.calculateOriginal()
622
        def createButtons(self):
623
            self.initButton.clicked.connect(self.initfrom)
624
            self.pushButton.clicked.connect(self.stop)
625
            self.shotButton.clicked.connect(self.f_p)
626
            self.actionAbout.triggered.connect(self.about)
627
            self.startButton.clicked.connect(self.startRe)
628
            self.endButton.clicked.connect(self.endRe)
            self.action12.triggered.connect(self.child_CameraVoic_
630
              e setting)
                #子窗口配置摄像头和麦克风
            self.actionse.triggered.connect(self.Child_File_Setti_
631
            → ng) #选择文件路径
        def setBackground(self):
632
            cv img rgb = img no camera
633
            self.original1_image.updateImage(cv_img_rgb)
            self.original2_image.updateImage(cv_img_rgb)
635
            self.eye_image.updateImage(cv_img_rgb)
636
            self.voice_image.updateImage(img_no_voice)
```

1.15 CvPyGui/ui/___init___.py

1

1.16 CvPyGui/ui/child_file.py

```
# -*- coding: utf-8 -*-
   # Form implementation generated from reading ui file

    'child file.ui'

   # Created by: PyQt5 UI code generator 5.15.10
   # WARNING: Any manual changes made to this file will be lost

    when pyuic5 is

   # run again. Do not edit this file unless you know what you
    \hookrightarrow are doing.
   from PyQt5 import QtCore, QtGui, QtWidgets
12
13
   class Ui_Form(object):
       def setupUi(self, Form):
           Form.setObjectName("Form")
16
           Form.resize(385, 269)
           self.file_ok = QtWidgets.QPushButton(Form)
           self.file_ok.setGeometry(QtCore.QRect(290, 230, 75,
19
            self.file_ok.setObjectName("file_ok")
           self.label = QtWidgets.QLabel(Form)
21
           self.label.setGeometry(QtCore.QRect(10, 100, 101, 16))
           self.label.setObjectName("label")
           self.layoutWidget = QtWidgets.QWidget(Form)
24
           self.layoutWidget.setGeometry(QtCore.QRect(14, 5, 361,
           self.layoutWidget.setObjectName("layoutWidget")
```

```
self.verticalLayout =
27

→ QtWidgets.QVBoxLayout(self.layoutWidget)

           self.verticalLayout.setContentsMargins(0, 0, 0, 0)
28
           self.verticalLayout.setObjectName("verticalLayout")
           self.horizontalLayout_2 = QtWidgets.QHBoxLayout()
30
           self.horizontalLayout_2.setObjectName("horizontalLayo
            \hookrightarrow ut 2")
           self.show file path label =
32

→ QtWidgets.QLabel(self.layoutWidget)

           self.show file path label.setStyleSheet("")
33
           self.show_file_path_label.setObjectName("show_file_pa_
34

    th label")

           self.horizontalLayout 2.addWidget(self.show file path_
35
            → label)
           spacerItem = QtWidgets.QSpacerItem(40, 20,
36
               QtWidgets.QSizePolicy.Minimum,
               QtWidgets.QSizePolicy.Expanding)
           self.horizontalLayout 2.addItem(spacerItem)
37
           self.verticalLayout.addLayout(self.horizontalLayout 2)
           self.horizontalLayout = QtWidgets.QHBoxLayout()
39
           self.horizontalLayout.setObjectName("horizontalLayout
            self.file_path_label =
41

→ QtWidgets.QLabel(self.layoutWidget)

           sizePolicy = QtWidgets.QSizePolicy(QtWidgets.QSizePol_
42
               icy.Minimum,
               QtWidgets.QSizePolicy.Preferred)
           sizePolicy.setHorizontalStretch(0)
43
           sizePolicy.setVerticalStretch(0)
44
           sizePolicy.setHeightForWidth(self.file_path_label.siz_
            ⇔ ePolicy().hasHeightForWidth())
           self.file_path_label.setSizePolicy(sizePolicy)
           self.file_path_label.setMinimumSize(QtCore.QSize(0,
47
            self.file_path_label.setObjectName("file_path_label")
           self.horizontalLayout.addWidget(self.file path label)
49
           self.choice_file_path_button =
              QtWidgets.QPushButton(self.layoutWidget)
```

```
sizePolicy =
              QtWidgets.QSizePolicy(QtWidgets.QSizePolicy.Fixed,
               QtWidgets.QSizePolicy.Fixed)
           sizePolicy.setHorizontalStretch(0)
           sizePolicy.setVerticalStretch(0)
53
           sizePolicy.setHeightForWidth(self.choice_file_path_bu_
              tton.sizePolicy().hasHeightForWidth())
           self.choice_file_path_button.setSizePolicy(sizePolicy)
55
           self.choice_file_path_button.setObjectName("choice_fi_
            → le path button")
           self.horizontalLayout.addWidget(self.choice_file_path_
57

    _button)

           self.verticalLayout.addLayout(self.horizontalLayout)
58
           self.layoutWidget1 = QtWidgets.QWidget(Form)
           self.layoutWidget1.setGeometry(QtCore.QRect(40, 180,
60

→ 291, 22))

           self.layoutWidget1.setObjectName("layoutWidget1")
61
           self.horizontalLavout 3 =
62
            self.horizontalLayout_3.setContentsMargins(0, 0, 0, 0)
63
           self.horizontalLayout_3.setObjectName("horizontalLayo

    ut_3")

           self.label_3 = QtWidgets.QLabel(self.layoutWidget1)
65
           self.label_3.setObjectName("label_3")
           self.horizontalLayout_3.addWidget(self.label_3)
67
           self.radioButton mp3 =
68
              QtWidgets.QRadioButton(self.layoutWidget1)
           self.radioButton_mp3.setEnabled(False)
69
           self.radioButton_mp3.setObjectName("radioButton_mp3")
70
           self.horizontalLayout_3.addWidget(self.radioButton_mp_
71
            → 3)
           self.radioButton_wav =
72
            → QtWidgets.QRadioButton(self.layoutWidget1)
           self.radioButton_wav.setEnabled(False)
73
           self.radioButton_wav.setObjectName("radioButton_wav")
           self.horizontalLayout 3.addWidget(self.radioButton wa_
75
            \hookrightarrow \vee)
           self.layoutWidget2 = QtWidgets.QWidget(Form)
76
```

```
self.layoutWidget2.setGeometry(QtCore.QRect(40, 130,

→ 291, 22))

           self.layoutWidget2.setObjectName("layoutWidget2")
78
           self.horizontalLayout_4 =

→ QtWidgets.QHBoxLayout(self.layoutWidget2)

           self.horizontalLayout_4.setContentsMargins(0, 0, 0, 0)
           self.horizontalLayout_4.setObjectName("horizontalLayo
81
           \leftrightarrow ut 4")
           self.label_2 = QtWidgets.QLabel(self.layoutWidget2)
82
           self.label 2.setObjectName("label 2")
83
           self.horizontalLayout_4.addWidget(self.label_2)
           self.radioButton mp4 =
           self.radioButton_mp4.setObjectName("radioButton_mp4")
           self.horizontalLayout_4.addWidget(self.radioButton_mp
           self.radioButton_avi =
88
             QtWidgets.QRadioButton(self.layoutWidget2)
           self.radioButton_avi.setObjectName("radioButton_avi")
           self.horizontalLayout_4.addWidget(self.radioButton_av_
90
             i)
91
           self.retranslateUi(Form)
92
           QtCore.QMetaObject.connectSlotsByName(Form)
       def retranslateUi(self, Form):
95
           _translate = QtCore.QCoreApplication.translate
           Form.setWindowTitle(_translate("Form", "初始化配置"))
97
           self.file_ok.setText(_translate("Form", " 确认"))
           self.label.setText(_translate("Form",
           → "音视频格式选择"))
           self.show_file_path_label.setText(_translate("Form",
100
              "当前文件保存路径:"))
           self.file_path_label.setText(_translate("Form", "C:"))
101
           102
             "选择文件保存路径"))
           self.label_3.setText(_translate("Form", " 音频格式"))
103
```

```
self.radioButton_mp3.setText(_translate("Form",
104
               "mp3"))
            self.radioButton_wav.setText(_translate("Form",
105
               "wav"))
            self.label_2.setText(_translate("Form", " 视频格式"))
106
            self.radioButton_mp4.setText(_translate("Form",
                "mp4"))
            self.radioButton_avi.setText(_translate("Form",
108
               "avi"))
109
110
    if __name__ == "__main__":
111
        import sys
112
        app = QtWidgets.QApplication(sys.argv)
113
        Form = QtWidgets.QWidget()
114
        ui = Ui_Form()
115
        ui.setupUi(Form)
116
        Form.show()
117
        sys.exit(app.exec_())
118
```

1.17 CvPyGui/ui/child_file.ui

```
<?xml version="1.0" encoding="UTF-8"?>
   <ui version="4.0">
    <class>Form</class>
    <widget class="QWidget" name="Form">
     property name="geometry">
      <rect>
       < x > 0 < / x >
       <y>0</y>
       <width>385</width>
       <height>269</height>
10
      </rect>
11
     </property>
12
     property name="windowTitle">
13
      <string>初始化配置</string>
     </property>
15
     <widget class="QPushButton" name="file_ok">
```

```
property name="geometry">
       <rect>
18
         < x > 290 < /x >
19
        <y>230</y>
         <width>75</width>
21
         <height>23</height>
22
        </rect>
       </property>
24
       property name="text">
        <string>确认</string>
26
       </property>
27
     </widget>
28
     <widget class="QLabel" name="label">
29
       property name="geometry">
       <rect>
31
        < x > 10 < /x >
32
         <y>100</y>
         <width>101</width>
34
         <height>16</height>
        </rect>
36
       </property>
37
       property name="text">
        <string>音视频格式选择</string>
39
       </property>
40
     </widget>
41
     <widget class="QWidget" name="layoutWidget">
42
       property name="geometry">
        <rect>
44
        <x>14</x>
45
         <y>5</y>
         <width>361</width>
47
         <height>71</height>
        </rect>
49
       </property>
50
       <layout class="QVBoxLayout" name="verticalLayout">
52
         <layout class="QHBoxLayout" name="horizontalLayout_2">
          <item>
           <widget class="QLabel" name="show_file_path_label">
```

```
property name="styleSheet">
             <string notr="true"/>
57
            </property>
58
            property name="text">
             <string>当前文件保存路径:</string>
60
            </property>
61
           </widget>
          </item>
63
          <item>
           <spacer name="horizontalSpacer">
65
            property name="orientation">
66
             <enum>Qt::Orientation::Horizontal
67
            </property>
68
            property name="sizeHint" stdset="0">
             <size>
70
              <width>40</width>
71
              <height>20</height>
             </size>
73
            </property>
           </spacer>
75
          </item>
76
         </layout>
        </item>
78
        <item>
         <layout class="QHBoxLayout" name="horizontalLayout">
80
81
           <widget class="QLabel" name="file_path_label">
            property name="sizePolicy">
83
             <sizepolicy hsizetype="Minimum"</pre>

    vsizetype="Preferred">

              <horstretch>0</horstretch>
85
              <verstretch>0</verstretch>
             </sizepolicy>
87
            </property>
            property name="minimumSize">
             <size>
90
              <width>0</width>
91
              <height>20</height>
             </size>
93
```

```
</property>
             property name="text">
95
              <string>C:</string>
96
             </property>
            </widget>
98
           </item>
           <item>
100
            <widget class="QPushButton"</pre>
101
            → name="choice_file_path_button">
             property name="sizePolicy">
102
              <sizepolicy hsizetype="Fixed" vsizetype="Fixed">
103
               <horstretch>0</horstretch>
104
               <verstretch>0</verstretch>
105
              </sizepolicy>
             </property>
107
             property name="text">
108
              <string>选择文件保存路径</string>
109
             </property>
110
            </widget>
111
           </item>
112
         </layout>
113
        </item>
114
       </layout>
115
      </widget>
116
      <widget class="QWidget" name="layoutWidget">
117
       property name="geometry">
118
        <rect>
         < x > 40 < /x >
120
         <y>180</y>
121
         <width>291</width>
         <height>22</height>
123
        </rect>
124
       </property>
125
       <layout class="QHBoxLayout" name="horizontalLayout_3">
126
        <item>
127
         <widget class="QLabel" name="label_3">
128
           property name="text">
129
            <string>音频格式</string>
130
           </property>
131
```

```
</widget>
132
         </item>
133
         <item>
134
          <widget class="QRadioButton" name="radioButton_mp3">
135
           property name="enabled">
136
            <bool>false</bool>
137
           </property>
138
           property name="text">
139
            <string>mp3</string>
140
           </property>
141
          </widget>
142
        </item>
143
         <item>
144
         <widget class="QRadioButton" name="radioButton_wav">
145
           property name="enabled">
146
            <bool>false</bool>
147
           </property>
148
           property name="text">
149
            <string>wav</string>
150
           </property>
151
          </widget>
152
         </item>
153
       </layout>
154
      </widget>
155
      <widget class="QWidget" name="layoutWidget">
156
       property name="geometry">
157
        <rect>
          < x > 40 < /x >
159
         <y>130</y>
160
          <width>291</width>
161
          <height>22</height>
162
        </rect>
163
       </property>
164
       <layout class="QHBoxLayout" name="horizontalLayout_4">
165
         <item>
166
         <widget class="QLabel" name="label_2">
167
           property name="text">
168
            <string>视频格式</string>
169
           </property>
170
```

```
</widget>
171
         </item>
172
         <item>
173
          <widget class="QRadioButton" name="radioButton_mp4">
           property name="text">
175
            <string>mp4</string>
176
           </property>
177
          </widget>
178
         </item>
179
         <item>
180
          <widget class="QRadioButton" name="radioButton_avi">
181
           property name="text">
182
            <string>avi</string>
183
           </property>
          </widget>
185
         </item>
186
       </layout>
187
      </widget>
188
     </widget>
189
     <resources/>
190
     <connections/>
191
    </ui>
```

1.18 CvPyGui/ui/child_test.py

```
from PyQt5 import QtCore, QtGui, QtWidgets
class Ui_Form(object):

def setupUi(self, Form):
    Form.setObjectName("Form")

Form.resize(400, 310)

self.tabWidget = QtWidgets.QTabWidget(Form)

self.tabWidget.setGeometry(QtCore.QRect(10, 10, 381, 40)))

self.tabWidget.setObjectName("tabWidget")

self.tab = QtWidgets.QWidget()

self.tab.setObjectName("tab")

self.tab.setObjectName("tab")

self.layoutWidget = QtWidgets.QWidget(self.tab)
```

```
self.layoutWidget.setGeometry(QtCore.QRect(0, 10, 371,
12

→ 211))

           self.layoutWidget.setObjectName("layoutWidget")
13
           self.horizontalLayout_2 =
14

→ QtWidgets.QHBoxLayout(self.layoutWidget)

           self.horizontalLayout_2.setContentsMargins(0, 0, 0, 0)
           self.horizontalLayout_2.setObjectName("horizontalLayo
16

    ut 2")

           spacerItem = QtWidgets.QSpacerItem(40, 20,
17
              QtWidgets.QSizePolicy.Expanding,
               QtWidgets.QSizePolicy.Minimum)
           self.horizontalLayout_2.addItem(spacerItem)
18
           self.verticalLayout 2 = QtWidgets.QVBoxLayout()
19
           self.verticalLayout_2.setObjectName("verticalLayout_2")
           self.verticalLayout = QtWidgets.QVBoxLayout()
21
           self.verticalLayout.setObjectName("verticalLayout")
           self.horizontalLayout = QtWidgets.QHBoxLayout()
23
           self.horizontalLayout.setObjectName("horizontalLayout
           spacerItem1 = QtWidgets.QSpacerItem(30, 20,
25
             QtWidgets.QSizePolicy.Maximum,
               QtWidgets.QSizePolicy.Minimum)
           self.horizontalLayout.addItem(spacerItem1)
           self.tab1_combobox =
           sizePolicy = QtWidgets.QSizePolicy(QtWidgets.QSizePol_

    icy.MinimumExpanding,
           sizePolicy.setHorizontalStretch(0)
           sizePolicy.setVerticalStretch(0)
30
           sizePolicy.setHeightForWidth(self.tab1_combobox.sizeP_

    olicy().hasHeightForWidth())

           self.tab1_combobox.setSizePolicy(sizePolicy)
32
           self.tab1_combobox.setObjectName("tab1_combobox")
           self.horizontalLayout.addWidget(self.tab1 combobox)
           spacerItem2 = QtWidgets.QSpacerItem(30, 20,
35
               QtWidgets.QSizePolicy.Maximum,
              QtWidgets.QSizePolicy.Minimum)
```

```
self.horizontalLayout.addItem(spacerItem2)
           self.verticalLayout.addLayout(self.horizontalLayout)
37
           spacerItem3 = QtWidgets.QSpacerItem(40, 20,
               QtWidgets.QSizePolicy.Expanding,
               QtWidgets.QSizePolicy.Minimum)
           self.verticalLayout.addItem(spacerItem3)
39
           self.verticalLayout_2.addLayout(self.verticalLayout)
40
           self.tab1_label = QtWidgets.QLabel(self.layoutWidget)
41
           sizePolicy = QtWidgets.QSizePolicy(QtWidgets.QSizePol
j
               icv.Ignored,
               QtWidgets.QSizePolicy.Fixed)
           sizePolicy.setHorizontalStretch(0)
43
           sizePolicy.setVerticalStretch(0)
44
           sizePolicy.setHeightForWidth(self.tab1_label.sizePoli_
              cy().hasHeightForWidth())
           self.tab1_label.setSizePolicy(sizePolicy)
46
           self.tab1_label.setMinimumSize(QtCore.QSize(256, 144))
47
           self.tab1 label.setMaximumSize(QtCore.QSize(256, 144))
48
           self.tab1_label.setAlignment(QtCore.Qt.AlignCenter)
           self.tab1_label.setObjectName("tab1_label")
50
           self.verticalLayout_2.addWidget(self.tab1_label)
           self.horizontalLayout_2.addLayout(self.verticalLayout_
           spacerItem4 = QtWidgets.QSpacerItem(40, 20,
               QtWidgets.QSizePolicy.Expanding,
               QtWidgets.QSizePolicy.Minimum)
           self.horizontalLayout_2.addItem(spacerItem4)
           self.tabWidget.addTab(self.tab, "")
55
           self.tab_2 = QtWidgets.QWidget()
56
           self.tab_2.setObjectName("tab_2")
           self.layoutWidget 2 = QtWidgets.QWidget(self.tab 2)
58
           self.layoutWidget_2.setGeometry(QtCore.QRect(0, 10,

→ 371, 211))

           self.layoutWidget_2.setObjectName("layoutWidget_2")
60
           self.horizontalLayout_7 =
              QtWidgets.QHBoxLayout(self.layoutWidget 2)
           self.horizontalLayout_7.setContentsMargins(0, 0, 0, 0)
62
           self.horizontalLayout_7.setObjectName("horizontalLayo
              ut_7")
```

```
spacerItem5 = QtWidgets.QSpacerItem(40, 20,

→ QtWidgets.QSizePolicy.Expanding,

              QtWidgets.QSizePolicy.Minimum)
           self.horizontalLayout_7.addItem(spacerItem5)
65
           self.verticalLayout_5 = QtWidgets.QVBoxLayout()
66
           self.verticalLayout_5.setObjectName("verticalLayout_5]
              ")
           self.verticalLayout 6 = QtWidgets.QVBoxLayout()
68
           self.verticalLayout_6.setObjectName("verticalLayout_6]
           self.horizontalLayout_8 = QtWidgets.QHBoxLayout()
70
           self.horizontalLayout_8.setObjectName("horizontalLayo_
71

    ut 8")

           spacerItem6 = QtWidgets.QSpacerItem(30, 20,
72
           QtWidgets.QSizePolicy.Minimum)
           self.horizontalLayout_8.addItem(spacerItem6)
73
           self.tab1 combobox 3 =
74
           → QtWidgets.QComboBox(self.layoutWidget_2)
           sizePolicy = QtWidgets.QSizePolicy(QtWidgets.QSizePol_
75

    icy.MinimumExpanding,
              QtWidgets.QSizePolicy.Fixed)
           sizePolicy.setHorizontalStretch(0)
76
           sizePolicy.setVerticalStretch(0)
           sizePolicy.setHeightForWidth(self.tab1_combobox_3.siz_
78
           ⇔ ePolicy().hasHeightForWidth())
           self.tab1_combobox_3.setSizePolicy(sizePolicy)
           self.tab1_combobox_3.setObjectName("tab1_combobox_3")
80
           self.horizontalLayout_8.addWidget(self.tab1_combobox___
           spacerItem7 = QtWidgets.QSpacerItem(30, 20,
82

→ QtWidgets.QSizePolicy.Maximum,

               QtWidgets.QSizePolicy.Minimum)
           self.horizontalLayout_8.addItem(spacerItem7)
83
           self.verticalLayout_6.addLayout(self.horizontalLayout_
           spacerItem8 = QtWidgets.QSpacerItem(40, 20,
85
               QtWidgets.QSizePolicy.Expanding,
               QtWidgets.QSizePolicy.Minimum)
```

```
self.verticalLayout_6.addItem(spacerItem8)
            self.verticalLayout_5.addLayout(self.verticalLayout_6)
87
            self.tab1_label_3 =
               QtWidgets.QLabel(self.layoutWidget_2)
            sizePolicy = QtWidgets.QSizePolicy(QtWidgets.QSizePol_
89

    icy.Ignored,

               QtWidgets.QSizePolicy.Fixed)
            sizePolicy.setHorizontalStretch(0)
90
            sizePolicy.setVerticalStretch(0)
            sizePolicy.setHeightForWidth(self.tab1_label_3.sizePo_
92

    licy().hasHeightForWidth())

            self.tab1_label_3.setSizePolicy(sizePolicy)
93
            self.tab1 label 3.setMinimumSize(QtCore.QSize(256,
94
            self.tab1_label_3.setMaximumSize(QtCore.QSize(256,
95
            self.tab1_label_3.setAlignment(QtCore.Qt.AlignCenter)
96
            self.tab1 label 3.setObjectName("tab1 label 3")
97
            self.verticalLayout_5.addWidget(self.tab1_label_3)
            self.horizontalLayout_7.addLayout(self.verticalLayout_
99
            spacerItem9 = QtWidgets.QSpacerItem(40, 20,
100

→ QtWidgets.QSizePolicy.Expanding,

                QtWidgets.QSizePolicy.Minimum)
            self.horizontalLayout_7.addItem(spacerItem9)
101
            # self.tabWidget.addTab(self.tab 2, "")
102
            self.tab_3 = QtWidgets.QWidget()
103
            self.tab_3.setObjectName("tab_3")
104
            self.layoutWidget_3 = QtWidgets.QWidget(self.tab_3)
105
            self.layoutWidget_3.setGeometry(QtCore.QRect(0, 10,
106

→ 371, 211))

            self.layoutWidget_3.setObjectName("layoutWidget_3")
107
            self.horizontalLayout_4 =
108

→ QtWidgets.QHBoxLayout(self.layoutWidget_3)

            self.horizontalLayout_4.setContentsMargins(0, 0, 0, 0)
109
            self.horizontalLayout 4.setObjectName("horizontalLayo
110
            \hookrightarrow ut_4")
```

```
spacerItem10 = QtWidgets.QSpacerItem(40, 20,
111
                QtWidgets.QSizePolicy.Expanding,
                QtWidgets.QSizePolicy.Minimum)
            self.horizontalLayout_4.addItem(spacerItem10)
112
            self.verticalLayout_7 = QtWidgets.QVBoxLayout()
113
            self.verticalLayout_7.setObjectName("verticalLayout_7]
114
               ")
            self.verticalLayout 8 = QtWidgets.QVBoxLayout()
115
            self.verticalLayout_8.setObjectName("verticalLayout_8]
116
            self.horizontalLayout_9 = QtWidgets.QHBoxLayout()
117
            self.horizontalLayout_9.setObjectName("horizontalLayo
118

    ut 9")

            spacerItem11 = QtWidgets.QSpacerItem(30, 20,
119
                QtWidgets.QSizePolicy.Maximum,
                QtWidgets.QSizePolicy.Minimum)
            self.horizontalLayout_9.addItem(spacerItem11)
120
            self.tab1 combobox 4 =
121
               QtWidgets.QComboBox(self.layoutWidget_3)
            sizePolicy = QtWidgets.QSizePolicy(QtWidgets.QSizePol_
122
                icy.MinimumExpanding,
                QtWidgets.QSizePolicy.Fixed)
            sizePolicy.setHorizontalStretch(0)
123
            sizePolicy.setVerticalStretch(0)
124
            sizePolicy.setHeightForWidth(self.tab1_combobox_4.siz_
125
            ⇔ ePolicy().hasHeightForWidth())
            self.tab1_combobox_4.setSizePolicy(sizePolicy)
126
            self.tab1_combobox_4.setObjectName("tab1_combobox_4")
127
            self.horizontalLayout_9.addWidget(self.tab1_combobox__
128
                4)
            spacerItem12 = QtWidgets.QSpacerItem(30, 20,
129
               QtWidgets.QSizePolicy.Maximum,
                QtWidgets.QSizePolicy.Minimum)
            self.horizontalLayout_9.addItem(spacerItem12)
130
            self.verticalLayout_8.addLayout(self.horizontalLayout
131
            spacerItem13 = QtWidgets.QSpacerItem(40, 20,
132
                QtWidgets.QSizePolicy.Expanding,
                QtWidgets.QSizePolicy.Minimum)
```

```
self.verticalLayout_8.addItem(spacerItem13)
133
            self.verticalLayout_7.addLayout(self.verticalLayout_8)
134
            self.tab1_label_4 =
135
               QtWidgets.QLabel(self.layoutWidget_3)
            sizePolicy = QtWidgets.QSizePolicy(QtWidgets.QSizePol_
136
              icy.Ignored.
               QtWidgets.QSizePolicy.Fixed)
            sizePolicy.setHorizontalStretch(0)
137
            sizePolicy.setVerticalStretch(0)
138
            sizePolicy.setHeightForWidth(self.tab1_label_4.sizePo_
139

→ licy().hasHeightForWidth())
            self.tab1_label_4.setSizePolicy(sizePolicy)
140
            self.tab1 label 4.setMinimumSize(QtCore.QSize(256,
141
            self.tab1_label_4.setMaximumSize(QtCore.QSize(256,
142
            self.tab1_label_4.setAlignment(QtCore.Qt.AlignCenter)
143
            self.tab1 label 4.setObjectName("tab1 label 4")
144
            self.verticalLayout_7.addWidget(self.tab1_label_4)
145
            self.horizontalLayout_4.addLayout(self.verticalLayout
146
            spacerItem14 = QtWidgets.QSpacerItem(40, 20,
147

→ QtWidgets.QSizePolicy.Expanding,

                QtWidgets.QSizePolicy.Minimum)
            self.horizontalLayout_4.addItem(spacerItem14)
148
            # self.tabWidget.addTab(self.tab 3, "")
149
            self.tab_4 = QtWidgets.QWidget()
            self.tab_4.setObjectName("tab_4")
151
            self.layoutWidget1 = QtWidgets.QWidget(self.tab_4)
152
            self.layoutWidget1.setGeometry(QtCore.QRect(0, 10,
153

→ 371, 211))

            self.layoutWidget1.setObjectName("layoutWidget1")
154
            self.horizontalLayout_13 =
155

→ QtWidgets.QHBoxLayout(self.layoutWidget1)

            self.horizontalLayout_13.setContentsMargins(0, 0, 0,
156
            self.horizontalLayout_13.setObjectName("horizontalLay
157
              out_13")
```

```
spacerItem15 = QtWidgets.QSpacerItem(40, 40,
158
                QtWidgets.QSizePolicy.Expanding,
                QtWidgets.QSizePolicy.Minimum)
            self.horizontalLayout_13.addItem(spacerItem15)
159
            self.verticalLayout_13 = QtWidgets.QVBoxLayout()
160
            self.verticalLayout_13.setObjectName("verticalLayout_1
              13")
            self.verticalLayout 14 = QtWidgets.QVBoxLayout()
162
            self.verticalLayout_14.setObjectName("verticalLayout_1
163
              14")
            self.horizontalLayout_14 = QtWidgets.QHBoxLayout()
164
            self.horizontalLayout_14.setObjectName("horizontalLay
165
            ⇔ out 14")
            spacerItem16 = QtWidgets.QSpacerItem(31, 20,
166
                QtWidgets.QSizePolicy.Maximum,
                QtWidgets.QSizePolicy.Minimum)
            self.horizontalLayout_14.addItem(spacerItem16)
167
            self.tab1 combobox 7 =
168

→ QtWidgets.QComboBox(self.layoutWidget1)

            sizePolicy = QtWidgets.QSizePolicy(QtWidgets.QSizePol_
169
                icy.MinimumExpanding,
               QtWidgets.QSizePolicy.Fixed)
            sizePolicy.setHorizontalStretch(0)
170
            sizePolicy.setVerticalStretch(0)
171
            sizePolicy.setHeightForWidth(self.tab1_combobox_7.siz_
172
            ⇔ ePolicy().hasHeightForWidth())
            self.tab1_combobox_7.setSizePolicy(sizePolicy)
            self.tab1_combobox_7.setMinimumSize(QtCore.QSize(160,
174
            self.tab1_combobox_7.setObjectName("tab1_combobox_7")
175
            self.horizontalLayout 14.addWidget(self.tab1 combobox
176
            spacerItem17 = QtWidgets.QSpacerItem(31, 20,
177
            QtWidgets.QSizePolicy.Minimum)
            self.horizontalLayout 14.addItem(spacerItem17)
178
            self.verticalLayout_14.addLayout(self.horizontalLayou_
179
            \hookrightarrow t_14)
```

```
spacerItem18 = QtWidgets.QSpacerItem(256, 55,
180
                QtWidgets.QSizePolicy.Minimum,
                QtWidgets.QSizePolicy.Minimum)
            self.verticalLayout_14.addItem(spacerItem18)
181
            self.verticalLayout_13.addLayout(self.verticalLayout_
182
                14)
            \hookrightarrow
            self.progressBar =
183
            self.progressBar.setProperty("value", 0)
184
            self.progressBar.setTextVisible(False)
185
            self.progressBar.setObjectName("progressBar")
186
            self.verticalLayout_13.addWidget(self.progressBar)
187
            spacerItem19 = QtWidgets.QSpacerItem(40, 60,
188

→ QtWidgets.QSizePolicy.Expanding,

                QtWidgets.QSizePolicy.Minimum)
            self.verticalLayout_13.addItem(spacerItem19)
189
            self.horizontalLayout_13.addLayout(self.verticalLayou
190
            spacerItem20 = QtWidgets.QSpacerItem(40, 20,
191

→ QtWidgets.QSizePolicy.Expanding,

                QtWidgets.QSizePolicy.Minimum)
            self.horizontalLayout_13.addItem(spacerItem20)
192
            self.tabWidget.addTab(self.tab_4, "")
193
            self.OK = QtWidgets.QPushButton(Form)
            self.OK.setGeometry(QtCore.QRect(260, 280, 111, 23))
195
            self.OK.setObjectName("OK")
196
            self.retranslateUi(Form)
            self.tabWidget.setCurrentIndex(0)
198
            QtCore.QMetaObject.connectSlotsByName(Form)
199
        def retranslateUi(self, Form):
200
            translate = QtCore.QCoreApplication.translate
201
            Form.setWindowTitle(_translate("Form",
202
               "音视频设备设置"))
            self.tab1_label.setText(_translate("Form",
203
               "TextLabel"))
            self.tabWidget.setTabText(self.tabWidget.indexOf(self_
204
               .tab), _translate("Form",
               "视频源"))
```

```
self.tab1_label_3.setText(_translate("Form",
205
            self.tabWidget.setTabText(self.tabWidget.indexOf(self_
206
               .tab_2), _translate("Form",
               "面部"))
           self.tab1_label_4.setText(_translate("Form",
207
              "TextLabel"))
           self.tabWidget.setTabText(self.tabWidget.indexOf(self_
208
               .tab_3), _translate("Form",
               "眼睛"))
           self.tabWidget.setTabText(self.tabWidget.indexOf(self_
209
               .tab_4), _translate("Form",
            → "音频源"))
           self.OK.setText(_translate("Form", " 确认"))
210
```

1.19 CvPyGui/ui/gui.py

```
# -*- coding: utf-8 -*-
   # Form implementation generated from reading ui file 'gui.ui'
   # Created by: PyQt5 UI code generator 5.9.2
   # WARNING! All changes made in this file will be lost!
   from PyQt5 import QtCore, QtGui, QtWidgets
   class Ui_MainWindow(object):
       def setupUi(self, MainWindow):
           MainWindow.setObjectName("MainWindow")
10
           MainWindow.resize(830, 578)
           icon = QtGui.QIcon()
12
           icon.addPixmap(QtGui.QPixmap("icon.ico"),
            → QtGui.QIcon.Normal, QtGui.QIcon.Off)
           MainWindow.setWindowIcon(icon)
14
           self.centralwidget = QtWidgets.QWidget(MainWindow)
           self.centralwidget.setObjectName("centralwidget")
16
           self.verticalLayout_4 =

→ QtWidgets.QVBoxLayout(self.centralwidget)

           self.verticalLayout_4.setObjectName("verticalLayout_4]
18
```

```
self.h_img_lay = QtWidgets.QHBoxLayout()
           self.h_img_lay.setObjectName("h_img_lay")
20
           self.original_img_v_lay = QtWidgets.QVBoxLayout()
21
           self.original_img_v_lay.setObjectName("original_img_v_
           → lav")
           spacerItem = QtWidgets.QSpacerItem(20, 40,

→ QtWidgets.QSizePolicy.Minimum,

→ QtWidgets.QSizePolicy.Expanding)

           self.original_img_v_lay.addItem(spacerItem)
           self.original_name_lbl =
25

→ QtWidgets.QLabel(self.centralwidget)

           self.original_name_lbl.setScaledContents(False)
26
           self.original_name_lbl.setAlignment(QtCore.Qt.AlignCe_
27
           → nter)
           self.original_name_lbl.setObjectName("original_name_l_
28

    b1")

           self.original_img_v_lay.addWidget(self.original_name__
29
           spacerItem1 = QtWidgets.QSpacerItem(20, 40,

→ QtWidgets.QSizePolicy.Minimum,

             QtWidgets.QSizePolicy.Expanding)
           self.original_img_v_lay.addItem(spacerItem1)
31
           self.original_frame_lbl =
32

→ QtWidgets.QLabel(self.centralwidget)

           self.original_frame_lbl.setMinimumSize(QtCore.QSize(4)
33
           → 00.
           self.original_frame_lbl.setAlignment(QtCore.Qt.AlignC_
34
           ⇔ enter)
           self.original_frame_lbl.setObjectName("original_frame_
35
           → lbl")
           self.original_img_v_lay.addWidget(self.original_frame_
           spacerItem2 = QtWidgets.QSpacerItem(20, 40,
37
           self.original_img_v_lay.addItem(spacerItem2)
           self.h_img_lay.addLayout(self.original_img_v_lay)
           self.processed_img_v_lay = QtWidgets.QVBoxLayout()
```

```
self.processed_img_v_lay.setObjectName("processed_img_")
41

    _v_lay")

           spacerItem3 = QtWidgets.QSpacerItem(20, 40,
42
           QtWidgets.QSizePolicy.Expanding)
           self.processed_img_v_lay.addItem(spacerItem3)
43
           self.processed_name_lbl =
44

    QtWidgets.QLabel(self.centralwidget)

           self.processed_name_lbl.setAlignment(QtCore.Qt.AlignC_
45

    enter)

           self.processed_name_lbl.setObjectName("processed_name_
46
           → lbl")
           self.processed_img_v_lay.addWidget(self.processed_nam_
47

    e_lbl)

           spacerItem4 = QtWidgets.QSpacerItem(20, 40,
48
           QtWidgets.QSizePolicy.Expanding)
           self.processed_img_v_lay.addItem(spacerItem4)
49
           self.processed_frame_lbl =

→ QtWidgets.QLabel(self.centralwidget)

           self.processed_frame_lbl.setMinimumSize(QtCore.QSize(
51
           self.processed_frame_lbl.setBaseSize(QtCore.QSize(0,
           → 0))
           self.processed frame lbl.setText("")
53
           self.processed_frame_lbl.setAlignment(QtCore.Qt.Align_
           self.processed_frame_lbl.setObjectName("processed_fra_

    me lbl")

           self.processed_img_v_lay.addWidget(self.processed_fra_
56
           \hookrightarrow me lbl)
           spacerItem5 = QtWidgets.QSpacerItem(20, 40,
57
           QtWidgets.QSizePolicy.Expanding)
           self.processed img v lay.addItem(spacerItem5)
           self.h_img_lay.addLayout(self.processed_img_v_lay)
           self.verticalLayout_4.addLayout(self.h_img_lay)
           self.horizontalLayout = QtWidgets.QHBoxLayout()
```

```
self.horizontalLayout.setObjectName("horizontalLayout
            \hookrightarrow
              ")
           self.verticalLayout_2 = QtWidgets.QVBoxLayout()
63
           self.verticalLayout_2.setObjectName("verticalLayout_2")
64
            self.label_3 = QtWidgets.QLabel(self.centralwidget)
           self.label_3.setAlignment(QtCore.Qt.AlignCenter)
66
           self.label 3.setObjectName("label 3")
67
           self.verticalLayout_2.addWidget(self.label_3)
           self.eye lbl = QtWidgets.QLabel(self.centralwidget)
69
           self.eye_lbl.setMinimumSize(QtCore.QSize(400, 240))
70
           self.eye lbl.setText("")
           self.eye lbl.setAlignment(QtCore.Qt.AlignCenter)
72
           self.eye_lbl.setObjectName("eye_lbl")
           self.verticalLayout_2.addWidget(self.eye_lbl)
74
           self.horizontalLayout.addLayout(self.verticalLayout 2)
75
           self.verticalLayout = QtWidgets.QVBoxLayout()
76
           self.verticalLayout.setObjectName("verticalLayout")
           self.label_2 = QtWidgets.QLabel(self.centralwidget)
           self.label_2.setAlignment(QtCore.Qt.AlignCenter)
79
           self.label_2.setObjectName("label_2")
           self.verticalLayout.addWidget(self.label_2)
           self.voice_lbl = QtWidgets.QLabel(self.centralwidget)
82
           self.voice lbl.setMinimumSize(QtCore.QSize(400, 240))
           self.voice lbl.setText("")
           self.voice lbl.setAlignment(QtCore.Qt.AlignCenter)
85
           self.voice_lbl.setObjectName("voice_lbl")
           self.verticalLayout.addWidget(self.voice_lbl)
87
           self.horizontalLayout.addLayout(self.verticalLayout)
           self.verticalLayout 4.addLayout(self.horizontalLayout)
           self.h btn lay = QtWidgets.QHBoxLayout()
90
           self.h_btn_lay.setObjectName("h_btn_lay")
           self.initButton =
92

→ QtWidgets.QPushButton(self.centralwidget)

           self.initButton.setObjectName("initButton")
           self.h btn lay.addWidget(self.initButton)
94
           self.pushButton =
               QtWidgets.QPushButton(self.centralwidget)
           self.pushButton.setObjectName("pushButton")
96
```

```
self.h_btn_lay.addWidget(self.pushButton)
            spacerItem6 = QtWidgets.QSpacerItem(40, 20,
98
                QtWidgets.QSizePolicy.Expanding,
                QtWidgets.QSizePolicy.Minimum)
            self.h btn lav.addItem(spacerItem6)
99
            self.label = QtWidgets.QLabel(self.centralwidget)
100
            self.label.setAlignment(QtCore.Qt.AlignRight|QtCore.Q
101
            self.label.setObjectName("label")
102
            self.h btn lay.addWidget(self.label)
103
            self.lineEdit =
104
               QtWidgets.QLineEdit(self.centralwidget)
            self.lineEdit.setObjectName("lineEdit")
105
            self.h_btn_lay.addWidget(self.lineEdit)
            self.startButton =
107
               QtWidgets.QPushButton(self.centralwidget)
            self.startButton.setObjectName("startButton")
108
            self.h btn lay.addWidget(self.startButton)
109
            self.endButton =
110
              QtWidgets.QPushButton(self.centralwidget)
            self.endButton.setObjectName("endButton")
111
            self.h_btn_lay.addWidget(self.endButton)
112
            self.shotButton =
113
               QtWidgets.QPushButton(self.centralwidget)
            self.shotButton.setObjectName("shotButton")
114
            self.h btn lay.addWidget(self.shotButton)
115
            self.verticalLayout_4.addLayout(self.h_btn_lay)
            self.v_filters_lay = QtWidgets.QVBoxLayout()
117
            self.v_filters_lay.setObjectName("v_filters lay")
118
            self.verticalLayout_4.addLayout(self.v_filters_lay)
119
            MainWindow.setCentralWidget(self.centralwidget)
120
            self.menubar = QtWidgets.QMenuBar(MainWindow)
121
            self.menubar.setGeometry(QtCore.QRect(0, 0, 1035, 23))
122
            self.menubar.setObjectName("menubar")
123
            self.menuHelp = QtWidgets.QMenu(self.menubar)
124
            self.menuHelp.setObjectName("menuHelp")
125
            self.menu = QtWidgets.QMenu(self.menubar)
126
            self.menu.setObjectName("menu")
127
            self.menu_2 = QtWidgets.QMenu(self.menubar)
128
```

```
self.menu_2.setObjectName("menu_2")
129
            MainWindow.setMenuBar(self.menubar)
130
            self.statusbar = QtWidgets.QStatusBar(MainWindow)
131
            self.statusbar.setMinimumSize(QtCore.QSize(500, 30))
            self.statusbar.setObjectName("statusbar")
133
            MainWindow.setStatusBar(self.statusbar)
            self.actionOpen_image = QtWidgets.QAction(MainWindow)
135
            self.actionOpen image.setObjectName("actionOpen image")
136
                ")
            self.actionSave original image =
137
                QtWidgets.QAction(MainWindow)
            self.actionSave_original_image.setObjectName("actionS
138
               ave original image")
            self.actionSave_processed_image =
139
                QtWidgets.QAction(MainWindow)
            self.actionSave_processed_image.setObjectName("action
140
                Save_processed_image")
            self.actionExit = QtWidgets.QAction(MainWindow)
141
            self.actionExit.setObjectName("actionExit")
142
            self.actionLicense = QtWidgets.QAction(MainWindow)
143
            self.actionLicense.setObjectName("actionLicense")
144
            self.actionAbout = QtWidgets.QAction(MainWindow)
145
            self.actionAbout.setObjectName("actionAbout")
146
            self.actionmanual = QtWidgets.QAction(MainWindow)
            self.actionmanual.setObjectName("actionmanual")
148
            self.action12 = QtWidgets.QAction(MainWindow)
149
            self.action12.setObjectName("action12")
            self.actionse = QtWidgets.QAction(MainWindow)
151
            self.actionse.setObjectName("actionse")
152
            self.menuHelp.addAction(self.actionmanual)
153
            self.menuHelp.addAction(self.actionAbout)
154
            self.menu 2.addAction(self.action12)
            self.menu_2.addAction(self.actionse)
156
            self.menubar.addAction(self.menu.menuAction())
157
            self.menubar.addAction(self.menu_2.menuAction())
158
            self.menubar.addAction(self.menuHelp.menuAction())
159
            self.retranslateUi(MainWindow)
160
            QtCore.QMetaObject.connectSlotsByName(MainWindow)
161
        def retranslateUi(self, MainWindow):
162
```

```
_translate = QtCore.QCoreApplication.translate
163
           MainWindow.setWindowTitle(_translate("MainWindow",
164
           → "肢体表型特征采集系统---山东省精神卫生中心"))
           self.original_name_lbl.setText(_translate("MainWindow |
165
           \hookrightarrow ",
              "原始图像"))
           self.processed_name_lbl.setText(_translate("MainWindo")
166
           "肢体特征"))
           self.label_3.setText(_translate("MainWindow",
167
           → "标记图像"))
           self.label_2.setText(_translate("MainWindow",
168
           → "肢体轮廓"))
           self.initButton.setText(_translate("MainWindow",
           → "检测视频设备"))
           self.pushButton.setText(_translate("MainWindow",
170
           → "停用视频设备"))
           self.label.setText(translate("MainWindow", "样本编号:
171
           self.startButton.setText(_translate("MainWindow",
172
           → "开始录制"))
           self.endButton.setText(_translate("MainWindow",
173
           → "结束录制"))
           self.shotButton.setText(_translate("MainWindow",
174
           → "进程中止"))
           self.menuHelp.setTitle( translate("MainWindow",
175
           → "帮助"))
           self.menu.setTitle(_translate("MainWindow", "文件"))
176
           self.menu_2.setTitle(_translate("MainWindow", "设置"))
177
           self.actionOpen_image.setText(_translate("MainWindow",
178
           → "Open image"))
           self.actionSave_original_image.setText(_translate("Ma_
179
           image"))
           self.actionSave_processed_image.setText(_translate("M_
180
           \hookrightarrow ainWindow", "Save processed
              image"))
181
           self.actionExit.setText(_translate("MainWindow",

    "Exit"))
```

```
self.actionLicense.setText(_translate("MainWindow",

"License"))

self.actionAbout.setText(_translate("MainWindow",

"关于"))

self.actionmanual.setText(_translate("MainWindow",

"操作说明"))

self.action12.setText(_translate("MainWindow",

"设备选择"))

self.actionse.setText(_translate("MainWindow",

"文件设置"))
```